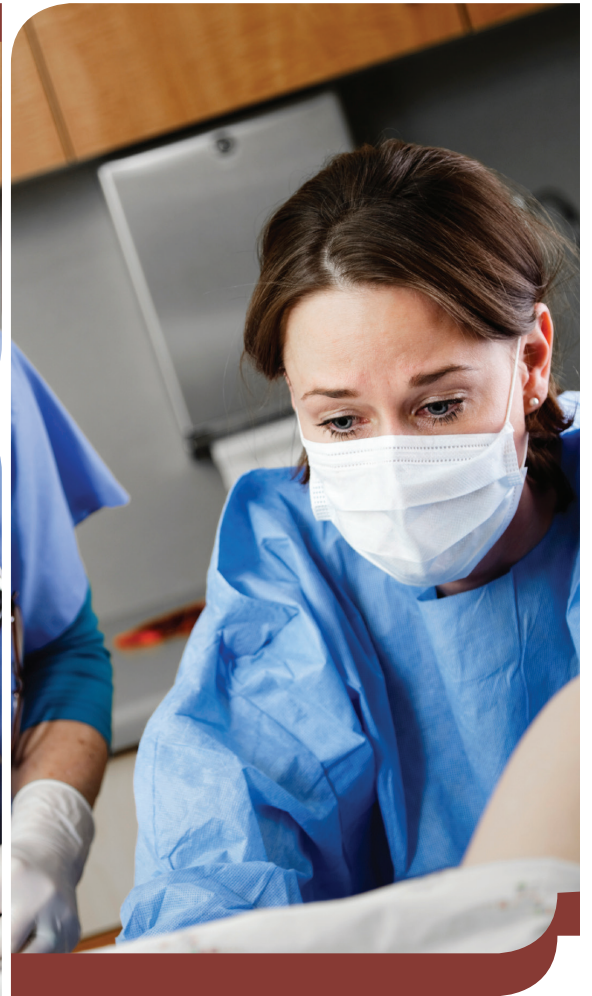




Primary Curriculum

Fourth Edition



FELLOWSHIP

Australian College of
Rural & Remote Medicine
WORLD LEADERS IN RURAL PRACTICE



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Version 02/2013

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Foreword

The practice of 'rural generalist medicine' - full-scope general practice - remains as important for communities as ever, as well as exciting and fulfilling as a medical career. Doctors whose work is narrow in scope or limited in context also make important contributions, but this does not appeal to all. The medical practitioner with expanded generalist capabilities can typically make the most difference, particularly in areas where community needs are greatest.

Fortunately, many graduates relish the opportunity to 'do-it-all' across a medical career. These are the doctors whose greatest dilemma in considering a choice of medical specialty is not what they like, but *what they are prepared to give up*.

Doctors like this enjoy providing comprehensive primary care in the community but also like the satisfaction and stimulation of looking after their patients in the hospital, responding to emergencies, taking a population perspective and developing extended skills in a focused area. Many such doctors enjoy diversity in daily practice and relish a challenge. Many are driven by a desire to 'make a difference' in medicine – to work with underserved communities, in rural and remote areas, with Aboriginal or Torres Strait Islander peoples, in aeromedical retrieval, military or humanitarian medicine. In cities, such doctors can often be found combining work in community primary care with emergency medicine or in hospitals as Career Medical Officers. This is real 'general practice'.

If the profile above appeals to you, then this is your curriculum. Fellowship of the Australian College of Rural and Remote Medicine signifies achievement of a broad scope of clinical capabilities, medical leadership and the ability to work confidently away from ready access to specialist referral or diagnostic services. It is recognised not as an accredited Australian general practice credential for community primary care but also by hospitals and credentialing committees for employment and award of extended scope of clinical privileges. The Fellowship is formally recognised in New Zealand and in Canada and is used as evidence of extended generalist clinical competence around the world.

I commend this curriculum and those who have developed it. It was written by rural doctors for rural doctors from an authentic rural and remote perspective. It reflects, in rich detail, the full scope of rural generalist medicine and the needs and context of rural and remote communities.

Congratulations on your choice of Fellowship. May this resource guide your learning and your professional practice and help you to become and remain the best doctor that you can be for your patients, communities and colleagues.

Professor Richard Murray
President
August 2013

1.0 Introduction

1.1 Defining general practice

The Australian College of Rural and Remote Medicine (ACRRM) is a professional College accredited by the Australian Medical Council to define standards and deliver training in the medical specialty of general practice.

The ACRRM definition of general practice asserts a proud tradition of generalist medicine, particularly as it has applied in rural and remote communities. The importance of the generalist medical practitioner with extensive clinical and leadership abilities is increasingly recognised in Australia and internationally by communities and policy-makers. The generalist medical practitioner has a key place in a societal response to a wide range of health care challenges. These include the complex care needs of ageing populations, increasing levels of chronic co-morbidity, the availability of increasingly expensive technological interventions and competing demands upon limited resources. General practice as defined by ACRRM is a long established tradition with a secure future in rural and remote communities as well as in the cities.

The ACRRM definition of general practice is as follows:

The general practitioner is the doctor with core responsibility for providing comprehensive and continuing medical care to individuals, families and the broader community. Competent to provide the greater part of medical care, the general practitioner can deliver services in the ambulatory care setting, the home, hospital, long-term residential care facilities or by electronic means - wherever and however services are needed by the patient.

The general practitioner applies broad knowledge and skills in: managing undifferentiated health problems across the lifespan in an un-referred patient population; providing continuing care for individuals with chronic conditions; undertaking preventive activities such as screening, immunisation and health education; responding to emergencies; providing in-hospital care; delivering maternal and child health services; and applying a population health approach at the practice and community level. General practitioners work across a dynamic and changing primary and secondary care interface, typically developing extended competencies in one or more discrete fields of medicine, thereby ensuring community access to the range of needed services in a supportive network of colleagues and health care providers.

As the medical expert with the broadest understanding of a patient's health in their cultural, social and family context, the general practitioner has a key role in coordinating the care pathway in partnership with the patient, including making decisions on the involvement of other health personnel. He or she practices reflectively, accessing and judiciously applying best evidence to ensure that the patient obtains benefit while minimising risk, intrusion and expense. The general practitioner contributes clinical leadership within a health care team and is skilled in providing clinical supervision, teaching and mentorship.

The clinical scope, practises and values that characterise the ACRRM vision for general practice are outlined in the curricula and professional standards that are set and maintained by ACRRM.

General practitioners who achieve these standards are recognised through the award of Fellowship of ACRRM (FACRRM). Fellows of ACRRM receive specialist registration as a general practitioner with the Medical Board of Australia and are able to practice in any location throughout Australia.

An ACRRM position paper defining the specialty within the context of international literature (plus research and resources that expand on the definition, scope and nature of general practice as defined by the College) is available at www.acrrm.org.au.

1.2 Target Group

The ACRRM Primary Curriculum sets out the outcomes expected at the Fellowship level. These outcomes mark the end of training, other than the abilities of Advanced Specialised Training.

The Curriculum is written with four main groups in mind:

- ACRRM registrars at any stage of education and training who are developing learning plans or preparing for assessment;
- Educators and clinical supervisors who are designing and delivering educational activities or supervising and guiding registrars in achieving their learning goals;
- Assessors who are forming judgements on whether the Fellowship standard has been achieved; and
- Fellows who are planning maintenance of professional standards activities.

It is also relevant to other providers of training, education and others including continuing professional development, clinical privileging and credentialing committees, employers, Medical Boards and Medical Councils in Australia and Internationally.

1.3 Background

The Australian College of Rural and Remote Medicine (ACRRM) was formed in 1997 as an acknowledgment of:

- the importance of rural and remote medicine as a broad but distinctive form of general practice;
- the need for well-designed vocational preparation and continuing medical education for rural doctors; and
- the need to address the shortage of rural and remote doctors in Australia, by providing them with a separate and distinctive professional body.

The development of a dedicated vocational curriculum was a natural extension of ACRRM's core vocational training and preparation role. A comprehensive Prospectus¹, and a Position Paper², both published in 1997, established the need for such a curriculum and indicated the major directions for further development.

¹ Australian College of Rural and Remote Medicine (ACRRM) (1997a) *Prospectus*. Australian College of Rural and Remote Medicine, Brisbane.

² Australian College of Rural and Remote Medicine (ACRRM) (1997b) *Primary Curriculum Position Paper*. Australian College of Rural and Remote Medicine, Brisbane.

The first edition of the *ACRRM Primary Curriculum* was published in 1998. The second edition was published in 2003, and the third edition in 2006. Minor revisions were made to the third edition in 2009.

The fourth and current edition (2013) has resulted from a major review of both content and structure involving key stakeholders conducted between October 2009 and January 2010. The curriculum is structured into an overarching model consisting of seven domains relevant to generalist medical practice. Curriculum statements, which provide more detailed outcomes in 18 major disciplines or practice areas, are also structured by the seven domains.

1.4 Rationale – why is generalist medical practice important?

Health Status

Australians living in rural and remote areas have unique health concerns that relate directly to their living conditions, social isolation, socioeconomic disadvantage and/or distance from health services. Health outcomes, as exemplified by rates of death, increase with remoteness. Death rates in remote areas are 1.8 times as high as in major cities.³ The main contributors to higher death rates in regional and remote areas are coronary heart disease, other circulatory diseases, motor vehicle accidents and chronic obstructive pulmonary disease (e.g. emphysema).⁴ Yet rural people have lower access to health care compared with their metropolitan counterparts because of distance, time factors, costs, and availability of transport. This disadvantage increases with geographical remoteness.^{5, 6}

Aboriginal and Torres Strait Islander peoples make up approximately 13 percent of the total 'remote' population of Australia and 45 percent of the 'very remote' population³. On some indicators, in particular diabetes and renal disease, Indigenous Australians have the worst health status in the world.³ While there is considerable congruence between Australia and other countries in patterns of health disadvantage, morbidity, and health risk behaviours in rural and remote communities and in Indigenous people, the rate of improvement in the health of Indigenous Australians still falls well behind other first world countries.⁷ Distance, isolation, lower incomes, poor educational opportunities, inadequate housing, minority status, and lack of services all exacerbate the experience of health inequality.⁸

Services and Workforce

This situation is compounded by shortages of health facilities and health professionals and rural peoples' perceptions of health. Rural Australians overwhelmingly prefer that medical services be provided locally, rather than travel to healthcare services in cities.⁹ Evidence suggests that many rural people will even avoid required specialist treatment rather than travel to a city for it.^{6, 10}

³ DOHA & AHMAC (2012) *National Strategic Framework for Rural and Remote Health*. D0692, March 2012, Commonwealth of Australia, Canberra.

⁴ AIHW (2012) *Australia's health 2012*. Australia's health no. 13. Cat. no. AUS 156. AIHW, Canberra.

⁵ Hays RB, Wallace A & SenGupta TK (1999) Training for rural family practice in Australia. *Teaching and Learning in Medicine*, vol 9, no. 2, pp. 80-82.

⁶ Veitch P, Sheehan M, Holmes J, Doolan T & Wallace A (1996) Barriers to the use of urban medical services by rural and remote area households. *Aust J Rural Health*, vol 4, no. 2, pp. 104-110.

⁷ Ring I & Elston J (2003) International comparisons of Indigenous mortality in International network of Indigenous Health knowledge and Development, inaugural biennial meeting, Oct. 2003. Indigenous Health Unit, James Cook University, Townsville.

⁸ ABS & AIHW (2008) *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples*. Cat. no. IHW 21. AIHW, Canberra.

⁹ HREOC (1999) *Bush Talks*. Human Rights and Equal Opportunity Commission, Sydney, pp. 1-28.

¹⁰ Keleher H & Ellis J (1996) Rural People utilising city hospitals: issues for service provision. *Aust J Rural Health*, vol 4, no. 2, pp. 144-150.

They also prefer to receive medical care from a familiar practitioner with whom they feel comfortable and who can provide continuity of care.¹¹

Workforce shortages are a consistent feature of rural medicine all over the world. This is compounded by medical sub-specialisation, which has tripled in the past 20 years due to technological developments.¹² In Australia, rural medical workforce shortages persist and without further intervention, are expected to worsen, despite current Government investment in recruitment and retention and workforce planning.¹³ There is ample evidence that rural and remote communities:

- have inadequate access to medical services;
- need more local doctors who are able to provide an extended range of clinical services; and
- suffer negative health consequences associated with these unmet needs

As a consequence of workforce shortages, rural and remote doctors work much longer hours and provide on-call after-hours services far more than their urban counterparts.¹⁴ These factors impact upon both patient and doctor safety and the potential quality of care provided.

Quality and Safety

General practitioners working in rural and remote settings require a broader and deeper range of knowledge and skills than their urban counterparts in areas such as public health, infectious disease, environmental health, procedural and emergency skills and cultural awareness. By providing a high quality vocational preparation program for rural and remote medicine, ACRRM enables doctors to develop the necessary knowledge and skills through dedicated education, training and assessment programs that reflect the realities of rural and remote practice. This fosters and consolidates education in rural and remote medicine by undergraduate and postgraduate education institutions, and advances research into safe clinical care and managing risk in the rural context. Fitting professional recognition of rural and remote general practice will also attract more doctors to this important field, and ultimately improve safety and quality by increasing the number of skilled practitioners and the range medical services provided to rural communities.

Scope of general practice as defined by ACRRM

Generalist medical practice is a broad, horizontal field of practice that intersects with many medical specialties, other health practitioners and community services. General practitioners in rural and remote communities are commonly called upon to provide a continuum of care from primary presentation to resolution, and deal with issues associated with public health in small communities. Because rural and remote practitioners are required to undertake many of the tasks that their urban counterparts would be able to refer to specialists and other health practitioner services, their practice is both more advanced and extended.

¹¹ Humphreys J, Mathews-Cowey S & Weinard H (1997) Factors in accessibility of general practice in rural Australia. *Medical Journal of Australia*, vol. 166, no. 11, pp. 577-580.

¹² Smith JD, Kelly K & Veitch C (2002) Evaluation of strategies to support the rural specialist workforce. Confidential report, Commissioned by the Commonwealth Department of Health and Ageing, Canberra, unpub.

¹³ Report on the Audit of Health Workforce in Rural and Regional Australia, April 2008. Commonwealth of Australia, Canberra.

¹⁴ Humphreys J, Jones J, Jones M, Mildenhall D, Mara P, Chater A, Rosenthal D, Maxfield M & Adena M (2002b) The influence of geographical location on the complexity of rural general practice activities. *MJA*, vol. 179, no. 8, pp. 416-421.

For example, they may provide services such as obstetrics, surgery, anaesthetics, and emergency care, and may do so across primary, secondary and tertiary settings. Their office-based consultations will often require more complex decision-making and more diverse clinical and procedural skills. There is considerable evidence that general practitioners working in rural and remote areas both in Australia^{15, 16} and overseas^{16, 17} are providing an increased range of procedural, emergency and other advanced care services than those working in urban areas.

In Australia, the complexity and scope of the practitioner's tasks increase as the degree of geographical remoteness increases. For instance, the more remote the location, the more likely it is that the doctor will be required to manage myocardial infarctions to a higher level, administer cytotoxic drugs, perform forensic examinations, stabilise multiple trauma patients pending retrieval, and coordinate discharge planning.¹⁴ This observation is consistent with data from Canada, which has similar demographic challenges.^{18, 19}

This extended scope has important implications both for training and for setting and maintaining professional standards.

Distance from tertiary services and local workforce restrictions create unique challenges for general practice that are best addressed by distinctive, functional and contemporary models of interdisciplinary teamwork. Rural and remote practitioners commonly work in a range of roles and settings, including hospitals, private practice, Aboriginal Medical Services, and community health centres. Many are required to divide their time between multiple settings. Multi-disciplinary and multi-skilled teamwork is a core feature of rural practice. It involves local healthcare teams, as well as urban-based referred care providers who may provide outreach and tele-medicine support. Rural and remote practitioners may also require higher levels of local management and collaboration to ensure post-operative and other follow-up care. In remote locations, this usually also involves working as part of a cross-cultural team with Aboriginal and Torres Strait Islander health workers who also have diverse, advanced, and extended practice roles.²⁰

Conclusion

Access to advanced medical care is a basic equity issue for all Australians. Many rural people experience considerable distress when required to travel to cities for treatment. In some instances, this can lead to patients refusing city-based specialist care, regardless of need^{10, 20}. It is widely acknowledged that appropriate vocational preparation of general practitioners is critical if they are to continue providing advanced procedural and other vital medical services in rural and remote Australia.

¹⁵ Britt H, Miller G & Valenti L (2001) It's different in the bush - A comparison of general practice activity in metropolitan and rural areas of Australia 1998 - 2000. Cat No GEP 6, Australian Institute of Health and Welfare, Sydney.

¹⁶ Carter R (1987) Training for Rural Medical Practice: What's Needed? *Canadian Family Physician*, vol. 33, pp. 1713-1715.

¹⁷ Chan B (1999) Atlas Reports: Use of Health Services. Report 1: Supply of Physicians Services in Ontario. Institute for Clinical Evaluative Sciences, Toronto.

¹⁸ Wetmore S, Rivet C, Tepper J, Tatemich S, Donoff M & Rainsberry P (2005) Defining core procedure skills for Canadian family medicine training. *Canadian Family Physician*, vol. 51, no. 10, pp. 1364-1365.

¹⁹ Chaytors RG, Szafran O & Crutcher RA (2001), Rural-urban and gender differences in procedures performed by family practice residency graduates. *Family Medicine*, vol. 33, no. 10, pp. 766-771.

²⁰ Smith JD (2004a) *Australia's rural and remote health: A social justice perspective*, Tertiary Press, Melbourne.

Rural and remote medicine is a unique mode of general practice that differs from urban practice in terms of the context, content and process of care ²¹. Rural and remote general practice demands extended knowledge and skills drawn from multiple medical specialties. This advanced skill set is applied in a context that requires unique modes of practice, cultural understanding and organisational skills. These differences, combined with the particular set of professional values required, sets rural and remote medicine apart as a unique field of practice within the broad specialty of general practice.

For all these reasons, it is vitally important that general practice registrars preparing to work in rural and remote settings have access to appropriate medical training to national and international accreditation standards to ensure competent, safe, and culturally appropriate health care services across the variety of rural and remote contexts. The Fourth Edition of the ACRRM Primary Curriculum is an important step towards achieving this goal.

²¹ Smith JD & Hays R (2004c) Is rural medicine a separate discipline? *Australian Journal of Rural Health*, vol. 12, no. 2, pp. 67-72.

2.0 The Primary Curriculum

2.1 Aim

The ACRRM Vocational Training Program aims to produce Fellows who can function as safe, confident and independent general practitioners in a full and diverse range of healthcare settings across Australia, with particular focus on rural and remote settings.

The Program has a number of goals for registrars:

1. Acquire the knowledge, skills, and behaviours to practise safe, independent and comprehensive medicine as general practitioners with a focus on practising in rural and remote communities;
2. Attain Fellowship of ACRRM by successfully completing the training and assessment pathway requirements based on the ACRRM Primary Curriculum; and
3. Commit to maintain and enhance competency after attaining Fellowship through participating in a structured continuing professional development program.

The ACRRM Primary Curriculum “The Curriculum” builds on early postgraduate experience by setting out what ACRRM expects registrars to achieve, and education providers to deliver. In turn it is intended to underpin and articulate with the set of ACRRM Advanced Specialised Training Curricula, which support advanced studies in selected subject areas relevant to rural and remote general practice in Australia.

2.2 Purpose

The Curriculum defines the scope and standards for independent general practice anywhere in Australia, with a particular focus on rural and remote settings. It sets out the outcomes expected at the ACRRM Fellowship (FACRRM) level.

The Curriculum is a fundamental resource for rural registrars, supervisors and educators, providing a clear framework from which to plan and deliver educational and assessment activities leading to the FACRRM. It has been designed to promote transparency, clarity, consistency and academic rigor in these educational processes.

2.3 Curriculum Framework

The Curriculum is structured according to the following elements:

1. *Principles* – 11 principles that form the conceptual and practical foundation for the Curriculum;
2. *Learning abilities* – 73 generic abilities which define the abilities that registrars must demonstrate, organised within the seven domains of rural and remote general practice; and
3. *Curriculum statements* – 18 statements that describe the relevant content in the major medical disciplines or practice areas. The curriculum statements contain abilities organised within the seven domains of rural and remote general practice and essential knowledge and skills.

2.4 Principles

The following 11 principles underpin the Curriculum:

1. *Grounding in professional standards* – The Curriculum is grounded in medical professional standards. This includes:
 - Defining the essential knowledge, skills, attitudes and professional values required of general practitioners across the range of working contexts in Australia;
 - Meeting or exceeding the relevant accreditation criteria of the Australian Medical Council.
2. *Responsiveness to community needs* – The Curriculum content responds to the diverse needs of the Australian population, including the National Health Needs and Priorities determined by the Australian Government, and also the needs expressed by rural and remote people and communities.
3. *Responsiveness to the rural and remote context* – The Curriculum focuses on the key features that define rural and remote medicine and distinguish it from urban models of general practice. This includes features such as regular after-hours care, extended clinical skills, emergency medicine, Aboriginal and Torres Strait Islander health, and independence in decision-making.
4. *Outcomes focus* – The Curriculum defines 73 abilities that registrars must achieve. These form the basis for the assessment blueprint and link with the content listed in the accompanying Curriculum statements.
5. *Focus on experiential learning* – The Curriculum supports a predominant teaching and learning approach involving experience in a variety of structured placements, with self-directed learning and supervision from experienced mentors and educators. This also promotes the recognition of prior learning and experience, and a deep rather than a surface approach to learning.
6. *Applicability to practice* – The Curriculum content is applicable to the current and projected future demands of rural and remote general practice.
7. *Validity, reliability and educational soundness* – The Curriculum and its related assessment processes are progressive, academically rigorous, educationally sound, clinically relevant, valid, reliable, and are designed to have a positive educational impact.
8. *Appropriateness and acceptability of delivery and assessment methods* – Curriculum delivery and assessment methods have been designed to be appropriate and acceptable to registrars in rural and remote contexts. This is done through distance learning, flexible delivery methods and interactive approaches.
9. *Use of information technology* – The Curriculum is designed to enable implementation on a robust and innovative online technology platform which allows registrars and their supervisors to monitor, record and review the achievement of learning outcomes.
10. *Articulation with advanced studies* – The requirements of the Curriculum have been designed to articulate with advanced and special interest vocational and tertiary studies.
11. *Contribution to improving workforce capacity* – The Curriculum will contribute to building a skilled, confident, safe and competent Australian rural and remote general practitioner workforce.

2.5 Abilities and Domains

The ability statements are high-level statements which describe the generic abilities that general practitioners require to be able to work anywhere in Australia and particularly in rural and remote settings. The ACRRM assessment blueprint is mapped to the ability statements. These overarching abilities are then applied to different age groups, disciplines or topic areas in the curriculum statements. This provides further detail in each statement of the standard that ACRRM expects registrars to attain by Fellowship.

The abilities are organised under the seven domains that describe the different contexts of practice. Building on the Third Edition of the Primary Curriculum 2009, these domains were refined through consultation with a diverse group of rural and remote general practitioners, and by referring to the Australian and international literature that describes this unique and evolving field of general practice. Like the approach taken by the Third Edition, they do not represent the traditional 'domains of learning' often found in medical and other health professional curricula, but are 'domains of practice'.

The Seven Domains

1. Provide medical care in the ambulatory and community setting
2. Provide care in the hospital setting
3. Respond to medical emergencies
4. Apply a population health approach
5. Address the health care needs of culturally diverse and disadvantaged groups
6. Practise medicine within an ethical, intellectual and professional framework
7. Practise medicine in the rural and remote context

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- 1.2 Obtain a clinical history that reflects contextual issues including: presenting problems, epidemiology, culture and geographic location
- 1.3 Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context
- 1.4 Use specialised clinical equipment as required for further assessment and interpret findings
- 1.5 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- 1.6 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses
- 1.7 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- 1.8 Formulate a management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- 1.9 Identify and manage co-morbidities in the patient and effectively communicate these to the patient and/or carer
- 1.10 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- 1.11 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- 1.12 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- 1.13 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- 2.1 Manage admission of patients to hospital in accordance with institutional policies
- 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer
- 2.3 Apply relevant checklists and clinical management pathways
- 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- 2.5 Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing
- 2.6 Order and perform a range of diagnostic and therapeutic procedures
- 2.7 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- 2.8 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- 2.9 Recognise and respond early to the deteriorating patient
- 2.10 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- 2.11 Undertake early, planned and multi-disciplinary discharge planning
- 2.12 Contribute medical expertise and leadership in a hospital team
- 2.13 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- 2.14 Recognise, document and manage adverse events and near misses
- 2.15 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- 3.1 Undertake initial assessment and triage of patients with acute or life-threatening conditions
- 3.2 Stabilise critically ill patients and provide primary and secondary care
- 3.3 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- 3.4 Perform required emergency procedures
- 3.5 Arrange and/or perform emergency patient transport or evacuation when needed
- 3.6 Demonstrate resourcefulness in knowing how to access and use available resources
- 3.7 Communicate effectively at a distance with consulting or receiving clinical personnel
- 3.8 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- 3.9 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- 4.2 Apply a population health approach that is relevant to the clinical practice profile
- 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- 4.4 Provide continuity and coordination of care for own practice population
- 4.5 Evaluate quality of health care for practice populations
- 4.6 Fulfil reporting requirements in relation to statutory notification of health conditions
- 4.7 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- 4.8 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- 6.1 Ensure safety, privacy and confidentiality in patient care
- 6.2 Maintain appropriate professional boundaries
- 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- 6.5 Keep clinical documentation in accordance with legal and professional standards
- 6.6 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- 6.7 Contribute to the management of human and financial resources within a health service
- 6.8 Work within relevant national and state legislation and professional and ethical guidelines
- 6.9 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes
- 6.10 Manage, appraise and assess own performance in the provision of medical care for patients
- 6.11 Develop and apply strategies for self-care, personal support and caring for family

- 6.12 Teach and clinically supervise health students, junior doctors and other health professionals
- 6.13 Engage in continuous learning and professional development
- 6.14 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, Teamwork and Technology, Responsiveness to context

Abilities

- 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- 7.2 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- 7.6 Use information and communication technology to network and exchange information with distant colleagues
- 7.7 Respect local community norms and values in own life and work practices
- 7.8 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

2.6 Curriculum Statements

The content that must be learned and demonstrated at Fellowship level is organised into 18 curriculum statements according to major medical disciplines or practice areas. A process of extensive consultation with rural and remote doctors throughout this country was undertaken to achieve a consensus on the content of each of these curriculum statements. The content covered in each of the curriculum statements is based on clinical presentations and problem-solving where possible, and takes into account the realities of rural and remote medicine and its comprehensive nature. The full curriculum statements are presented in Section 6.

The areas covered by the curriculum statements are:

1. Aboriginal and Torres Strait Islander Health
2. Adult Internal Medicine
3. Aged Care
4. Anaesthetics
5. Business and Professional Management
6. Child and Adolescent Health
7. Dermatology
8. Information Management and Information Technology
9. Mental Health
10. Musculoskeletal Medicine
11. Obstetrics and Women's Health
12. Ophthalmology
13. Oral Health
14. Palliative Medicine
15. Radiology
16. Rehabilitation Medicine
17. Research and Teaching
18. Surgery

2.7 How to use the Curriculum

The Curriculum is designed to be the yardstick by which progression in training can be reflected upon and strengths and areas for improvement identified by both registrars and their supervisors and educators. It serves to specify the intended learning outcomes for reference by supervisors and educators in planning learning activities and for conducting formative and summative assessments.

The full range of outcomes should be met by the stage of achieving Fellowship. It is acknowledged that registrars will take various pathways through training, have different training experiences and environments and enter with different range of abilities and interests. Therefore the Curriculum is set out as a whole entity, and not as a linear structure. As medical practice is integrated, so are the outcomes.

To make the most of the Curriculum, users should first familiarise themselves with the seven Domains and the 73 generic learning abilities that underpin them.

The Curriculum statements are intended to provide a more detailed analysis of learning outcomes in each Domain within the 18 identified areas of practice. While many learning outcomes remain the same or similar to the generic learning abilities, these learning outcomes have been deliberately contextualized to the major medical disciplines or practice areas and some learning outcomes will therefore provide variations of the generic abilities or be additional to the generic abilities.

This approach enables each of the 18 curriculum statements to stand in its own right - which may be especially helpful for registrars when reviewing progress by discipline or areas and for supervisors or educators working in defined disciplines or areas to rapidly assess the required outcomes in planning or delivering education. In this way the Curriculum can be accessed in multiple ways depending on needs. Hyperlinks enable the reader to access the required pages direct from the Table of Contents for ease of use.

3.0 Implementation

Appendix 1 provides further information on the ways in which ACRRM implements its curriculum. Please refer to this for more information on training standards and pathways, training duration, teaching and learning, educational delivery platforms and further resources.

4.0 Assessment

4.1 Programmatic Assessment Model

A programmatic assessment model is used in the ACRRM Vocational Training Program. A programmatic model treats assessment as a 'program' across the entire duration of training, rather than just a specific instrument. It therefore integrates assessment into all aspects of the curriculum²². This approach enables multiple methods to be used to assess learning outcomes and provides registrars with progressive feedback throughout their training.

Further details of the Assessment process are in Appendix 2. These should be read in conjunction with the Assessment blueprint relevant to the curriculum abilities shown below.

4.2 Assessment Blueprint

Domain 1 - Provide medical care in the ambulatory and community setting							
Abilities	MCQ	StAMPS	Logbook	MSF	CBD	MiniCEX	Other
1.1	Establish a doctor-patient relationship and use a patient-centred approach to care			x		x	
1.2	Obtain a clinical history that reflects contextual issues including: presenting problems, epidemiology, culture and geographic location		x			x	
1.3	Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context			x	x	x	
1.4	Use specialised clinical equipment as required for further assessment and interpret findings				x	x	
1.5	Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions	x	x			x	
1.6	Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses	x	x			x	
1.7	Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer	x	x	x		x	
1.8	Formulate a management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues	x	x			x	
1.9	Identify and manage co-morbidities in the patient and effectively communicate these to the patient and/or carer	x	x			x	
1.10	Ensure safe and appropriate prescribing of medications and treatment options in a clinical context	x				x	
1.11	Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions		x			x	
1.12	Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services		x	x	x	x	
1.13	Provide and/or arrange follow-up and continuing medical care	x	x		x	x	

²²van der Vleuten CP & Schuwirth LW (2005) Assessing professional competence: From methods to programs. *Medical Education*, vol. 39, no. 3, pp. 309-317.
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Domain 2 – Provide care in the hospital setting

Abilities	MCQ	StAMPS	Logbook	MSF	CBD	MiniCEX	Other
2.1	Manage admission of patients to hospital in accordance with institutional policies					x	
2.2	Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer		x			x	x
2.3	Apply relevant checklists and clinical management pathways		x			x	x
2.4	Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly	x	x			x	x
2.5	Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing	x	x				x
2.6	Order and perform a range of diagnostic and therapeutic procedures	x	x	x		x	x
2.7	Maintain timely and accurate patient documentation in hospital records including drug prescription and administration					x	Supervisor reports
2.8	Communicate effectively with the health care team, patient and/or carer including effective clinical handover		x		x		x
2.9	Recognise and respond early to the deteriorating patient	x	x			x	
2.10	Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography	x	x			x	
2.11	Undertake early, planned and multi-disciplinary discharge planning.		x				
2.12	Contribute medical expertise and leadership in a hospital team				x		
2.13	Provide direct and remote clinical supervision and support to nurses, junior doctors and students		x		x		x
2.14	Recognise, document and manage adverse events and near misses		x				x
2.15	Participate in institutional quality and safety improvement and risk-management activities						

Domain 3 – Respond to medical emergencies							
Abilities	MCQ	StAMPS	Logbook	MSF	CBD	MiniCEX	Other
3.1	Undertake initial assessment and triage of patients with acute or life threatening conditions	x	x				EM Courses
3.2	Stabilise critically ill patients and provide primary and secondary care	x	x	x			
3.3	Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources			x	x		EM Courses
3.4	Perform required emergency procedures			x			
3.5	Arrange and/or perform emergency patient transport or evacuation when needed		x			x	
3.6	Demonstrate resourcefulness in knowing how to access and use available resources		x			x	
3.7	Communicate effectively at a distance with consulting or receiving clinical personnel		x			x	
3.8	Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing		x				
3.9	Provide inter-professional team leadership in emergency care that includes quality assurance		x				EM Courses

Domain 4 – Apply a population health approach								
Abilities		MCQ	StAMPS	Logbook	MSF	CBD	MiniCEX	Other
4.1	Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services	x	x					
4.2	Apply a population health approach that is relevant to the clinical practice profile	x	x					
4.3	Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level		x			x	x	
4.4	Provide continuity and coordination of care for own practice population					x	x	
4.5	Evaluate quality of health care for practice populations		x					
4.6	Fulfil reporting requirements in relation to statutory notification of health conditions	x	x			x		
4.7	Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government		x					
4.8	Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health		x					

Domain 5 – Address the health care needs of culturally diverse and disadvantaged groups								
Abilities		MCQ	StAMPS	Logbook	MSF	CBD	MiniCEX	Other
5.1	Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups	x	x			x	x	
5.2	Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate				x		x	
5.3	Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care		x			x		
5.4	Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research		x					
5.5	Harness the resources available in the health care team, the local community and family to improve outcomes of care		x			x	x	
5.6	Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health		x			x		

Domain 6 – Practise medicine within an ethical, intellectual and professional framework							
Abilities	MCQ	StAMPS	Logbook	MSF	CBD	MiniCEX	Other
6.1	Ensure safety, privacy and confidentiality in patient care			x		x	
6.2	Maintain appropriate professional boundaries			x		x	
6.3	Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community	x	x				
6.4	Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements	x	x				
6.5	Keep clinical documentation in accordance with legal and professional standards			x	x		Supervisor Reports
6.6	Demonstrate commitment to teamwork, collaboration, coordination and continuity of care			x		x	
6.7	Contribute to the management of human and financial resources within a health service			x			
6.8	Work within relevant national and state legislation and professional and ethical guidelines		x		x		
6.9	Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes		x		x		
6.10	Manage, appraise and assess own performance in the provision of medical care for patients			x			
6.11	Develop and apply strategies for self-care, personal support and caring for family		x				
6.12	Teach and clinically supervise health students, junior doctors and other health professionals			x			
6.13	Engage in continuous learning and professional development						Training Program
6.14	Critically appraise and apply relevant research	x	x			x	x

Domain 7 – Practise medicine in the rural and remote context							
Abilities	MCQ	StAMPS	Logbook	MSF	CBD	MiniCEX	Other
7.1	Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation		x	x	x	x	
7.2	Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services		x	x	x	x	
7.3	Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs		x	x	x	x	
7.4	Provide direct and distant clinical supervision and support for other rural and remote health care personnel		x	x			
7.5	Use information and communication technology to provide medical care or facilitate access to specialised care for patients		x			x	
7.6	Use information and communication technology to network and exchange information with distant colleagues		x				
7.7	Respect local community norms and values in own life and work practices			x			
7.8	Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population		x	x	x		

5.0 Evaluation

This ACRRM Primary Curriculum is reviewed regularly about every five years, to ensure it is up-to-date and reflects contemporary general practice particularly in rural and remote settings, and that it is suitable to prepare registrars to work anywhere in Australia. It is also evaluated on an ongoing basis through feedback received by training providers, registrars, the profession, policy makers, and other key stakeholders.

6.0 Curriculum Statements

This section consists of the curriculum statements that describe the specific abilities, knowledge and skills that registrars must learn and be able to demonstrate, organised under major medical disciplines and topic areas. These curriculum statements resulted from an extensive consultation process with rural and remote doctors throughout Australia, which was used to achieve agreement on the content of each one. Each statement therefore takes into account the realities of rural and remote general practice and its comprehensive nature.

Each curriculum statement defines the abilities, knowledge and skills that rural general practitioners require in that discipline or topic area.

The disciplines and topic areas covered by the curriculum statements are:

1. Aboriginal and Torres Strait Islander Health (ATS)
2. Adult Internal Medicine (AIM)
3. Aged Care (AGE)
4. Anaesthetics (ANA)
5. Business and Professional Management (BPM)
6. Child and Adolescent Health (CAH)
7. Dermatology (DERM)
8. Information Management and Information Technology (IMIT)
9. Mental Health (MH)
10. Musculoskeletal Medicine (MSK)
11. Obstetrics and Women's Health (O&WH)
12. Ophthalmology (OPH)
13. Oral Health (ORAL)
14. Palliative Care (PAL)
15. Radiology (RAD)
16. Rehabilitation (REH)
17. Research and Teaching (R&T)
18. Surgery (SURG)

Each curriculum statement has been allocated an abbreviation as indicated above. The abbreviations are used prior to each ability statement to create a specific reference for each 'ability statement'; for example ATS 2.4.

Where an area is *italicised and underlined* in the following statements further information relating to this phrase is found under Definition of terms later in the statement.

6.1 Aboriginal and Torres Strait Islander Health

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- ATS 1.1 Undertake a systematic and culturally sensitive approach to health assessment for Aboriginal and Torres Strait Islander patients
- ATS 1.2 Establish a doctor-patient relationship and use a patient-centred approach to care
- ATS 1.3 Obtain a clinical history that reflects contextual issues including: presenting problems, epidemiology, culture and geographic location
- ATS 1.4 Identify and evaluate the range of factors that has impacted on an Aboriginal or Torres Strait Islander patient's health and recognise high-risk situations
- ATS 1.5 Identify situations where one-on-one consultations may be inappropriate with some Aboriginal or Torres Strait Islander patients
- ATS 1.6 Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context
- ATS 1.7 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- ATS 1.8 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering common and important health problems experienced by Aboriginal and Torres Strait Islander populations
- ATS 1.9 Consider spirituality problems as a potential differential diagnosis in a range of physical and psychological illnesses and seek advice from Indigenous health workers when a spirituality problem is suspected
- ATS 1.10 Evaluate and present available treatment options and their physical, social and psychological implications for the patient, family, community, and health team to enable their informed participation in decision-making
- ATS 1.11 Identify and consult with relevant parts of a patient's health decision-making network with the aim of developing a management plan in concert with the patient and/or carer
- ATS 1.12 Identify and manage co-morbidities in the patient and effectively communicate these to the patient and/or carer
- ATS 1.13 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- ATS 1.14 Refer, facilitate and coordinate access to relevant specialised medical and diagnostic and other health and social support services, considering local and cultural issues that may impact on the decision to treat or refer

- ATS 1.15 Collaborate and work effectively with other team members and other health care providers to provide optimal patient care during referrals, transfers and evacuations
- ATS 1.16 Consider and be able to evaluate the challenges associated with referral of Aboriginal and Torres Strait Islander people to specialist centres
- ATS 1.17 Recognise and demonstrate in referrals the additional time and other resources that may need to be expended to ensure effective referral, including optimal travel arrangements and liaison with Indigenous health workers for advice
- ATS 1.18 Establish effective follow-up and review mechanisms as required including review of procedures, assessment of outcomes and reassessment of health problems

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- ATS 2.1 Manage admission of Aboriginal and Torres Strait Islander patients to hospital in accordance with institutional policies
- ATS 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient, carers, family and Aboriginal and Torres Strait Islander Health Workers as relevant
- ATS 2.3 Enlist the support of Aboriginal or Torres Strait Islander hospital liaison officers in inpatient care and discharge planning and be able to describe their role
- ATS 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- ATS 2.5 Communicate effectively with the health care team, patient and/or carer including effective clinical handover and liaison with hospital and community-based Aboriginal and Torres Strait Islander health staff
- ATS 2.6 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation, geography and challenges associated with referral of Aboriginal and Torres Strait Islander people to specialist centres
- ATS 2.7 Undertake early, planned and multi-disciplinary discharge planning with involvement of relevant Aboriginal and Torres Strait Islander health personnel

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- ATS 3.1 Undertake initial assessment and triage of patients with acute or life threatening conditions
- ATS 3.2 Stabilise critically-ill patients and provide primary and secondary care
- ATS 3.3 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- ATS 3.4 Recognise and evaluate variations in emergency presentations among Aboriginal and Torres Strait Islander patients that differ from the non-Indigenous population
- ATS 3.5 Perform required emergency procedures
- ATS 3.6 Arrange and/or perform emergency patient transport or evacuation when needed
- ATS 3.7 Demonstrate resourcefulness in knowing how to access and use available resources
- ATS 3.8 Communicate effectively at a distance with consulting or receiving clinical personnel
- ATS 3.9 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- ATS 3.10 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- ATS 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the burden of disease in Aboriginal and Torres Strait Islander communities and their access to health-related services
- ATS 4.2 Apply a population health approach that is relevant to the clinical practice profile
- ATS 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level, including opportunistic comprehensive health assessment and treatment plans for Aboriginal and Torres Strait Islander patients
- ATS 4.4 Provide continuity and coordination of care for own practice population
- ATS 4.5 Evaluate quality of health care for Aboriginal and Torres Strait Islander practice populations
- ATS 4.6 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- ATS 4.7 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- ATS 5.1 Recognise and assess how the historical, cultural and epidemiological diversity among Aboriginal peoples and Torres Strait Islander communities in Australia impacts on their health care
- ATS 5.2 Apply knowledge of the varying profile of disease and health risks among different Aboriginal and Torres Strait Islander communities to health care provision
- ATS 5.3 Communicate effectively and in a culturally safe manner, using interpreters, key Aboriginal and Torres Strait Islander community contacts and networks as appropriate
- ATS 5.4 Reflect on and discuss own assumptions, cultural beliefs and emotional reactions in providing culturally safe care to Aboriginal and Torres Strait Islander patients
- ATS 5.5 Describe and apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research with Aboriginal and Torres Strait Islander communities
- ATS 5.6 Harness the resources available in the health care team, the local community and family to improve outcomes of care for Aboriginal and Torres Strait Islander communities
- ATS 5.7 Work with culturally diverse and disadvantaged groups to evaluate and address barriers in access to health services and the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- ATS 6.1 Ensure safety, privacy and confidentiality in patient care
- ATS 6.2 Deal effectively with the particular need and difficulty in maintaining confidentiality in rural/remote and Aboriginal and Torres Strait Islander communities
- ATS 6.3 Establish where necessary and adhere to protocols that outline confidentiality and integrity requirements for staff
- ATS 6.4 Describe the principles and practicalities of working in a manner which is empowering to individuals and communities

- ATS 6.5 Provide health care services that use a primary health care approach, contributing to the social and emotional wellbeing of the individual patient and the community as a whole
- ATS 6.6 Demonstrate an ability to recognise one's own limitations and appropriately determine when to refer
- ATS 6.7 Maintain appropriate professional boundaries
- ATS 6.8 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- ATS 6.9 Critically reflect on consultations and community-based activities to identify strengths and opportunities for development of own performance in the care of Aboriginal and Torres Strait Islander patients
- ATS 6.10 Develop and apply strategies for self-care, personal support and caring for family while living and working in a cultural context other than one's own
- ATS 6.11 Teach and clinically supervise health students, junior doctors and other health professionals including Aboriginal and Torres Strait Islander Health Workers
- ATS 6.12 Undertake self-directed learning, continuing education and conduct quality assurance activities in the provision of health services to Aboriginal and Torres Strait Islander peoples
- ATS 6.13 Critically appraise and apply relevant research to inform practice taking into account the particular ethical considerations in conduct of research in the Indigenous health context

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness; Flexibility, teamwork and technology; Responsiveness to context

Abilities

- ATS 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- ATS 7.2 Demonstrate a commitment to ensuring that Aboriginal and Torres Strait Islander peoples in rural/remote communities receive health opportunities commensurate with health care standards and opportunities available in metropolitan areas
- ATS 7.3 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- ATS 7.4 Use information and communication technology to provide medical care or facilitate access to specialised care for Aboriginal and Torres Strait Islander patients
- ATS 7.5 Use information and communication technology to network and exchange information with distant colleagues
- ATS 7.6 Respect local Aboriginal or Torres Strait Islander community norms and values in own life and work practices
- ATS 7.7 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local Aboriginal or Torres Strait Islander population

Definition of terms

High risk situations include	Pre-existing physical illness, compromised immunity, social situations which place families at risk, social situations which lead to inappropriate use of health services, alcoholism or other substance abuse, history of domestic violence in the family, history of mental illness, implicated in death or injury of another Aboriginal person; people travelling long distances or camped in other communities
Situations where one on one consultations may be inappropriate include	Gynaecological and obstetric examinations; when customary lore issues are involved; intimate examination for STIs
Common and important health risks and problems experienced by Aboriginal and Torres Strait Islander populations include	<p>High adult and child prevalence of chronic disease, including type 2 diabetes mellitus, hypertension, dyslipidaemia and related end-organ complications such as cardiovascular, renal and eye disease</p> <p>Infectious and parasitic diseases that are overrepresented in many Indigenous communities, such as bacterial pneumonia, scabies, impetigo, rheumatic fever, syphilis, trachoma, tuberculosis, leprosy, gonococcal disease, hookworm and strongyloidiasis</p> <p>Injury and trauma related to motor-vehicle accidents, environmental hazards, family violence and other interpersonal violence, suicide and self-harm</p> <p>Teen pregnancy, gestational diabetes, premature labour, IUGR, faltering growth</p> <p>Mental health, social and emotional wellbeing problems, alcohol and substance misuse</p>
Challenges associated with referral of Aboriginal and Torres Strait Islander people to specialist centres include	Removal from home and family; travel arrangements; culture shock and language barriers; financial problems; problems with maintaining a reasonable informed consent process
Variations in emergency presentations among Aboriginal and Torres Strait Islander patients include	Young age at presentation with acute coronary syndrome, stroke or acute kidney failure, acute rheumatic fever, severe pneumonia, crusted scabies, disseminated strongyloidiasis

Knowledge and Skills

Essential knowledge required

Recognises the social, cultural, historical, economic and political framework that has influenced the current health status of Aboriginal and Torres Strait Islander people, including:

- the known characteristics of the pre-colonial health status of Aboriginal and Torres Strait Islander people
- major current mortality and morbidity patterns of Aboriginal and Torres Strait Islander people compared to the Australian population as a whole, particularly in relation to: fertility rate, life expectancy, maternal mortality, infant mortality, age-specific mortality and morbidity
- major regional differences in mortality and morbidity patterns
- common age and sex specific causes of morbidity, mortality, clinic presentation and hospital admission for local Aboriginal and Torres Strait Islander people, linking them with the associated socio- economic, cultural and environmental factors

Knows an overview of colonisation in Australia including:

- the term 'Terra Nullius' and its significance
- cultural revitalisation
- the background underlying colonisation in Australia
- the process of colonisation

- the resistance of Aboriginal and Torres Strait Islander people to colonisation

Knows an overview of the history of Australian government regulation in relation to Aboriginal and Torres Strait Islander people including:

- segregation and protection policies, 'smoothing the dying pillow' to 'training for citizenship'
- assimilation, removal of children, the 'stolen' generation
- contemporary policies, community empowerment, self-determination, the growth of Indigenous organisations
- land rights
- reconciliation

Recognises the contemporary socio-cultural characteristics of Indigenous communities including:

- family organisation, extended family
- patterns of reciprocity and decision making
- social distance from non-Aboriginal and Torres Strait Islander people
- folklore and identity

Defines the term 'cultural safety' and the application of culturally safe principles to health service delivery, including:

- the importance of, and connection between, cultural safety, recognition of cultural diversity among Aboriginal and Torres Strait Islander peoples and self determination
- racism and the impact of racism on the health and the delivery of health care to Aboriginal and Torres Strait Islander peoples
- strategies to maintain culturally safe practice
- the concept of community held by Aboriginal and Torres Strait Islander people and appropriate protocols for consultation

Identifies the issues involved in communicating cross-culturally, including:

- the different communication styles of Aboriginal and Torres Strait Islander people
- communication cues from Aboriginal and Torres Strait Islander people particularly in relation to: gender issues in the patient/doctor relationship, body space and touching, questions about initiation marks, limitations on questions about sexual organs, lore and about other people
- the barriers to effective communication between doctors, other staff and community members including: socio-economic background, cultural issues, language, health beliefs, lore, authority figures, anticipation of approval from whites, gender
- the concept of culture shock

Knows the living picture of the population and distribution characteristics of Aboriginal and Torres Strait Islander people, including:

- the population of Aboriginal and Torres Strait Islander people relative to the whole population, pre- and post-colonisation

- major features of the distribution of Aboriginal and Torres Strait Islander people, nationally, in each state, rural–urban distribution, in his/her own region, town, community
- demography of the Indigenous population in terms of age and gender
- the broad diversity of backgrounds and lifeway's of Aboriginal and Torres Strait Islander people

Describes current social and economic inequities experienced by Aboriginal and Torres Strait Islander people and the link between socio-economic factors and health status, including:

- employment status, education status, economic status, housing status, access and standard of environmental infrastructure
- barriers to accessing primary, secondary and tertiary health services
- the social and economic determinants of health and mechanisms by which these act

Identifies the elements, concepts and activities of Primary Health Care, including:

- the shared characteristics of the primary health care model and the concept of health held by Aboriginal and Torres Strait Islander people
- the principles of primary health care to his/her clinical practice
- how preventive health care, including health promotion and environmental health issues can be an integral part of clinical practice relevant to the health of Aboriginal and Torres Strait Islander people

Knows the evolution, philosophy and characteristics of health service delivery for Aboriginal and Torres Strait Islander people, including:

- the types, quality and effectiveness of western-style health services provided prior to the Aboriginal community controlled health services movement
- social and health conditions that underpin the evolution of community controlled health services
- the philosophy of community controlled health services
- 'self-determination' as it is exercised in the context, operation and activity of community controlled health services
- community controlled organisations in their local area and the services they provide
- the relationship between government health agencies and community controlled health services, nationally, regionally and locally
- concepts of social justice, equity of health outcomes, and health rights in relation to Indigenous health care provision
- the integral role of intersectoral and interprofessional collaboration and the function of Indigenous and Torres Strait Islander health workers in facilitating effective care of the individual and the community

Learning resources

Recommended texts and other resources

- Australian Indigenous Health/InfoNet, <http://www.healthinfonet.ecu.edu.au>
- Australian Indigenous Clinical/InfoNet, <http://www.clinicalinfonet.net.au/Pages/default.aspx>
- Eckermann A (2010) *Binan Goonj: Bridging Cultures in Aboriginal Health*. 3rd ed. Sydney; Churchill Livingstone, New York.
- Couzos S & Murray R (2008) *Aboriginal Primary Health Care: An Evidence Based Approach*. Kimberley Aboriginal Medical Services' Council, National Aboriginal Community Controlled Health Organisation, 3rd ed. Oxford University Press, Melbourne, Vic.
- Smith JD (2007) *Australia's Rural and Remote Health: A Social Justice Perspective*. 2nd Ed. Tertiary Press, Croydon, Vic.
- Rural and Remote Medical Education Online (RRMEO) - <http://www.rrmeo.com>
- UpToDate® electronic database that provides current, published, summarised evidence and specific recommendations for patient care - <http://www.uptodate.com>
- Central Australian Rural Practitioners Association (2009) *CARPA Standard Treatment Manual*. 5th Ed. Alice Springs: Central Australian Rural Practitioners Association - <http://www.carpa.org.au/drupal/node/15>
- The State of Queensland (Queensland Health) and the Royal Flying Doctor Service (Queensland Section) (2011) *Primary Clinical Care Manual*. 7th Ed. Cairns - <http://www.health.qld.gov.au/pccm/>
- CRANApplus (2009) *Clinical Procedures Manual for Remote and Rural Practice* 2nd Ed. CRANApplus, Alice Springs.
- Congress Alukura, Nganampa Health Council Inc. *Minymaku Kutju Tjukurpa Women's Business Manual*. 4th Ed. Alice Springs: Congress Alukura and Nganampa Health Council Inc; 2008 <https://crana.org.au/shop/> (New edition coming Sept 13)
- *Australian medicines handbook: AMH*. Adelaide, S.Aust: Australian Medicines Handbook; 2013 <https://shop.amh.net.au/>
- Top End Division of General Practice (2003) *Tropical Health in the Top End: An introduction for health practitioners*, Top End Division of General Practice, Darwin (currently under review). PDF Version - <http://www.ntml.org.au/resources>
- National Health and Medical Research Council - *Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research*. 2003, National Health and Medical Research Council, Commonwealth of Australia, Canberra (Currently under review).
- Thomson, N (2003) *The Health of Aboriginal and Torres Strait Islander Australians*. Oxford University Press, Melbourne.
- Closing the Gap: The Indigenous Reform Agenda - <http://www.fahcsia.gov.au/our-responsibilities/indigenous-australians/programs-services/closing-the-gap>

6.2 Adult Internal Medicine

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- AIM 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- AIM 1.2 Obtain an accurate clinical history that reflects contextual issues including: presenting problems, epidemiology, occupation, family, gender, culture and geographic location
- AIM 1.3 Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context
- AIM 1.4 Use specialised clinical equipment as required for further assessment and interpret findings
- AIM 1.5 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- AIM 1.6 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses in balance with common or important medical conditions and infections
- AIM 1.7 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- AIM 1.8 Formulate an appropriate management plan for immediate and urgent treatment, local management, further local and specialist consultation as required and/or arrange referral and transfer
- AIM 1.9 Manage concurrent illness and co-morbidities being aware of implications for the primary medical condition and involving specialised advice and treatment if required
- AIM 1.10 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- AIM 1.11 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- AIM 1.12 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services fostering a team approach to health care
- AIM 1.13 Provide and/or arrange follow-up and continuing medical care for patients with common or important medical conditions including infections

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- AIM 2.1 Manage admission of patients to hospital in accordance with institutional policies ensuring a relevant clinical diagnostic process with history, physical examination, investigation and differential diagnosis
- AIM 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer and in discussion with their community-based general practitioner or other health professional
- AIM 2.3 Apply relevant checklists and clinical management pathways
- AIM 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- AIM 2.5 Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing
- AIM 2.6 Order and perform a range of diagnostic and therapeutic procedures in discussion with the patient and/or carer being aware of cost-benefit and medical risk issues
- AIM 2.7 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- AIM 2.8 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- AIM 2.9 Recognise and respond early to the deteriorating patient
- AIM 2.10 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- AIM 2.11 Undertake early, planned and multi-disciplinary discharge planning including discussion with the general practitioner or health professional who will provide ongoing care in the community
- AIM 2.12 Contribute medical expertise and leadership in a hospital team
- AIM 2.13 Provide direct and remote clinical supervision and support to nurses, junior doctors and students
- AIM 2.14 Recognise, document and manage adverse events and near misses identifying the benefit for learning and developing expertise
- AIM 2.15 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- AIM 3.1 Undertake initial assessment and triage of patients with acute or life threatening conditions
- AIM 3.2 Stabilise critically ill patients and provide primary and secondary care
- AIM 3.3 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- AIM 3.4 Perform required emergency procedures
- AIM 3.5 Arrange and/or perform emergency patient transport or evacuation when needed
- AIM 3.6 Demonstrate resourcefulness in knowing how to access and use available resources locally and in secondary and tertiary referral centres
- AIM 3.7 Communicate effectively at a distance with consulting or receiving clinical personnel
- AIM 3.8 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- AIM 3.9 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- AIM 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- AIM 4.2 Apply a population health approach that is relevant to the clinical practice profile of the population served
- AIM 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level for common or important medical conditions and infections
- AIM 4.4 Conduct screening activities to identify patients at high risk of cardiovascular disease
- AIM 4.5 Provide continuity and coordination of care for own practice population
- AIM 4.6 Evaluate quality of health care for practice populations in collaboration with local primary health care providers
- AIM 4.7 Fulfil reporting requirements in relation to statutory notification of health conditions
- AIM 4.8 Access and collaborate with agencies responsible for key population health functions including public health services, private health providers, employer groups and local government
- AIM 4.9 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- AIM 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- AIM 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- AIM 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- AIM 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- AIM 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- AIM 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- AIM 6.1 Ensure safety, privacy and confidentiality in patient care
- AIM 6.2 Maintain appropriate professional boundaries
- AIM 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- AIM 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- AIM 6.5 Keep clinical documentation in accordance with legal and professional standards
- AIM 6.6 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- AIM 6.7 Contribute to the management of human and financial resources within a health service
- AIM 6.8 Work within relevant national and state legislation and professional and ethical guidelines
- AIM 6.9 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes

- AIM 6.10 Manage, appraise and assess own performance in the provision of medical care for patients
- AIM 6.11 Develop and apply strategies for self-care, personal support and caring for family
- AIM 6.12 Teach, mentor and clinically supervise health students, junior doctors and other health professionals
- AIM 6.13 Engage in continuous learning and professional development
- AIM 6.14 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, Teamwork and technology, Responsiveness to context

Abilities

- AIM 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- AIM 7.2 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- AIM 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- AIM 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- AIM 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- AIM 7.6 Use information and communication technology to network and exchange information with distant colleagues
- AIM 7.7 Respect local community norms and values in own life and work practices
- AIM 7.8 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

Common or important medical conditions and infections include

<p>Cardiac</p>	<p>Arrhythmia including:</p> <p>Supraventricular arrhythmias, ventricular arrhythmias</p> <p>Ischaemic heart disease including:</p> <p>Myocardial infarction, angina</p> <p>Hypertensive heart disease</p> <p>Valvular heart disease including:</p> <p>Aortic and mitral valve disease, ventricular septal defect (VSD), atrial septal defect (ASD), bacterial endocarditis</p> <p>Cardiac failure including:</p> <p>Acute left ventricular failure (LVF), congestive heart failure, chronic LVF and cor pulmonale</p> <p>Peripheral Vascular Disease including:</p> <p>Arterial and venous ulcers</p>
<p>Nephrology</p>	<p>Glomerular Nephropathies</p> <p>Acute and recurrent urinary tract infections including:</p> <p>Pyelonephritis, cystitis, prostatitis, urethritis</p> <p>Acute and chronic renal failure</p> <p>Vascular disease of the kidney including:</p> <p>Polyarteritis nodosa, hypersensitivity vasculitis, haemolytic uraemic syndrome (HUS) and atypical haemolytic uraemic syndrome (aHUS), renal artery stenosis</p> <p>Urinary tract calculi</p>
<p>Thoracic and sleep medicine</p>	<p>Asthma</p> <p>Acute respiratory failure</p> <p>Chronic Obstructive Airways Disease including:</p> <p>COPD, Chronic respiratory failure, sleep apnoea</p> <p>Respiratory Infections including:</p> <p>Acute and chronic bronchitis, pneumonia, bronchiectasis, tuberculosis, cystic fibrous, psittacosis</p> <p>Neoplasia</p> <p>Pulmonary embolism</p> <p>Pleural disease</p> <p>Spontaneous pneumothorax</p> <p>Hypersensitivity pneumonitis including:</p>

	<p>Farmer's lung, bird fancier's lung</p> <p>Interstitial lung disease including:</p> <p>Sarcoidosis, Wegener's granulomatosis, cryptogenic fibrosing alveolitis</p>
Infectious diseases	<p>Occupational/Environmental lung disease including:</p> <p>Occupational asthma, asbestos related pleural and parenchymal disease (benign and malignant), interstitial lung disease from exposure to organic and inorganic dusts</p> <p>Zoonoses such as:</p> <p>Q fever, leptospirosis, brucellosis, rabies, anthrax, toxoplasmosis</p> <p>Bacterial infections such as:</p> <p>Meningococcal meningitis/septicaemia, other meningitides, typhoid, pneumonia, tuberculosis, leprosy, melioidosis</p> <p>Hepatitis</p> <p>Viral infections such as:</p> <p>Influenza, Ross River Fever, measles, mumps, varicella, Epstein-Barr virus, dengue, rubella, herpes</p> <p>Protozoal infections such as:</p> <p>Malaria, giardiasis</p> <p>Worms such as:</p> <p>Round worms, hook worms, fluke worms, pin worms</p> <p>Sexually transmitted disease such as:</p> <p>Gonorrhoea, syphilis, NGU/chlamydia, herpes, genital warts, HIV/AIDS</p>
Gastroenterology	<p>Gastrointestinal emergencies including:</p> <p>Acute gastrointestinal haemorrhage, liver failure, hepatic encephalopathy, acute colitis</p> <p>Common gastrointestinal symptoms including:</p> <p>Weight loss, abdominal pain, dysphagia, Iron deficiency anaemia, acute/chronic diarrhoea, nausea and vomiting</p> <p>Upper Gastrointestinal Disease including:</p> <p>Gastro-oesophageal reflux disease, peptic ulcer, helicobacter pylori associated ulcers, NSAID induced conditions including: functional dyspepsia, gastric carcinoma</p> <p>Hepatobiliary disease such as:</p> <p>Alcoholic liver disease, fatty liver, chronic liver disease (cirrhosis) and complications, ascites, liver failure, haemochromatosis, gall bladder disorders</p> <p>Pancreatic disease including:</p> <p>Acute pancreatitis and complications, chronic pancreatitis and complications, pseudocyst formation and complications</p> <p>Small and large bowel diseases including:</p> <p>Coeliac disease, irritable bowel syndrome, constipation, appendicitis, inflammatory bowel disease, colonic adenoma/carcinoma, diverticulosis/diverticulitis, lactose intolerance</p>

	<p>Anorectal disease such as:</p> <p>Haemorrhoids, anal fissures, anorectal abscess</p>
Rheumatology	<p>Rheumatological emergencies including:</p> <p>Acute mono/oligo arthritis, acute polyarthritis, systemic vasculitis</p> <p>Common rheumatological problems including:</p> <p>Rheumatoid arthritis, osteoarthritis, gout/pseudogout, back pain, soft tissue rheumatism, recognition of arboviral arthropathies, temporal arteritis / polymyalgia rheumatica, sero-negative arthropathies, connective tissue disorders including: SLE - vasculitis – scleroderma - myositis</p>
Endocrinology	<p>Common endocrinological disorders including:</p> <p>Diabetes mellitus including gestational diabetes, thyroid disease, adrenal cortical disease, pituitary disease, sex hormone disease, parathyroid disease, sexual dysfunction</p>
Neurology	<p>Common neurological disorders including:</p> <p>Abnormal focal neurological signs, cerebrovascular accident, transient ischaemic attacks, headache, epilepsy, Parkinson's disease, confusional states and intellectual impairment, CNS infection, Space occupying lesions (SOL)</p> <p>Other neurological disorders including:</p> <p>Acoustic neuroma, Guillain-Barre syndrome, temporal arteritis, benign intracranial hypertension, multiple sclerosis, Bell's palsy, trigeminal neuralgia</p>

Knowledge and Skills

Essential knowledge required

- Knows aetiology, pathogenesis, incidence, prevalence and where relevant trigger factors or causes of common or important medical conditions and infections
- Recalls signs and symptoms of common or important medical conditions and infections
- Interprets common investigations including laboratory tests and imaging
- Identifies appropriate pharmacological and non-pharmacological treatment of common or important medical conditions and infections
- Describes indications for referral to specialised care
- Selects national guidelines for common medical conditions e.g. Heart Foundation, Asthma Foundation guidelines
- Knows infection control procedures
- Knows contact tracing, legal requirements and the management of partners with STDs

Essential skills required

- Performs and interprets common and important ECG findings
- Uses emergency electrocardiograph and cardioversion
- Performs fundoscopy and assesses common disorders
- Demonstrates urine analysis
- Performs urine microscopy
- Performs spirometry
- Uses venom detection kit
- Performs Glasgow coma scale
- Performs arterial blood sampling
- Demonstrates technique of use for nebulisers, spacers and turbo-inhalers
- Uses supplemental oxygen
- Applies re-breathing mask
- Uses CPAP/BIPAP
- Uses oxygen concentrators
- Performs pericardiocentesis
- Performs intercostal catheter thrombolytic therapy
- Inserts orogastric tube
- Performs needle thoracocentesis
- Undertakes a pleural tap
- Inserts an underwater drain
- Performs a lumbar puncture
- Undertakes sigmoidoscopy/proctoscopy (under supervision)
- Demonstrates ascitic tap
- Uses glucometers
- Assist with a focussed assessment with sonography for trauma (FAST Scan)

Learning resources

Recommended texts and other resources

- Hampton JR (2013) *The ECG Made Easy*. 8th Ed. Edinburgh; New York: Churchill Livingstone/Elsevier, Australia (*new edition to be released 23/10/13*).
- Flynn JA & Longmore JM (2010) *Oxford American Handbook of Clinical Medicine*. 8th Ed. Oxford University Press, New York.
- Bickley LS & Szilagyi PG (2012) *Bates' Guide to Physical Examination and History Taking*. 11th Ed. Lippincott Williams & Wilkins, Philadelphia.
- National Health and Medical Research Council (Australia) (2013) *The Australian immunisation handbook*. 10th Ed. Australian Govt. Pub. Service, Canberra.
- Sutherland SK & Tibballs J (2001) *Australian Animal Toxins: The Creatures, their Toxins, and Care of the Poisoned Patient*. 2nd Ed. South Melbourne; Oxford University Press, New York.
- Gill GV & Beeching N (2009) *Tropical Medicine*. 6th Ed. Edited by Geoff Gill & Nick Beeching. Ed. Wiley-Blackwell, Oxford.

- Australian Medicines Handbook (2013) *AMH*. Australian Medicines Handbook, Adelaide, South Australia.
- Therapeutic Guidelines Limited <http://www.tg.org.au/>
- Therapeutic Guidelines Limited (2012) *Therapeutic Guidelines: Analgesics*. 6th Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2012) *Therapeutic Guidelines: Toxicology and Wilderness*. 2nd Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2010) *Therapeutic Guidelines: Rheumatology*. 2nd Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2010) *Therapeutic Guidelines: Antibiotic*. 14th Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2009) *Therapeutic Guidelines: Respiratory*. 4th Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2011) *Therapeutic Guidelines: Gastrointestinal*. 5th Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2012) *Therapeutic Guidelines: Cardiovascular*. 6th Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2009) *Therapeutic Guidelines: Endocrinology*. 4th Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2011) *Therapeutic Guidelines: Neurology*. 4th Ed. Therapeutic Guidelines Limited, North Melbourne.
- Therapeutic Guidelines Limited (2011) *Therapeutic Guidelines: Developmental Disability*. 3rd Ed. Therapeutic Guidelines Limited, North Melbourne.
- Rural and Remote Medical Education Online (RRMEO) - <http://www.rrmeo.com>
- UpToDate® electronic database that provides current, published, summarised evidence and specific recommendations for patient care - <http://www.uptodate.com>
- PubMed, US National Public Library of Medicine, National Institutes of Health - <http://www.ncbi.nlm.nih.gov/pubmed/>
- Department of Health - *National Male Health Policy* - <http://www.health.gov.au/malehealthpolicy>

6.3 Aged Care

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- AGE 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- AGE 1.2 Obtain a clinical history from the older patient and/or carer that reflect contextual issues, consideration of specific conditions with a strong age-associated risk, and conditions that may affect functional status
- AGE 1.3 Perform a problem-focused physical examination and comprehensive functional health assessment for the older patient
- AGE 1.4 Use specialised clinical equipment as required for further assessment and interpretation of findings
- AGE 1.5 Undertake regular medication reviews with advancing age and frailty including monitoring and managing adverse effects of medication
- AGE 1.6 Order and/or perform relevant investigations and apply knowledge of age-related changes in interpretation of results
- AGE 1.7 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering non-specific and differing presentation of diseases in older people as well as uncommon but clinically important differential diagnoses
- AGE 1.8 Formulate a management plan in concert with the older patient and/or carer, applying knowledge of community resources, continuity of care and a multi-disciplinary approach
- AGE 1.9 Empower patients and/or carers with the knowledge, skills, and resources to self-manage the symptoms of their chronic conditions where possible
- AGE 1.10 Identify and manage co-morbidities in the patient and effectively communicate these to the patient/carer
- AGE 1.11 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- AGE 1.12 Participate in development, implementation and review of multidisciplinary care plans for aged patients with complex needs
- AGE 1.13 Demonstrate knowledge and skills in assisting families to cope with the issues faced in caring for a deteriorating elderly person, including sustaining family relationships in times of tension, stress and anxiety
- AGE 1.14 Demonstrate knowledge and skills in assisting patients and their carers to access respite care or move to residential care
- AGE 1.15 Support older patients to develop an Advanced Care Directive, allowing the patients to give directions about what medical treatment they may/may not wish when they are no longer able to speak for themselves
- AGE 1.16 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions

- AGE 1.17 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- AGE 1.18 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- AGE 2.1 Manage admission of older patients to hospital in accordance with institutional policies
- AGE 2.2 Develop, implement and maintain a priority-based management plan for elderly in patients with a range of acute diagnoses
- AGE 2.3 Apply relevant checklists and clinical management pathways for common conditions in the aged population
- AGE 2.4 Monitor clinical progress, regularly re-evaluate problem lists and modify management accordingly
- AGE 2.5 Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing
- AGE 2.6 Order and perform a range of diagnostic and therapeutic procedures
- AGE 2.7 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- AGE 2.8 Communicate effectively with the health care team, patient and/or carer including effective clinical handover to primary care provider
- AGE 2.9 Recognise and respond early to the deteriorating older patient in hospital
- AGE 2.10 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, Advance Care Directives, service capabilities, patient preferences, transportation and geography
- AGE 2.11 Undertake early, planned and multi-disciplinary discharge planning
- AGE 2.12 Contribute medical expertise and leadership in a hospital team
- AGE 2.13 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- AGE 2.14 Recognise, document and manage adverse events and near misses
- AGE 2.15 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- AGE 3.1 Respond to acute or life threatening condition in the elderly patient, including assessment of potential risks and adverse reactions
- AGE 3.2 Be aware of a current Advanced Care Directive or resuscitation status
- AGE 3.3 Provide definitive emergency resuscitation and management for the older patient, in keeping with any Advance Care Directive, clinical need, own capabilities and available resources
- AGE 3.4 Arrange and/or perform emergency patient transport or evacuation when needed
- AGE 3.5 Communicate effectively at a distance with consulting or receiving clinical personnel
- AGE 3.6 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment
- AGE 3.7 Plan for emergencies at home and in the community including use of medical alert tags and personal alarms

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- AGE 4.1 Analyse the social, environmental, economic and occupational determinants of healthy ageing that affect the community burden of disease and access to health-related services
- AGE 4.2 Apply a population health approach that is relevant to the clinical practice profile
- AGE 4.3 Integrate health education and health promotion for healthy ageing into practice at a systems level to prevent illness and improve general health
- AGE 4.4 Organise routine comprehensive health assessment for patients aged over 75 years
- AGE 4.5 Apply principles of coordination of care and the provision of continuity of care for older patients
- AGE 4.6 Evaluate the quality of health care for older patients in the practice population
- AGE 4.7 Fulfil reporting requirements in relation to statutory notification of health conditions
- AGE 4.8 Access and collaborate with agencies responsible for older person care and support
- AGE 4.9 Apply knowledge of the impact and implications of the ageing population on the health system in rural and remote communities in planning health service needs, access to health services and health service utilisation

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- AGE 5.1 Apply knowledge of the differing profile of disease, health risks and beliefs among older patients from culturally and linguistically diverse and disadvantaged groups
- AGE 5.2 Communicate effectively and in a culturally safe manner with older patients, using interpreters, key community contacts and networks as appropriate
- AGE 5.3 Reflect on and discuss own assumptions, cultural beliefs and emotional reactions in providing culturally safe care for older patients
- AGE 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- AGE 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care for older patients
- AGE 5.6 Work with culturally and linguistically diverse and disadvantaged groups to address barriers in access to health and support services for older people

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- AGE 6.1 Recognise and demonstrate strategies for the particular need for and difficulty in maintaining privacy and confidentiality in rural/remote communities
- AGE 6.2 Uphold the rights of older patients, their family members and/or carers
- AGE 6.3 Promote older people's dignity and sense of identity in the face of illness and frailty
- AGE 6.4 Be aware of duty of care issues arising from providing health care to elderly patients and the community
- AGE 6.5 Recognise and manage elder abuse in its various forms
- AGE 6.6 Keep clinical documentation in accordance with legal and professional standards
- AGE 6.7 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care in the aged population
- AGE 6.8 Contribute to the management of human and financial resources within a health service
- AGE 6.9 Work within relevant *national and state legislation related to the rights of elderly people* and improvement of their health care
- AGE 6.10 Provide accurate and ethical certification when required for sickness, social benefits and other purposes
- AGE 6.11 Recognise and utilise the extended role of other health care practitioners and services in the local area
- AGE 6.12 Develop and apply strategies for self-care, personal support and caring for family

- AGE 6.13 Critically appraise own clinical performance in providing care to older patients
- AGE 6.14 Teach and clinically supervise others in provision of care to older patients
- AGE 6.15 Engage in continuous learning and professional development in aged care

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, Teamwork and technology, Responsiveness to context

Abilities

- AGE 7.1 Recognise differences in presentation of older patients that might occur in the rural and remote context
- AGE 7.2 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- AGE 7.3 Recognise the differing availability of medical and allied health care resources in rural/remote communities and demonstrate the ability to improvise where necessary
- AGE 7.4 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- AGE 7.5 Provide direct and distant clinical supervision and support for other rural and remote health care personnel working with older patients
- AGE 7.6 Use information and communication technology effectively to provide medical care or facilitate access to specialised care for patients, as well as maintain a professional network and exchange medical information when required
- AGE 7.7 Use information and communication technology to network and exchange information with distant colleagues
- AGE 7.8 Respect local community norms and values in own life and work practices
- AGE 7.9 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local elderly population

Definition of terms

<p>Specific conditions with a strong age-related risk include</p>	<p>Neurological including:</p> <p>Parkinson's disease, dementia, CVA</p> <p>Ophthalmology disorders including:</p> <p>Loss of visual acuity, cataracts, glaucoma, macular degeneration, exophthalmia, temporal arteritis</p> <p>Musculoskeletal including:</p> <p>Spondylosis, polymyalgia rheumatica, osteoarthritis, spinal canal stenosis, sciatica, osteoporosis and osteoporotic fractures</p> <p>Pulmonary including:</p> <p>Asthma, COPD, pneumonia</p> <p>Gastrointestinal including:</p> <p>Constipation, incontinence</p> <p>ENT including:</p>
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	<p>Deafness, tinnitus, xerostomia</p> <p>Endocrine including:</p> <p>Type 2 diabetes, hypothyroidism, hyperthyroidism</p> <p>Renal including:</p> <p>Chronic renal disease</p> <p>Cardiovascular disease including:</p> <p>Ischaemic heart disease, heart failure, hypertension, hypotension, atrial fibrillation</p> <p>Genitourinary including:</p> <p>Urinary dysfunction, urinary tract infection, prostate disease, incontinence</p> <p>Psychiatric disorders including:</p> <p>Depression, anxiety</p> <p>Cancers</p>
Conditions that may affect functional status include	Nutritional problems, syncope, falls and gait disorders, fractures, osteoarthritis, acute confusional state, behaviour disorders, sleep disorders, pain, cancer, pressure sores, urinary incontinence, sensory loss, polypharmacy, frailty and dementia
Comprehensive functional health assessment include	<p>An assessment of impairment, disability and handicap that also includes social - psychological and environmental dimensions</p> <p>Administration of functional and cognitive assessment scales as appropriate, assessing a patient's suitability for care at home, identifying the need for aids (including hearing aids) and appliances in the rehabilitation of older disabled patients</p>
Medication reviews	<p>www.health.gov.au/internet/main/publishing.nsf/Content/medication_management_reviews</p> <p>DMMR (Domiciliary Medication Management Review)</p> <p>RMRR (Residential Medication Management Review)</p>
Health education and health promotion for healthy ageing include	Activities to promote health: exercise, diet, social interaction and accident prevention, Current population health initiatives including national targets and priority areas in population health, state and local health promotion and illness prevention activities
Agencies responsible for older persons' care and support include	Residential care facilities including nursing homes, hostels, respite care services, community resources available to support older people in the home, roles of allied health care workers, role of Office of Public Guardian/Public Trustee
National and state legislation related to the rights of elderly people include	Legislation and regulations regarding euthanasia, enduring power of attorney, Advance Health Directives, fitness to drive and the legal standing of alternative decision-makers

Knowledge and Skills

Essential knowledge required

- Interprets epidemiological characteristics of the ageing population in Australia
- Knows national and state legislation related to the rights of elderly people
- Describes physiological, psychological and social age-related changes commonly experienced by the elderly
- Defines issues in prescribing medications in older people and polypharmacy
- Describes issues that may affect treatment compliance in older people

Essential skills required

- Performs physical, psychological and functional clinical assessment
- Develops an Advanced Care Directive with the patient
- Prepares an application to the Guardianship board
- Makes appropriate referrals to other agencies

Learning resources

Recommended texts and other resources

- Bowker L, Price J & Smith S (2012) *Oxford Handbook of Geriatric Medicine*. 2nd Ed, Oxford Press, Oxford.
- Kane R, Ouslander R, Abrass I & Resnick B (2013) *Essentials of Clinical Geriatrics*, 7th Ed, New York, McGraw-Hill Medicine, New York (Will be published Aug 13).
- Australian Government Department of Health - *Aged Care Assessment and Approval Guidelines*. Sept 2006. <http://www.health.gov.au/internet/publications/publishing.nsf/Content/ageing-acat-acapaag.htm>
- Australian & New Zealand Society for Geriatric Medicine website - <http://www.anzsgm.org>
- Ham R, Sloan P, Warshaw G, Potter J & Flaherty E (2014) *Ham's Primary Care Geriatrics – A Case Based Approach*, 6th Ed (will be released 13.01.14), Mosby, Elsevier, Chatswood, Australia.
- Fernandez H, Cassel C & Leipzig R (2007) *Fundamentals of Geriatric Medicine: A Case Based Approach* (Google eBook), 4th Ed. Soriano R. Springer, New York.

6.4 Anaesthetics

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- ANA 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- ANA 1.2 Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context
- ANA 1.3 Perform an accurate pre-anaesthetic assessment for elective surgery
- ANA 1.4 Identify general pre-anaesthetic risk factors for all age groups and anaesthetic-specific conditions
- ANA 1.5 Use specialised clinical equipment as required for further assessment and interpret findings
- ANA 1.6 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- ANA 1.7 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses
- ANA 1.8 Diagnose and classify pain by pain type
- ANA 1.9 Recognise when significant medical conditions exist and consult with or refer to a specialist or generalist anaesthetist
- ANA 1.10 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- ANA 1.11 Formulate a management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- ANA 1.12 Administer topical anaesthesia and local and regional nerve blocks, applying knowledge of techniques, effects and complications and their management
- ANA 1.13 Provide safe and appropriate child and adult sedation for painful procedures in accordance with relevant standards and service capability
- ANA 1.14 Provide pain interventions relevant to the pain type and recognise when referral is required
- ANA 1.15 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- ANA 1.16 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- ANA 1.17 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- ANA 2.1 Manage admission of patients to hospital in accordance with institutional policies
- ANA 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer
- ANA 2.3 Apply relevant checklists and clinical management pathways
- ANA 2.4 Manage the pre and post-anaesthetic care of patients having surgery or other procedures
- ANA 2.5 Manage the care of admitted patients who have received analgesia (including epidural opiates and spinal opiates)
- ANA 2.6 Recognise and manage common and important complications of anaesthesia and analgesia
- ANA 2.7 Order and perform a range of diagnostic and therapeutic procedures
- ANA 2.8 Maintain a clinically relevant management plan of drug dosage, fluid, electrolyte and blood product and associated use of relevant pathology testing
- ANA 2.9 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- ANA 2.10 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- ANA 2.11 Recognise and respond early to the deteriorating patient
- ANA 2.12 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- ANA 2.13 Undertake early, planned and multi-disciplinary discharge planning
- ANA 2.14 Contribute medical expertise and leadership in a hospital team
- ANA 2.15 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- ANA 2.16 Recognise, document and manage adverse events and near misses
- ANA 2.17 Participate in regular clinic audit and other institutional quality and safety improvement and risk-management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- ANA 3.1 Undertake initial assessment and triage of patients with acute or life-threatening conditions
- ANA 3.2 Stabilise and support the critically ill patient at local hospital before transport or retrieval is arranged and support local facility staff
- ANA 3.3 Perform anaesthetic skills as required in medical emergencies including: venous access, non-invasive ventilation techniques, sedation (e.g. of acutely psychotic patients) and arterial line insertion
- ANA 3.4 Perform rapid sequence induction and intubation in an emergency
- ANA 3.5 Use a mechanical ventilator in the emergency situation, initiating pharmacological management and monitoring the ventilated patient
- ANA 3.6 Arrange and/or perform emergency patient transport or evacuation when needed
- ANA 3.7 Communicate effectively and at a distance with consulting or receiving clinical teams
- ANA 3.8 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment
- ANA 3.9 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- ANA 3.10 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- ANA 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- ANA 4.2 Apply a population health approach that is relevant to the clinical practice profile
- ANA 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- ANA 4.4 Provide continuity and coordination of care for own practice population
- ANA 4.5 Evaluate quality of anaesthetic health services for the community
- ANA 4.6 Fulfil reporting requirements in relation to statutory notification of health conditions
- ANA 4.7 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- ANA 4.8 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- ANA 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- ANA 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate to provide anaesthetic services to a culturally diverse and disadvantaged groups
- ANA 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- ANA 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- ANA 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- ANA 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- ANA 6.1 Ensure safety, privacy and confidentiality in patient care
- ANA 6.2 Maintain appropriate professional boundaries
- ANA 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- ANA 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- ANA 6.5 Keep clinical documentation in accordance with legal and professional standards
- ANA 6.6 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- ANA 6.7 Demonstrate ability to obtain valid and informed consent
- ANA 6.8 Work within relevant national and state legislation and professional and ethical guidelines
- ANA 6.9 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes
- ANA 6.10 Manage, appraise and assess own performance in the provision of medical care for patients
- ANA 6.11 Develop and apply strategies for self-care, personal support and caring for family

- ANA 6.12 Teach and clinically supervise health students, junior doctors and other health professionals
- ANA 6.13 Engage in continuous learning and professional development
- ANA 6.14 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- ANA 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- ANA 7.2 Communicate and cooperate with a range of rural specialist anaesthetists in the provision of safe anaesthetic services in accordance with relevant standards, scope of practice and service capability
- ANA 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- ANA 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- ANA 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- ANA 7.6 Use information and communication technology to network and exchange information with distant colleagues
- ANA 7.7 Respect local community norms and values in own life and work practices
- ANA 7.8 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

<i>Pre-anaesthetic assessment include</i>	Physical and mental states which may influence conduct of anaesthesia; previous family history; relevance of previous medical, surgical and anaesthetic events; clinical examination and investigation; significant symptoms and signs requiring further investigations; post-operative pain relief methods; disease and drug therapy; the primary surgical condition; intercurrent disease and drug therapy
<i>Anaesthetic-specific conditions include</i>	Suxamethonium apnoea, malignant hyperthermia and halothane hepatitis
<i>Pain types include</i>	Nociceptive, neuropathic, phantom, psychogenic, break-through and incident pain
<i>Local and regional nerve blocks include</i>	Digital nerve block, intercostal nerve block, femoral nerve block, Bier's block, peripheral nerve block
<i>Common and important complications of anaesthesia and analgesia</i>	Nausea, vomiting, damage to teeth, sore throat, laryngeal damage, nerve injuries, backache, headache, allergic reaction mild to severe, respiratory depression, cardiovascular collapse, aspiration pneumonitis, hypothermia, hypoxic brain damage, embolism, death

Knowledge and Skills

Essential knowledge required

- Know the anatomy and physiology of the upper airway
- Interpret radiography and lung function testing
- Define the natural history of post-anaesthesia recovery
- Recognise physiological changes resulting from drug use in anaesthesia
- Know the effects of anaesthesia and analgesia in various medical conditions and on the foetus
- Outline physical and mental states which may influence conduct of anaesthesia
- Define pathophysiological differences in children including oxygen needs, temperature control, and fluid replacement
- Knows physiology, anatomy relevant to local, topical and conduction anaesthesia
- Recall pharmacology of commonly used topical and local anaesthetic agents
- Recognise overuse and abnormal response to local and conduction anaesthesia
- Know anaesthetic aspects of the early management of severe trauma
- Recall theories of pain and pain control
- Know the influence of emotional, psychological and social factors on an individual's response to pain
- Recognise causes, symptoms and signs of impending cardiac or respiratory arrest
- Define principles of and indications for use of mechanical ventilators
- Know when to use a defibrillator
- Outline pharmacology and indications for drugs used in advanced life support

Essential skills required

- Demonstrate intravenous access in adults and children
- Demonstrate intravenous cutdown
- Perform interosseous access
- Perform the peripheral line Seldinger technique
- Deliver a blood transfusion
- Demonstrate oxygen saturation monitoring
- Insert a oropharyngeal airway
- Insert a nasopharyngeal airway
- Use a laryngeal mask
- Demonstrate endotracheal intubation (adult and child)
- Conduct mouth to mouth/mask ventilation
- Conduct bag/mask ventilation
- Perform jet insufflation
- Conduct cricothyroidotomy for emergency access
- Perform external cardiac massage (adult and child)
- Conduct rapid sequence induction
- Administer defibrillation (adult and child)
- Perform synchronised DC cardioversion (adult and child)
- Demonstrate emergency use of mechanical ventilator (in particular, the Oxylog)
- Administer nitrous oxide (as analgesia)
- Reduce tension pneumothorax
- Administer adult sedation
- Apply topical wound anaesthesia

Learning Resources

Recommended Texts and Other Resources

- Padley A (2008) *Westmead Anaesthetic Manual*, 3rd Ed, Westmead Hospital, Australia - <http://www.thefreelibrary.com/Westmead+Anaesthetic+Manual.+Third+Edition.-a0200780013>
- Allman K & Wilson I (2011) *Oxford Handbook of Anaesthetics*, 3rd Ed, Sydney, Oxford University Press, Oxford.
- ACRRM Clinical Guidelines - https://www.rmeo.com/rmeo/dls_rmeo.pl?a=sp_notice_view&n=aa-1111-1247614185
- Sturt Fleurieu - ProStart Anaesthetics - <http://www.sfet.com.au/GPTraining/SturtFleurieuTrainingProgram/prostartanaesthetics.aspx>
- Australian and New Zealand College of Anaesthetists - <http://www.anzca.edu.au>
- Joint Consultative Committee of Anaesthesia (JCCA) Curriculum Statement (2010) *Anaesthesia for Advanced Rural Skills & Advanced Specialised Training*, 4th Ed. <http://www.racgp.org.au/yourracgp/organisation/committees/joint-consultative-committees/jcca/>

6.5 Business and Professional Management

Domain 1: Provide medical care in the ambulatory and community setting

Themes: *Patient-centred clinical assessment, Clinical reasoning, Clinical management*

Abilities

- BPM 1.1 Communicate operational policies such as, opening hours, appointment systems, after hours, patient test results, fees, complaints procedures, policies on prescribing drugs of addiction, and expectations of patient behaviour
- BPM 1.2 Apply communication skills and strategies for dealing effectively with patient feedback and complaints, including dealing with angry or aggressive patients
- BPM 1.3 Understand and implement policies and procedures such as recall systems, disease registers (for chronic disease management), handling of referrals, reports, letters, records, screening and infection control
- BPM 1.4 Understand the roles, responsibilities and skill set of the practice team
- BPM 1.5 Demonstrate effective work relationships with staff and colleagues through appropriate leadership, support, communication, negotiation and decision making
- BPM 1.6 Apply techniques of conflict resolution effectively in managing conflicts with patients, staff and colleagues
- BPM 1.7 Use and interpret the Medical Benefits Scheme (MBS) and Pharmaceutical Benefits Scheme (PBS) in a manner that complies with Federal, State or Territory law
- BPM 1.8 Use and interpret other fees schedules including those published by the AMA, Worker's compensation, Transport / Road Traffic Accident, insurance companies and corporations according to Federal, State and Territory expectations
- BPM 1.9 Identify and use structures and financial rewards/incentive programs such as: Chronic Disease Management item numbers, Practice Incentive Program, Rural Retention Scheme and other remuneration packages/programs available to the practitioner and or practice
- BPM 1.10 Meet financial, reporting and legal requirements for superannuation, income taxation, GST, worker's compensation, staff remuneration and insurance matters
- BPM 1.11 Identify sources of debt related to unpaid fees (private, Medicare or other source) and have an effective strategy for debt collection
- BPM 1.12 Manage own time effectively in line with organisation policies whilst achieving work-life balance
- BPM 1.13 Undertake clinical audit and quality improvement activities including accreditation activities and show how to respond constructively to the outcomes
- BPM 1.14 Contribute to providing a safe working environment for all staff through the practice of injury prevention and observance of Occupational Health and Safety rules and regulations

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- BPM 2.1 Work in accordance with institutional policies in managing both public and private patients admitted to hospital
- BPM 2.2 Demonstrate good communication with external providers with respect to patients with chronic diseases with aim of preventing re-admission
- BPM 2.3 Use and interpret fee for service schedules where appropriate and undertake accurate coding of inpatient care for patients
- BPM 2.4 Contribute to the development of institutional policy and procedures
- BPM 2.5 Demonstrate organisational and professional meeting skills
- BPM 2.6 Participate in the recruitment and selection of staff or colleagues and the performance management of staff when required
- BPM 2.7 Assess when it is safe and relevant to delegate
- BPM 2.8 Use a considered and rational approach to the use of resources including disposable items, limited / expensive resources and human resources
- BPM 2.9 Contribute to planning, maintaining and developing local healthcare services, and interpret the difference between governance and management issues
- BPM 2.10 Contribute medical expertise and leadership in a hospital team while working effectively with the roles, responsibilities and skill set of the team
- BPM 2.11 Recognise, document and manage adverse events and near misses in a timely fashion including involvement of patient / family and other third parties
- BPM 2.12 Participate in institutional quality and safety improvement
- BPM 2.13 Participate in accreditation and risk management activities including injury prevention strategies

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- BPM 3.1 Demonstrate resourcefulness in knowing how to access and use and maintain available resources
- BPM 3.2 Maintain systems to ensure that emergency equipment is working and that drugs are current
- BPM 3.3 Manage medical retrieval within your team and liaise with external medical retrieval personnel
- BPM 3.4 Communicate effectively at a distance with consulting or receiving clinical personnel
- BPM 3.5 Participate and describe the principles of disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- BPM 3.6 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- BPM 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- BPM 4.2 Describe how implementation of policies in your location will improve access to health for the most disadvantaged population
- BPM 4.3 Apply a population health approach that is relevant to the clinical practice profile that addresses federal National Priority Areas in health
- BPM 4.4 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- BPM 4.5 Provide continuity and coordination of care for own practice population
- BPM 4.6 Evaluate quality of health care for practice populations and set targets for improvement
- BPM 4.7 Fulfil reporting requirements in relation to statutory notification of health conditions and drug reactions, medical device related incidents
- BPM 4.8 Access and collaborate with agencies responsible for key population health functions including Federal agencies, public health services, employer groups and local government
- BPM 4.9 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- BPM 5.1 Apply knowledge of the differing profile of disease and health risk among culturally diverse and disadvantaged groups to patient care
- BPM 5.2 Communicate effectively and practice in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- BPM 5.3 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- BPM 5.4 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- BPM 5.5 Identify funding opportunities and programs to work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health
- BPM 5.6 Demonstrate planning and time management skills in order to meet reporting requirements on time for any funded activities undertaken
- BPM 5.7 Formulate and undertake quality improvement activities that will benefit culturally diverse communities and disadvantaged groups

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- BPM 6.1 Ensure safety, privacy and confidentiality in patient care
- BPM 6.2 Maintain appropriate professional boundaries
- BPM 6.3 Be aware of duty of care issues and mandatory reporting requirements arising from providing health care to self, family, colleagues, patients and the community
- BPM 6.4 Keep clinical documentation in accordance with legal and professional standards
- BPM 6.5 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- BPM 6.6 Contribute to the management of human and financial resources within a health service
- BPM 6.7 Work within relevant national and state legislation and professional and ethical guidelines including Trade Practices Act, occupational health and safety regulations, equal employment opportunity legislation and Privacy Act Including Taxation, superannuation, AHPRA, Insurance Acts including Medicare

- BPM 6.8 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes according to State and Territory Law
- BPM 6.9 Undertake ethically responsible practice when dealing with patients making end of life decisions
- BPM 6.10 Manage, appraise and assess own performance in the provision of medical care for patients
- BPM 6.11 Show ability to participate effectively as a member of a professional/medico-political organisation

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- BPM 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- BPM 7.2 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- BPM 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- BPM 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- BPM 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- BPM 7.6 Use information and communication technology to network and exchange information with distant colleagues
- BPM 7.7 Undertake continuous professional development
- BPM 7.8 Respect local community norms and values in own life and work practices
- BPM 7.9 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Knowledge and Skills

Essential knowledge required

Management principles

- Describe the difference between governance and management
- Know the role and responsibilities of a Board, role and responsibilities of a chairperson, understand what is meant by "terms of reference" and how they are developed and applied to committees, committee protocol and meeting protocol
- Define roles and responsibilities of management and leadership such as basic principles of quality management, leadership theory, team development and delegation

Practice organisation

- Know where to seek information on setting up or purchasing a practice
- Describe important elements of health facility infrastructure design
- Understand the practical, financial, administrative and legal implications of the range of practice and employment models including traditional solo or group practice, partnerships, associateships, employee, contractor, locum, blended private and public, corporations, government/public health positions and education/academic positions
- Know how to access to relief staff/locums

Operational management

- Know how to establish procedures for line of responsibility, communications, patient flow and scheduling, front desk duties, phone calls, handling of referrals, reports, letters, screening, recall systems, infection control, complaints and equipment maintenance
- Understand safe management of medical records such as storage and filing, indexing and coding, confidentiality, security, incorporating clinical results/reports/correspondence, risk management in backup (onsite and offsite) and restoration of data

Human resource management

- Know staff management principles
- Understand policies and procedures for staff such as recruitment, appraisal/productivity assessment, staff development/training, contracts/remuneration, disciplinary guidelines and performance management of staff and holiday/sickness/sabbatical/CME leave entitlements
- Have awareness of resources available through professional organisations on operation management topics and the ability to access such information as the need arises
- Understand and navigate the relevant levels of bureaucracy both within and external to the organisation
- Know statutory and regulatory requirements relating to staff including, OH&S Legislation, Trade Practices Act, Equal Opportunity Legislation, Privacy Act, Health Practitioners Act, Workers Compensation, Workplace Relations Act, Superannuation, taxation and Public Liability

Financial management

- Know how to develop a basic business plan
- Interpret basic financial statements including profit and loss and balance sheet and to be able to understand the basis of depreciation and depreciation schedules
- Understand how to effectively manage practitioner investment in the practice and returns on investment
- Identify the types of finance available to the organisation
- Know day-to-day cash flow management
- Understand patient fees and fee collection processes including debt collection
- Use service companies to control finance as necessary

Patient service

- Define methods of continuous quality improvement applied within the organisation or practice including clinical/management audit, performance appraisal benchmarked against local and national standards, practice accreditation/hospital ACHS accreditation, evaluate objectives of accreditation requirements and follow through accreditation processes deemed appropriate to the location
- Explore opportunities to improve patient satisfaction
- Understand basic marketing concepts

Professional Systems

- Know the roles and responsibilities of relevant local, state and national professional and medico-political organisations including, accreditation organisations, Medicare Locals, Rural Workforce Agencies, RDA, AMA and Medical Indemnity Insurers
- Understand the role and function of academic, financial, and legal advisers including, management consultants, accountants, solicitors, financial planning consultants

Personal Financial Management

- Effectively manage personal finances including debt consolidation, insurance needs, taxation, superannuation and retirement planning
- Outline the range of sources of financial advice
- Outline long-term financial plan and describe alternative investment strategies managed funds and portfolio management
- Demonstrate an understanding of the interplay between lifestyle, practice and personal financial needs
- Consider the issues surrounding family involvement in financial matters

Essential skills required

- Undertake an audit – clinical or financial
- Participate in an accreditation activity
- Undertake a CQI activity
- Manage a project

Learning resources

Recommended texts and other resources

Your own area health will have standards relevant to your location

- Medical Board of Australia, *Good Medical Practice Guidelines*, 28 October 2011 - <http://www.ahpra.gov.au/Search.aspx?q=good%20medical%20practice>
- Pharmaceutical Benefits Scheme (PBS) online - <http://www.pbs.gov.au/pbs/home>
- Medicare Benefits Schedule (MBS) online: <http://www.mbsonline.gov.au/>
- Royal Australian College of General Practice, *Standards for Accreditation of General Practices*, 4th Ed, 26th April 2013 - <http://www.racgp.org.au/your-practice/standards/standards4thedition/>
- Australian Medical Association (AMA) - Policy - <http://ama.com.au/policy>
- Australian Institute of Health and Welfare (AIHW) - Population Health - <http://www.aihw.gov.au/population-health/>
- Public Health Information Development Unit - <http://www.publichealth.gov.au/>
- Australian Indigenous Health *InfoNet* - <http://www.healthinfonet.ecu.edu.au/>
- National Aboriginal Community Controlled Health Organisation (NACCHO) website - <http://www.naccho.org.au/>
- Centre for Cultural Diversity in Ageing website - <http://www.culturaldiversity.com.au/>
- The Royal Australasian College of Medical Administrators (RACMA) - <http://www.racma.edu.au/> offers relevant Clinician Manager Courses.

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6.6 Child and Adolescent

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- CAH 1.1 Establish a doctor-patient relationship with parent and child and use a patient-centred approach to care
- CAH 1.2 Establish effective therapeutic relationships with adolescents recognising that a young person may feel self-conscious, anxious, alienated, or have difficulty disclosing distress and maintain appropriate confidentiality
- CAH 1.3 Obtain a clinical history from the adolescent, child and/or parent that reflects contextual issues, epidemiology and cultural context
- CAH 1.4 Consider the particular needs and anxieties of parents with sick children, whilst recognising their expertise as the close observer of the child and the illness
- CAH 1.5 Engage with and perform a problem-focussed physical examination relevant to clinical history and risks, remembering that the child's alertness, interest and responsiveness are critical to accurate assessment
- CAH 1.6 Identify early indicators of 'at risk' behaviours of adolescents and initiate harm minimisation strategies
- CAH 1.7 Use specialised clinical equipment as required for further assessment and interpret findings
- CAH 1.8 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- CAH 1.9 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering common and important conditions in childhood and adolescence, the limitations of clinical indicators of serious illness in children and the effect of dynamics and beliefs on presentations in young people
- CAH 1.10 Communicate findings of clinical assessment effectively and sensitively and establish the child's/adolescents and parent's levels of understanding of any conditions or risks
- CAH 1.11 Formulate a management plan for common and important conditions in childhood and adolescence in concert with the parent and/or child, that sets realistic expectations between the parent, child and doctor including the indicators and mechanisms for follow-up
- CAH 1.12 Identify and manage co-morbidities in the patient and effectively communicate these to the child, adolescent and/or parent
- CAH 1.13 Prescribe medications for children and adolescents in a safe manner and according to appropriate treatment guidelines

- CAH 1.14 Promote parental self-confidence and skills both directly and indirectly and encourage family and community support in the immediate environment in which care occurs
- CAH 1.15 Anticipate the need for respite care for children, adolescents and families dealing with chronic paediatric illness or disability and implement appropriate strategies for these families
- CAH 1.16 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- CAH 1.17 Refer, facilitate and coordinate access to specialised paediatric medical and other health and social support services
- CAH 1.18 Provide and arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- CAH 2.1 Manage admission of paediatric patients to hospital in accordance with institutional policies
- CAH 2.2 Develop, implement and maintain a management plan for hospitalised children with a range of acute conditions requiring inpatient admission specific to children and adolescents in concert with the parents
- CAH 2.3 Manage the normal and common abnormalities postnatal period both in the context of hospital care and early discharge
- CAH 2.4 Effectively manage neonates admitted with common neonatal medical conditions and be sensitive to the conditions and events that affect the mother-baby interrelationship
- CAH 2.5 Apply relevant checklists and clinical management pathways for common conditions in children and adolescents
- CAH 2.6 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- CAH 2.7 Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing considering the limitations of laboratory indicators of serious illness in children
- CAH 2.8 Order and perform a range of diagnostic and therapeutic procedures
- CAH 2.9 Maintain timely and accurate patient documentation in hospital records including appropriate drug dosing and administration
- CAH 2.10 Communicate effectively with the health care team, patient and/or carer including effective clinical handover to the primary care provider
- CAH 2.11 Recognise and respond early to the deteriorating paediatric patient in hospital
- CAH 2.12 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient and parent preferences, transportation and geography
- CAH 2.13 Undertake early, planned and multi-disciplinary discharge planning

- CAH 2.14 Participate in creating a hospital environment sympathetic to children including theatre and anaesthetic considerations
- CAH 2.15 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- CAH 2.16 Recognise, document and manage adverse events and near misses
- CAH 2.17 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- CAH 3.1 Undertake initial assessment and triage of paediatric and adolescent patients with acute or life-threatening conditions
- CAH 3.2 Stabilise critically ill paediatric and adolescent patients and provide primary and secondary care
- CAH 3.3 Competently perform definitive emergency resuscitation of paediatric and neonatal patients, including the severely compromised newborn and in keeping with clinical need, own capabilities and local context and resources
- CAH 3.4 Perform required emergency procedures specific to children and adolescents
- CAH 3.5 Manage abnormal perinatal care, emergencies, and with neonatal resuscitation, including intubation and umbilical catheterisation, and the necessary work up, in consultation with referral centres, for evacuation when indicated
- CAH 3.6 Arrange and/or perform emergency patient transport or evacuation when needed
- CAH 3.7 Demonstrate resourcefulness in knowing how to access and use available resources
- CAH 3.8 Communicate effectively at a distance with consulting or receiving clinical personnel
- CAH 3.9 Provide inter-professional team leadership in paediatric emergency care that includes quality assurance and risk management assessment
- CAH 3.10 Plan for emergencies at home and in the community including use of medical alert tags and Epi-Pens®

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- CAH 4.1 Analyse the social, environmental, economic and occupational determinants of child and adolescent health that affect the community burden of disease and access to health-related services
- CAH 4.2 Apply a population health approach that is relevant to the clinical practice profile
- CAH 4.3 Undertake health promotion activities appropriate to the needs of children and adolescents
- CAH 4.4 Integrate evidence-based prevention, early detection, mental and physical health maintenance activities in children and adolescents into practice at a systems level
- CAH 4.5 Encourage parent-held record as a means of facilitating health promotion, developmental surveillance and communication between health professionals
- CAH 4.6 Utilise available practitioners including podiatrists, orthotists and physiotherapists to encourage physical achievement and fitness as well as injury treatment and prevention
- CAH 4.7 Utilise available practitioners including audiologists and speech therapists to encourage and maintain important language development in children
- CAH 4.8 Liaise with school and education department staff in the management of problems when necessary
- CAH 4.9 Evaluate the quality of health care for younger patients in the practice population
- CAH 4.10 Access and collaborate with agencies responsible for care and support of children
- CAH 4.11 Plan health service needs and access to services by applying knowledge of the impact and implications on the paediatric and adolescent population
- CAH 4.12 Fulfil mandatory reporting requirements in relation to health conditions, abuse and vaccinations
- CAH 4.13 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of child and adolescent health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, Working with groups to improve health outcomes

Abilities

- CAH 5.1 Apply knowledge of the differing profile of disease, health risks and beliefs among younger patients from culturally diverse and disadvantaged groups
- CAH 5.2 Communicate effectively and in a culturally safe manner with younger patients and their families, using diagrams, interpreters, key community contacts and networks as appropriate
- CAH 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care for younger patients and their families
- CAH 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- CAH 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care for younger patients
- CAH 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health and support services for younger people

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- CAH 6.1 Act as an advocate for the developmental and health needs of children and adolescents in the context of their family and community
- CAH 6.2 Enhance the autonomy and personal responsibility of the young patient and their families
- CAH 6.3 Ensure safety, privacy and confidentiality for children and adolescents whilst integrating the concepts of consent and the mature minor
- CAH 6.4 Maintain appropriate professional boundaries with children and adolescents and their families
- CAH 6.5 Recognise and manage child abuse in its various forms including those at risk or in a situation of abuse, violence, neglect, homelessness or accidental injury
- CAH 6.6 Disclose suspected emotional, physical and sexual abuse or neglect of children or young people, with particular reference to mandatory reporting
- CAH 6.7 Utilise community resources to assist in the management of childhood abuse, in the context of concurrent State and Territory Legislative requirements

- CAH 6.8 Keep clinical documentation in accordance with legal and professional standards
- CAH 6.9 Identify ways in which health outcomes may be improved for children and adolescents through enhancing family and social function
- CAH 6.10 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care for younger patients
- CAH 6.11 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes for the young patient and their families
- CAH 6.12 Manage, appraise and assess own performance in the provision of medical care for younger patients
- CAH 6.13 Develop and apply strategies for self-care, personal support and caring for family
- CAH 6.14 Teach and clinically supervise health students, junior doctors and other health professionals
- CAH 6.15 Engage in continuous learning and professional development in child and adolescent health
- CAH 6.16 Critically appraise and apply research relevant to child and adolescent health

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- CAH 7.1 Take into account differences in paediatric presentations that might occur in the rural and remote context
- CAH 7.2 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- CAH 7.3 Recognise the differing availability of medical and allied health care resources in rural/remote communities and demonstrate the ability to improvise where necessary
- CAH 7.4 Demonstrate an awareness of local issues which impact on the decision to treat or refer, such as patient preference, local transport, costs and potential benefits
- CAH 7.5 Provide direct and distant clinical supervision and support for other rural and remote health care personnel working with children
- CAH 7.6 Use information and communication technology effectively to provide medical care or facilitate access to specialised care for patients
- CAH 7.7 Use information and communication technology to network and exchange information with distant colleagues
- CAH 7.8 Respect local community norms and values in own life and work practices
- CAH 7.9 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local paediatric population
- CAH 7.10 Contribute to the development of the discipline of rural/remote general practice by gaining skills in teaching, research and advocacy aimed at improving the well-being of children and adolescents

Definition of terms

<p>'At risk' behaviours of adolescents includes</p>	<p>'At risk' behaviours are those that can have adverse effects on the overall development and well-being of the child or youth, or that might prevent them from future successes and development. This includes behaviours that cause immediate physical injury (e.g., fighting), as well as behaviours with cumulative negative effects (e.g. substance use)</p> <p>Behaviour that could lead to unplanned adverse consequences, such as harm to the person, or conflict with family, friends or the law</p>
<p>Harm minimisation strategies include</p>	<p>Strategies that allow children and adolescents to experiment with risky behaviour in a manner that limits risks of adverse consequences</p>
<p>Common and important conditions in childhood, and adolescents include</p>	<p>Upper respiratory, mouth, eye and ear includes:</p> <p>Recurrent viral infections, croup (acute, recurrent), stridor, laryngomalacia, rhinitis, sinusitis, nasal septal haematoma, epistaxis, sleep apnoea, hearing loss, ASOM, CSOM, otitis externa, cholesteatoma, stomatitis, thrush, herpes, coxsackie virus, teething, caries prevention, tonsillitis, epiglottitis, cervical adenopathy, congenital glaucoma, cataract, blocked tear duct, conjunctivitis: infectious & allergic, unilateral red eye, retinoblastoma, amblyopia, squint, periorbital cellulitis</p> <p>Lower respiratory includes:</p> <p>Recurrent bronchitis, bronchiolitis, asthma, wheezy cough under 3 years, cough, psychogenic cough, pneumonia, atypical pneumonia, pertussis, cystic fibrosis, TB, bronchiectasis</p> <p>Cardiac includes:</p> <p>Murmurs (innocent and pathological), coarctation of the aorta, supraventricular tachycardia, abnormal BP, SBE prophylaxis</p> <p>Gastrointestinal includes:</p> <p>Abdominal pain, acute abdomen, headache, vomiting, diarrhoea, acute and chronic, dehydration as a factor in acute illness, rehydration techniques, gastro-oesophageal reflux disease, pyloric stenosis, coeliac disease, appendicitis, hernia, abdominal mass, intussusception, constipation, encopresis, rectal bleeding, jaundice, hepatitis</p> <p>Genitourinary includes:</p> <p>Abnormal / ambiguous genitalia, fluid - electrolyte imbalance, hydrocoele, undescended testis (early, late), inguinal hernia, urinary tract infection, vesicoureteric reflux, congenital abnormality urinary tract, acute urinary obstruction, glomerulonephritis, nephrotic syndrome, enuresis, vulvitis, labial adhesions, phimosis, paraphimosis, torsion of testis, circumcision, tumours</p> <p>Dermatological includes:</p> <p>Normal skin variation, aboriginal skin problems, birth marks, viral exanthems (specific and non-specific), solar pathology/prevention, napkin rash, thrush, tinea, kerion, eczema, psoriasis, seborrhoeic dermatitis, scabies, lice, molluscum contagiosum, orf, pityriasis, perianal streptococcus, infections, impetigo, urticaria, drug/food rashes, septicaemia, meningococcus</p> <p>Musculoskeletal includes:</p> <p>Limp, Perthes' disease, hip dysplasia, lower limb problems, patello-femoral syndromes, epiphysitis, apophysitis, soft tissue trauma, minor dislocations, progressive muscular weakness, sepsis, bone/joint infections</p> <p>Infections include:</p> <p>Measles, mumps, rubella, Epstein-Barr virus, herpes simplex, haemophilus influenza B, meningococcus, varicella zoster, streptococcus, staphylococcus, chronic viral, HIV, hepatitis, tropical infestations, congenital (rubella, cytomegalovirus, hepatitis)</p>

	<p>Haematological, immunological, and rheumatological includes:</p> <p>Normal age haematology, anaemia, lymphoma, leukaemia, inherited conditions, purpura, haemophilia, thalassaemia, sickle cell disease, allergies (general concepts and fads), vasculidities, angioedema, Kawasaki syndrome, autoimmune disease, general arthralgia, systemic lupus erythematosus, rheumatoid arthritis, immunodeficiency, HIV, AIDS</p> <p>Endocrine</p> <p>Diabetes, thyroid disorder/s, short stature, abnormal puberty</p> <p>General Issues</p> <p>Growth problems, failure to thrive, obesity, behavioural issues, (normal versus 'problem'), the social context, developmental delay, disruptive children, disorders - ADHD, autism spectrum disorder, sleep disorder, the crying baby, oppositional behaviour and alienation, disability, (learning: specific/general), intellectual disability (subnormality), physical disability, language disability, SIDS prevention and management</p>
Acute conditions requiring inpatient admission specific to children and adolescents include	Head injury, hypovolaemia, acidosis, hypoxia and blood transfusion
Common neonatal medical conditions include	Respiratory distress, asphyxia, cyanosis, hypoglycaemia, hypothermia, vomiting, failure to pass meconium, physiological and non-physiological jaundice, intraterm and neonatal infection, seizures, maternal infection including syphilis, hepatitis B, hepatitis C, HIV
Conditions and events that affect the mother-baby interrelationship include	Effects of maternal drug dependency, immediate neonatal care, bonding, rooming in, neonatal screening, post (early) discharge care, breast feeding in detail, breast feeding problems including infections, formula feeding including special needs, puerperal complications, family adjustment maternal exhaustion - anxiety, formula feeding
Emergency procedures specific to children and adolescents include	Basic life support, early management severe trauma, neck stabilisation, airway management (intubation), hypovolaemia correction, hypoxia correction, thoracocentesis, chest drain, paediatric infusion, intra-osseous infusion, paediatric radiology, catheterisation, suprapubic aspiration, removal of foreign bodies with and without GA, simple fractures management with and without GA, simple dislocations: joint and epiphyseal, neonatal resuscitation:(intubation and umbilical catheterisation), burns management: simple, moderate, severe, ingestion of poisons and drug overdose
Mature minor	The common law recognises that a child or young person may have the capacity to consent to medical treatment on their own behalf, and without their parents' knowledge. The child or young person must have a sufficient understanding and intelligence to enable him or her to fully understand what is proposed. The level of maturity required to provide consent will vary with the nature and complexity of the medical treatment. The treatment must be in the best interests of the health and wellbeing of the child
Mandatory reporting includes	Specified people are required to report suspected child maltreatment (abuse or neglect) to statutory child protection services in Australia. The legal requirement to report suspected cases of child abuse and neglect is known as mandatory reporting. All jurisdictions possess mandatory reporting requirements of some description. However, the people mandated to report and the abuse types for which it is mandatory to report vary across Australian states and territories. Doctors are mandated to report across all jurisdictions in Australia

Knowledge and Skills

Essential knowledge required

- Demonstrate a working knowledge of problems common during the infant, toddler, school-age and adolescent years that warrant management in the general practice setting
- Understand the principles and issues relating to patterns of inheritance, newborn screening and counselling
- Know the principles and issues associated with nutritional goals by age group including flexible feeding patterns, risk factors for deficiencies, as well as food allergy and sensitivity
- Demonstrate the application of knowledge to age-specific exercise, recreation and fitness programs and reducing the risk of obesity and other related diseases
- Define the rights of children and adolescents including individual rights, use of chaperones, age of consent, confidentiality, and power of guardians over the rights of minors, in everyday patient care
- Understand the normal striving for independence and the issues of concern to young people as they progress through adolescence
- Comprehend the barriers perceived by adolescents which may limit access to effective medical care
- Understand the effect of peer pressure, school, mass media and employment prospects on the attitude and behaviour of adolescents
- Recognise common developmental issues for adolescents including individuation, sexual maturation, cognitive development and self-esteem
- Know strategies to manage problems that can arise during adolescence including peer issues, and problems with body image, support/alienation from family/school/peers, oppositional behaviour, school dysfunction and self-harm
- Understand and demonstrate strategies to manage psycho-social issues in adolescents including effects of homelessness, unemployment and their health impact, risk-taking behaviour including substance misuse (normal, experimentation, at risk, out of control), suicidal intention or self-harm, dysfunctional families, eating disorders
- Understand financial and compliance issues when prescribing for adolescents
- Be informed about family development and dynamics affecting children including parental substance use, the effects of smoking, childhood caffeine use and high risk families
- Apply knowledge of the epidemiological characteristics of the paediatric population in Australia to improving care provision

Essential skills required

- Perform physical and functional clinical assessment
- Undertake a paediatric neurological assessment
- Apply skills in a range of adolescent communication/assistance strategies including emergency strategies, confidential history taking, minimising anxiety, encouraging compliance, direct family counselling and assist in coping with imprisonment
- Perform endotracheal intubation (child and neonate)
- Resuscitation (child and neonate)
- Conduct defibrillation
- Perform synchronised DC cardioversion (child)
- Apply external cardiac massage

- Apply mouth to mouth/mask ventilation
- Apply bag/mask ventilation
- Insert oropharyngeal airway
- Gain intravenous access (child)
- Insert umbilical catheter (neonate)
- Gain intraosseous access
- Use of medication delivery devices (child)
- Use of spacer devices (child)
- Conduct nebulisation therapy (child)
- Insert intercostal catheter (child)
- Conduct thoracentesis (child)
- Insert nasogastric tube (child)
- Administer local anaesthesia (child)
- Administer nitrous oxide (as analgesia)
- Administer child sedation
- Conduct lumbar puncture
- Reduce a fracture (child)
- Reduce a dislocated joint (child)
- Repair of superficial skin lacerations (child)
- Remove a subcutaneous foreign body (child)
- Conduct urethral catheterisation (child)
- Demonstrate suprapubic aspiration (child)
- Conduct hearing assessment
- Perform an ear toilet
- Remove a foreign body from external auditory meatus and nasal cavity
- Cauterise for nasal bleeding
- Perform venous blood sampling (child)

Learning resources

Recommended texts and other resources

- Cummings M & Kang M (2012) *Youth Health Services: Improving Access to Primary Health Care*, Australian Family Physician, Vol 41, No. 5, May, pp. 339 to 341 <http://www.racgp.org.au/afp/2012/may/youth-health-services/>
- Australian Government. The Department of Health and Ageing (2013) *The Australian Immunisation Procedures Handbook*. 10th Ed. <http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home>
- Australian Paediatric Review Quarterly Modules and Publications: Required to register as a Research Review Member at - http://www.researchreview.com.au/research_review_catalogue.cfm?ID=58
- Hutson J, O'Brien M, Beasley S & Woodward A (2008) *Jones' Clinical Paediatric Surgery: Diagnosis and Management*. 6th Ed, Blackwell.
- National Health and Medical Research Council, *Guidelines for screening children* <http://www.nhmrc.gov.au/guidelines/publications/subject/Child%20health>

- National Asthma Council Australia (2006) *Asthma Management Handbook*. 6th Ed, Melbourne - <http://www.nationalasthma.org.au/handbook>
- Kilham H, Alexander S, Wood N & Isaacs D (2009) *Paediatrics Manual The Children's Hospital at Westmead Handbook*, 2nd Ed, McGraw-Hill.
- Thompson K, Tey D & Marks M (2009) *Paediatric Handbook*, 8th Ed, Royal Children's Hospital, Melbourne, BMJ Books. Available on line at - http://www.rch.org.au/paed_handbook/about_paediatric_handbook/Paediatric_Handbook_8th_Edition/
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- Australian Government National Health and Medical Research Council - *Child Health guidelines* <http://www.nhmrc.gov.au/guidelines/publications/subject/Child%20health>
- Australian Government National Health and Medical Research Council (2011) *Clinical Practice Guidelines: Depression in Adolescents and Young Adults*, BeyondBlue, February - <http://www.nhmrc.gov.au/guidelines/publications/ext0007>
- HEADSS: *A Psychosocial Interview for Adolescents* - <http://www.bcchildrens.ca/NR/rdonlyres/6E51B8A4-8B88-4D4F-A7D9-13CB9F46E1D6/11051/headss20assessment20guide1.pdf>
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- Rural and Remote Medical Education Online (RRMEO) – <http://www.rrmeo.com>
- Youth BeyondBlue: <http://www.youthbeyondblue.com/>
- Central Australian Rural Practitioners Association. *CARPA Standard Treatment Manual*. 5th Ed. Alice Springs: Central Australian Rural Practitioners Association; 2009 <http://www.carpa.org.au/drupal/node/15>
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- Top End Division of General Practice (2003) - *Tropical Health in the Top End: An introduction for health practitioners*, Top End Division of General Practice, Darwin (currently under review). PDF Version - <http://www.ntml.org.au/resources>
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6.7 Dermatology

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- DERM 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- DERM 1.2 Elicit an accurate and relevant dermatological history and dermatological examination
- DERM 1.3 Perform a problem-focused physical examination relevant to clinical history and risks, epidemiology and cultural context
- DERM 1.4 Use specialised clinical equipment for further examination of the skin, including a magnifying lamp, Woods light and dermatoscope
- DERM 1.5 Undertake or arrange and interpret dermatological investigations
- DERM 1.6 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses and involving specialised advice and treatment if required
- DERM 1.7 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- DERM 1.8 Formulate a management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- DERM 1.9 Treat common and important skin disorders using common pharmacological agents safely
- DERM 1.10 Perform cryotherapy of skin lesions and demonstrate an understanding of associated medico-legal implications
- DERM 1.11 Perform different types of skin biopsy
- DERM 1.12 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- DERM 1.13 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- DERM 1.14 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- DERM 2.1 Manage admission of dermatological patients to hospital in accordance with institutional policies
- DERM 2.2 Manage the symptoms of admitted patients including sufficient analgesia and anti-pruritics
- DERM 2.3 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer and in discussion with their community based general practitioner, relevant specialist or other health professional
- DERM 2.4 Apply relevant checklists and clinical management pathways
- DERM 2.5 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- DERM 2.6 Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing
- DERM 2.7 Order and perform a range of diagnostic and therapeutic procedures. Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- DERM 2.8 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- DERM 2.9 Recognise and respond early to the deteriorating patient
- DERM 2.10 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- DERM 2.11 Undertake early, planned and multi-disciplinary discharge planning
- DERM 2.12 Contribute medical expertise and leadership in a hospital team
- DERM 2.13 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- DERM 2.14 Recognise, document and manage adverse events and near misses
- DERM 2.15 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- DERM 3.1 Undertake initial assessment and triage of patients with acute or life threatening dermatological conditions
- DERM 3.2 Stabilise critically ill patients and provide primary and secondary care
- DERM 3.3 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- DERM 3.4 Perform required emergency procedures
- DERM 3.5 Arrange and/or perform emergency patient transport or evacuation when needed
- DERM 3.6 Demonstrate resourcefulness in knowing how to access and use available resources
- DERM 3.7 Communicate effectively at a distance with consulting or receiving clinical personnel
- DERM 3.8 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- DERM 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- DERM 4.2 Apply a population health approach that is relevant to the clinical practice profile
- DERM 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- DERM 4.4 Provide continuity and coordination of care for own practice population
- DERM 4.5 Evaluate quality of health care for practice populations
- DERM 4.6 Fulfil reporting requirements in relation to statutory notification of health conditions
- DERM 4.7 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- DERM 4.8 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, Working with groups to improve health outcomes

Abilities

- DERM 5.1 Apply knowledge of the differing profile of dermatological disease and health risks among culturally diverse and disadvantaged groups
- DERM 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- DERM 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- DERM 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- DERM 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- DERM 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- DERM 6.1 Ensure safety, privacy and confidentiality in patient care
- DERM 6.2 Maintain appropriate professional boundaries
- DERM 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- DERM 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- DERM 6.5 Keep clinical documentation in accordance with legal and professional standards
- DERM 6.6 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- DERM 6.7 Work within relevant national and state legislation and professional and ethical guidelines
- DERM 6.8 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes
- DERM 6.9 Manage, appraise and assess own performance in the provision of medical care for patients

- DERM 6.10 Develop and apply strategies for self-care, personal support and caring for family
- DERM 6.11 Teach and clinically supervise health students, junior doctors and other health professionals
- DERM 6.12 Engage in continuous learning and professional development
- DERM 6.13 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- DERM 7.1 Recognise dermatological problems commonly occurring in rural/remote general practice
- DERM 7.2 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- DERM 7.3 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- DERM 7.4 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- DERM 7.5 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- DERM 7.6 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- DERM 7.7 Use information and communication technology to network and exchange information and photos with distant colleagues
- DERM 7.8 Respect local community norms and values in own life and work practices
- DERM 7.9 Identify and acquire extended dermatological knowledge and skills as may be required for example excise benign and malignant skin lesions using specialised excision techniques to meet health care needs of the local population

Definition of terms

Dermatological history	<p>Includes: history of the presenting complaint including time course, distribution, associated symptoms and illnesses such as pain, itch or fever and response to previous therapies</p> <p>Medications: current and previous; including topical and complementary therapies</p> <p>Past medical history, including previous skin conditions and cancers</p> <p>Family history, particularly of skin conditions and cancers</p> <p>Domestic and international travel in the last year.</p> <p>Occupation</p> <p>Hobbies for example gardening, crafts</p> <p>Skin care routines including frequency and temperature of showers and baths; types of cosmetics, soaps, oils, and products used clothing and jewellery</p> <p>Lifetime and current sun exposure</p>
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	<p>Hair and nail care products and routines</p> <p>Tattoos</p> <p>Skin slashing, cutting</p>
<i>Dermatological examination must include, but is not limited to:</i>	<p>Mucous membranes: eyelids, nose, mouth - buccal, pharyngeal, sub-lingual, tongue,</p> <p>Hair: texture, colour, quantity, distribution, brittleness, hair loss including pattern. Scalp: scales, crusts, or lesions. Facial hair distribution, quantity, texture; hirsutism in females.</p> <p>Nails: length, color, configuration, symmetry, hygiene, thickness, deformities, hyperpigmented bands, pitting, and splinter haemorrhages</p> <p>Skin of the neck, arms, hands, chest and abdomen, legs, back, back of legs, feet, including soles and between the toes, buttocks, and genital area</p> <p>Description of lesions to include: primary or secondary in nature, colour, exudates, pattern, size, shape, change in sensation, inflammation, location, distribution, symmetry, tenderness, consistency, temperature, moisture, texture, turgor, and fragility</p>
<i>Types of skin biopsies include</i>	Excision, Shave, Curettage, Punch, Incisional
<i>Common and important skin disorders include</i>	Eczema (dermatitis) – atopic- discoid, asteatotic eczema and venous stasis, seborrhoeic dermatitis, solar keratosis, lichen planus, lichen simplex, psoriasis, pityriasis rosea, erythema multiforme, urticaria, vasculitis, photosensitivity, acne, rosacea, drug related eruptions, warts, naevi, BCC, SCC, Melanoma
<i>Common pharmacological agents include</i>	Topical corticosteroids, moisturisers and emollients, antibacterials, antifungals, antivirals, antipsoriatic agents, acne therapies, topical cytotoxics e.g. fluorouracil, imiquimod
<i>Specialised excision techniques include</i>	Ellipse excisions, flap repairs, skin grafts
<i>Acute or life-threatening dermatological conditions include</i>	<p>Staphylococcal toxic shock syndrome, angioedema, exfoliative erythroderma, necrotising fasciitis, meningococemia, Stevens-Johnson Syndrome and toxic epidermal necrolysis, malignant melanoma</p> <p>Taken from Canadian Medical Association Journal http://www.cmaj.ca/content/173/11/1317.full.pdf</p>
<i>Common viral, bacterial and insect related skin infections include</i>	<p>Viral warts, molluscum contagiosum, exanthemata, herpes simplex, herpes zoster, HIV</p> <p>Bacterial including erysipelas/ cellulitis, staphylococcal infections, folliculitis, pitted keratolysis, erythrasma, syphilis, impetigo, leprosy</p> <p>Fungal: candidiasis, tinea, pityriasis versicolor</p> <p>Insects: scabies, lice, flea bites</p>
<i>Common and important skin tumours include</i>	<p>Non-melanocytic, benign: seborrhoeic keratosis, skin tags, keratoacanthoma, haemangioma,</p> <p>- premalignant: solar keratosis,</p> <p>- malignant: basal cell carcinoma, squamous cell carcinoma, Bowen's disease, keratoacanthoma</p> <p>Melanocytic: melanocytic naevi, malignant melanoma</p>

Knowledge and Skills

Essential knowledge required

- Know essential features, cause, and specific treatment for common viral, bacterial and insect related skin infections
- Recognise and distinguish between sun damaged skin conditions including, ephelides, solar lentiginos, solar elastosis, solar keratoses and sun related skin malignancies
- Recognise the essential features, cause, and specific treatment for common and important skin tumours
- Know the essential features, cause, and specific treatment for systemic diseases with possible cutaneous associations including systemic malignancy, metabolic diseases, endocrine disorders e.g. diabetes, thyroid, Cushing's, Addison's, gastrointestinal disorders, Paget's disease, extra-mammary Paget's disease, Lichen sclerosus
- Describe rashes related to pregnancy including pruritus gravidarum, prurigo of pregnancy, pruritic urticarial papules and plaques of pregnancy and pruritic folliculitis of pregnancy
- Know essential features, causes, and specific treatments for leg ulcers
- Know anatomical considerations, specific diagnostic tests and treatment for conditions associated with hair including hair loss, alopecia areata, alopecia totalis, trichotillomania, traction alopecia, scalp ringworm, lichen simplex, psoriasis, plus excessive hair growth, aetiology, differences, hirsutism and hypertrichosis
- Define anatomical considerations, specific diagnostic tests and treatment for dermatological conditions associated with nails including, nail pitting, nail ridging, nail discolouration, nail plate thickening – tinea and onychogryphosis
- Recognise nail changes that occur due to psoriasis, dermatitis and paronychia
- Recognise, distinguish between and treat nappy rash related to irritant dermatitis, candida and seborrhoeic dermatitis
- Differential diagnosis and management of facial rashes associated with rosacea, seborrhoeic, perioral, contact dermatitis, fungal infection, systemic and discoid lupus erythematosus and melasma
- Differential diagnosis and management of hand rashes related to irritant dermatitis, contact allergic dermatitis, endogenous eczema, fungal infection and psoriasis
- Describe the indications and contraindications for each type of biopsy and the role of special testing e.g. immunofluorescence
- Apply general principles for selecting a vehicle for topical treatment

Essential skills required

- Describe a rash or skin lesion accurately using medical terminology
- Arrange and interpret results of patch testing, bacteriology, mycology, virology and PCR / NAAT testing, including details such as transport delays and sampling errors
- Collect skin scrapings and clippings for mycology
- Examine skin lesions with a dermatoscope
- Perform punch and shave skin biopsies
- Perform basic excisions of skin lesions using specialised techniques (desirable)
- Supervise the choice and application of dressings for ulcers
- Apply wet wraps / dressings for eczema

Learning Resources

Recommended texts and other resources

- Murtagh J (2011) *Murtagh's General Practice*. 5th Ed, McGraw-Hill.
- Murtagh J (2010) *Murtagh's General Practice Companion Handbook*. 5th Ed, McGraw-Hill.
- Australian Medicines Handbook (2013) *AMH*. Australian Medicines Handbook, Adelaide, South Australia.
- Therapeutic Guidelines Limited (2009) *Therapeutic Guidelines: Dermatology*. 3rd Ed. Therapeutic Guidelines Limited, North Melbourne.
- Wolff K, Johnson RA & Fitzpatrick TB. (2013) *Fitzpatrick's Colour Atlas and Synopsis of Clinical Dermatology*. 7th Ed, McGraw-Hill, Medical, New York.
- Buxton P & Morris-Jones R (2009). *ABC of Dermatology*, 5th Ed, BMJ Books, Wiley, Telford, Shropshire.
- <http://www.rrmeo.com> – provides access to Telederm and other online courses.
- DermNet NZ - *The Dermatology Resource*: <http://dermnetnz.org/>
- Johr R (2011) *Dermoscopy: The Essentials*. 2nd Ed. Edinburgh; Mosby, New York.
- Goldsmith L, Katz S, Gilchrest B, Paller A, Leffell D & Wolff, K. (2012) *Fitzpatrick's Dermatology in General Medicine*, 8th Ed, 2 Volume Set, McGraw-Hill.

6.8 Information Management and Information Technology

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- IMIT 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care when providing telehealth consultations, collecting and retrieving data, facilitating patients' access to relevant e-health records, and utilising other e-health systems and tools
- IMIT 1.2 Perform physical examinations on behalf of distant specialists during telehealth consultations, ensuring that the specialist has a clear view of the examination
- IMIT 1.3 Select and support appropriate patients for telehealth consultations taking into account clinical, practical and patient factors
- IMIT 1.4 Ensure informed consent is obtained when introducing telehealth and e-health options
- IMIT 1.5 Manage the logistical environment for telehealth consultations including booking people, equipment and space
- IMIT 1.6 Manage the physical environment during telehealth consultations including effective use of camera, lighting and audio
- IMIT 1.7 Use imaging devices, point of care devices and tests, and equipment that is fit for purpose when conducting telehealth consultations
- IMIT 1.8 Use telehealth, decision support tools and clinical guidelines to support diagnostic reasoning
- IMIT 1.9 Determine and apply the role of telehealth judiciously in overall patient management
- IMIT 1.10 Inform patients about the risks and benefits of e-health and telehealth, including risks to privacy, safety and quality, plus the other relevant options for providing care
- IMIT 1.11 Use e-health and telehealth options to access specialist advice and institute shared care arrangements
- IMIT 1.12 Use technology and secure messaging to refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services, including e-pathology, e-prescribing, and e-discharge summaries
- IMIT 1.13 Provide and/or arrange follow-up and continuing medical care utilising ehealth and telehealth options as appropriate, and ensuring that the division of follow-up responsibilities arising from a telehealth consultation are clear to both patient-end and distant clinicians

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- IMIT 2.1 Manage admission of patients to hospital in accordance with institutional policies
- IMIT 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer, and with reference to e-health records where applicable
- IMIT 2.3 Maintain timely and accurate patient documentation in the patient record system and shared e-health summary, ensuring that the patient information is coded using SNOMED Clinical Terms
- IMIT 2.4 Apply relevant checklists and clinical management pathways, using decision support tools where appropriate
- IMIT 2.5 Communicate effectively with e-health and telehealth when distant advice is required to optimise management
- IMIT 2.6 Contribute medical expertise and leadership in a hospital team, including the establishment of telehealth services and ehealth implementation strategies
- IMIT 2.7 Use e-health and telehealth equipment to provide remote supervision and support clinical supervision and support to nurses, junior medical staff and students where appropriate
- IMIT 2.8 Participate in regular audits of telehealth services as part of institutional quality and safety improvement

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- IMIT 3.1 Undertake initial assessment and triage of patients with acute or life threatening conditions, accessing e-health records where appropriate
- IMIT 3.2 Access advice and support from distant clinicians as required using telehealth and e-health methods where appropriate to stabilise critically-ill patients and provide primary and secondary care
- IMIT 3.3 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources including e-health and telehealth resources
- IMIT 3.4 Demonstrate resourcefulness in knowing how to access specialist support via telehealth
- IMIT 3.5 Communicate effectively at a distance with consulting or receiving clinical personnel
- IMIT 3.6 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing with consideration of the role of telehealth and e-health

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- IMIT 4.1 Analyse data from practice records to identify clinical practice profile to inform a population health approach
- IMIT 4.2 Establish telehealth arrangements with distant clinicians to improve coordination of care and establish shared care arrangements
- IMIT 4.3 Evaluate quality of health care for practice populations, including patient experiences of telehealth and the usefulness of telehealth to the health care organisation as a whole
- IMIT 4.4 Fulfil responsibilities for managing e-health summaries for eligible patients
- IMIT 4.5 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health, with specific attention to the use of telehealth and e-health arrangements

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- IMIT 5.1 Take patient factors into account when deciding whether to use telehealth, such as the ability of the patient to travel, plus their family, work and cultural situation
- IMIT 5.2 Communicate effectively and in a culturally safe manner, when using telehealth
- IMIT 5.3 Access the services of Aboriginal Health Workers as cultural brokers when conducting telehealth consultations for consenting Aboriginal patients
- IMIT 5.4 Discuss how to undertake a needs analysis to determine optimal use of telehealth for your patient population
- IMIT 5.5 Work with culturally diverse and disadvantaged groups to establish telehealth services to address barriers in access to services and to improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- IMIT 6.1 Ensure safety, privacy and confidentiality in patient care when using e-health systems and conducting telehealth consultations
- IMIT 6.2 Keep clinical documentation in accordance with legal and professional standards and e-health standards
- IMIT 6.3 Demonstrate how to keep contemporaneous notes of telehealth consultations in the patient record systems of patient-end clinicians and distant clinicians
- IMIT 6.4 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care in establishing e-health and telehealth arrangements
- IMIT 6.5 Contribute to the management of human and financial resources within a health service, including the development of a business case for telehealth
- IMIT 6.6 Work within relevant national and state legislation, regulations, and professional and ethical guidelines, including the ACRRM Telehealth Guidelines
- IMIT 6.7 Manage, appraise and assess own performance in the provision of telehealth services for patients
- IMIT 6.8 Teach and clinically supervise health students, junior doctors and other health professionals, using telehealth equipment where appropriate
- IMIT 6.9 Engage in continuous learning and professional development, including e-learning, e-health knowledge and skills, and opportunistic learning from specialists during clinical telehealth consultations
- IMIT 6.10 Critically appraise and apply relevant research related to e-health

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- IMIT 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation, including the establishment of telehealth to expand scope of practice
- IMIT 7.2 Use e-health and telehealth to provide effective clinical care when away from ready access to face-to-face specialist medical, diagnostic and allied health services
- IMIT 7.3 Provide direct and distant clinical supervision and support for other rural and remote health care personnel using telehealth equipment
- IMIT 7.4 Use information and communication technology including telehealth equipment to provide medical care or facilitate access to specialised care for patients

- IMIT 7.5 Use information and communication technology including e-health records and telehealth to network and exchange information with distant colleagues
- IMIT 7.6 Respect local community norms and values in own life and work practices
- IMIT 7.7 Identify and acquire extended knowledge and skills in telehealth as may be required to meet health care needs of the local population

Knowledge and Skills

Essential knowledge required

- Know commonly used operating systems, software and hardware
- Know internet terminology and how to choose an internet provider
- Understand basic technical infrastructure including the principles of connectivity, the value of different types of equipment and how networks work
- Know how to follow procedures for detecting, diagnosing and fixing equipment problems
- Know business continuity and risk management requirements, e.g. theft prevention, offsite backup, dedicated resources, reliable technical support, uninterruptible power supply, cloud access to server
- Understand the importance of strategic and long-term system security and privacy, including virus protection, server firewall set up, encryption of patient information through emails or system networks, data recovery and back up procedures, and where needed, delegate these tasks to information technology professionals
- Describe the standard components of a medical practice computer system
- Recognise that hospital IM/IT systems vary from modern to legacy platforms and that different skills and knowledge will be required for different systems
- Understand the ACRRM Telehealth Standards Framework in the establishment and routine use of Telehealth within your practice or organisation
- Understand the potential and limitations of e-health and telehealth in rural/remote general practice
- Know how to select telehealth equipment that is fit for clinical purpose
- Know how to reduce risks of telehealth consultation
- Understand issues related to confidentiality and the internet including when using, smartphones, tablets and other mobile devices, applications and interactive programs, disease management tools, medical records, shared e-records, firewalls, online vs. offline, cloud applications, photography and online consultations
- Understand own limitations and the range and accessibility of local IT support resources including, Medicare Locals, hospitals, community-based health organisations, local IT companies and distant support
- Describe the principles of using patient information databases for activities such as:
 - Patient registers including: age, sex, disease, patient recall and reminder systems
 - Electronic diagnosis and treatment support: drug-drug interaction alerts, patient medication and clinical histories
 - Contribution to research/clinical audit activities
 - Health data management for the community e.g. incidence of diabetes or tuberculosis in a community

Essential skills required

- Demonstrate basic skills in the use of the internet
- Use electronic information sources to acquire and enhance knowledge and skills
- Use online learning platforms to access ongoing professional development and training
- Apply basic skills in using communication tools as necessary for communication and consultation with other medical professionals, including secure transmission of data and images, and use of telehealth and e-health systems
- Apply the ACRRM Telehealth Guidelines when establishing, conducting telehealth services and monitoring quality
- Use the Rural and Remote Medical Education Online (RRMEO) website www.rrmeo.com and www.ehealth.acrrm.org.au communication tools as appropriate to communicate with peers and participate in clinical discussion forums
- Apply appropriate and ethical conduct in use of social media

Learning Resources

Recommended texts and other resources

- Introduction to Telehealth - <http://www.ehealth.acrrm.org.au/teaser/acrrm-telehealth-tool-kit>
- ACRRM Telehealth Standards Framework - <http://www.ehealth.acrrm.org.au/telehealth-standards>
- ACRRM Telehealth Guidelines - <http://www.ehealth.acrrm.org.au/acrrm-telehealth-guidelines>
- ACRRM Telehealth Module - <http://www.ehealth.acrrm.org.au/homeblock-modules>
- ACRRM eHealth website - <http://www.ehealth.acrrm.org.au>
- PICO Search Protocol - <http://www.biomedcentral.com/1472-6947/7/16>
- Health Online Code - useful vs. useless information.
- UpToDate® - <http://www.uptodate.com/home>
- PubMed Clinical Queries and other EBM.

6.9 Mental Health

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- MH 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- MH 1.2 Obtain a comprehensive mental health history and conduct an accurate mental health status examination
- MH 1.3 Recognise the signs and symptoms of mental health disorders and mental health problems with an emphasis on early detection
- MH 1.4 Apply diagnostic classification systems and recognise when diagnostic classification labels may not be appropriate
- MH 1.5 Differentiate between functional and organic causes of altered mental status
- MH 1.6 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- MH 1.7 Work with patients, families and other health care providers to develop mutually acceptable treatment and care plans and strategies for relapse prevention
- MH 1.8 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- MH 1.9 Consider the needs of those with mental health disorders as well as existing co-morbidities
- MH 1.10 Identify and use mental health clinical practice guidelines to assist in determining best practice patient management strategies
- MH 1.11 Diagnose and manage mental health problems in specific age groups
- MH 1.12 Provide mental health care using a range of mental health care interventions in collaboration with other health care professionals and community/government organisations
- MH 1.13 Manage pharmacotherapy for the full spectrum of mental illness including monitoring and managing adverse effects of medication
- MH 1.14 Support patients and families to access self-help and carer organisations

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- MH 2.1 Manage admission of patients with mental health conditions requiring inpatient care in accordance with institutional policies
- MH 2.2 Develop, implement and maintain a relevant in-patient management plan for a range of mental health problems and conditions
- MH 2.3 Apply relevant hospital checklists and clinical management pathways for mental health conditions
- MH 2.4 Monitor and regularly re-evaluate patient progress and problem list and modify the management plan accordingly
- MH 2.5 Perform effective clinical handover to team members and the primary care provider
- MH 2.6 Order and perform a range of diagnostic and therapeutic procedures
- MH 2.7 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- MH 2.8 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- MH 2.9 Recognise and respond early to the deteriorating patient
- MH 2.10 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- MH 2.11 Undertake early, planned and multi-disciplinary discharge planning. Contribute medical expertise and leadership in a hospital team
- MH 2.12 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- MH 2.13 Recognise, document and manage adverse events and near misses
- MH 2.14 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- MH 3.1 Undertake initial assessment and triage of patients with acute or life-threatening conditions
- MH 3.2 Respond to a mental health crisis or emergency, including assessment of potential risks and adverse reactions of patients
- MH 3.3 Apply strategies to ensure safety of patient, health professionals, and family
- MH 3.4 Institute emergency management of patients with a mental illness, using only as a last resort, the involvement of police, chemical and/or physical restraint
- MH 3.5 Recognise the indicators for an emergency psychiatric consultation
- MH 3.6 Apply a plan/protocol for referring or transferring patients who require specialised care
- MH 3.7 Use the legislative framework for involuntary psychiatric care, guardianship/power of attorney and child protection correctly where relevant
- MH 3.8 Demonstrate resourcefulness in knowing how to access and use available resources
- MH 3.9 Communicate effectively at a distance with consulting or receiving clinical personnel
- MH 3.10 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- MH 3.11 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- MH 4.1 Identify local risk behaviours, prevalence of mental disorders and mental health problems and specific needs of local community for community education and mental health promotion
- MH 4.2 Undertake community education and health promotion activities to increase community awareness and understanding of mental health issues and mental health disorders and strategies for promoting and maintaining good mental health
- MH 4.3 Consider current national mental health priorities and policies and their application to rural/remote medical practice
- MH 4.4 Integrate systematic evidence-based screening, brief interventions and other mental health maintenance activities into practice
- MH 4.5 Use clinical information systems for the organised management and evaluation of mental health care in practice populations
- MH 4.6 Provide continuity and coordination of care for own practice population
- MH 4.7 Evaluate quality of mental health care for practice populations
- MH 4.8 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population mental health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, Working with groups to improve health outcomes

Abilities

- MH 5.1 Apply knowledge of the differing profile of mental health problems and disease among culturally diverse and disadvantaged groups
- MH 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- MH 5.3 Consider strategies to address social and environmental determinants of mental health problems among culturally diverse and disadvantaged groups
- MH 5.4 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- MH 5.5 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- MH 5.6 Harness the resources available in the health care team, the local community and family to improve outcomes of mental health care
- MH 5.7 Work with culturally diverse and disadvantaged groups to address barriers in access to mental health services and support services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- MH 6.1 Uphold the rights of people affected by mental health disorders or mental health problems, their family members and/or carers
- MH 6.2 Ensure safety, privacy and confidentiality in patient care
- MH 6.3 Maintain appropriate professional boundaries
- MH 6.4 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- MH 6.5 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- MH 6.6 Keep clinical documentation in accordance with legal and professional standards
- MH 6.7 Demonstrate commitment to teamwork, collaboration, coordination and continuity of mental health care
- MH 6.8 Work within relevant national and state legislation and professional and ethical guidelines related to the care and rights of people with mental illness
- MH 6.9 Apply protocols for media management

- MH 6.10 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes
- MH 6.11 Manage, appraise and assess own performance in the provision of mental health treatment for patients
- MH 6.12 Develop and apply strategies for self-care, personal support and caring for family
- MH 6.13 Teach and clinically supervise health students, junior doctors and other health professionals
- MH 6.14 Engage in continuous learning and professional development
- MH 6.15 Critically evaluate and apply published literature and research pertaining to psychiatry and mental health issues

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- MH 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- MH 7.2 Recognise the impact of rural and remote context on mental illness presentations
- MH 7.3 Recognise the differing availability of mental health resources in rural/remote communities and demonstrate the ability to improvise where necessary
- MH 7.4 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- MH 7.5 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- MH 7.6 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- MH 7.7 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- MH 7.8 Use information and communication technology to network and exchange information with distant colleagues
- MH 7.9 Respect local community norms and values in own life and work practices
- MH 7.10 Identify and acquire extended mental health knowledge and skills such as psychotherapeutic techniques to meet health care needs of the local population

Definition of terms

<i>A comprehensive mental health history includes</i>	Effective communication with patients in a respectful, empathic and empowering manner, with effective listening skills, an appreciation of different patient decision-making processes, an ability to interpret body language and an ability to recognise hidden agendas
<i>Mental health status examination has the following general elements</i>	General appearance, psychomotor behaviour, mood and affect, speech, cognition, thought patterns, level of consciousness
<i>Mental health disorders and mental health problems include</i>	Depression (major and minor), anxiety disorders (generalised anxiety disorder, acute stress disorder, adjustment disorder, obsessive compulsive disorder, panic disorder, post-traumatic stress disorder), sleep disorders, personality disorders, psycho-geriatrics (dementia, depression delirium), psychoses (bipolar, unipolar, schizophrenia, toxic and organic brain disorders), substance misuse
<i>Diagnostic classification systems include</i>	There are two internationally recognised manuals of mental health disorders; the Diagnostic and Statistical Manual of Mental Disorders, fifth Edition (DSM-V) and the International Statistical Classification of Diseases and Related Health Problems 10 th Revision (ICD-10), which are both categorical classification systems that provide prototypes of recognised mental health disorders
<i>Existing co-morbidities include</i>	Substance misuse, developmental disability, physical disability, personality disorder, trauma, acquired brain injury, physical illness with which mental illnesses are commonly associated - e.g. Parkinson's disease, hearing or sight impairment and co-existing psychiatric morbidities
<i>Mental health clinical practice guidelines include</i>	Mental health guidelines including those dealing with depression, anxiety, anger, self-harm, violence and aggression
<i>Mental health problems in specific age groups include</i>	<p>Children: 'the difficult child', encopresis and enuresis, school refusal, attention deficit hyperactivity disorder, aggression, organic brain disorder, oppositional defiant disorder, loss and grief reaction, recognition of sexual abuse and child abuse</p> <p>Young people: relationship problems at home, low self-esteem, peer group imitation, oppositional behaviour, self-harm, substance misuse (alcohol, marijuana, amphetamine derivatives, solvents, sedatives and others), depression, psychoses, teen pregnancy, eating disorders, loss and grief reaction, sexual abuse</p> <p>Adults: substance abuse, marriage/relationship problems, family conflict/parenting issues</p> <p>Aged: dementia, depression, delirium</p>
<i>Mental health care interventions include</i>	Providing education and information, empathic listening, behavioural and counselling therapies, the full range of pharmacotherapy for mental illness
<i>Mental health conditions requiring inpatient care include</i>	Alcohol detoxification, initiation of new medications in some circumstances, crisis situations
<i>Respond to a mental health crisis includes</i>	<p>Assess the risk of: suicide/self-harm, violence to others, damage to property, drug overdose, severity of psychiatric illness, availability of guns</p> <p>Techniques for aggression management, acute situational crisis counselling, conflict resolution, violence interventions, debriefing</p>

Knowledge and Skills

Essential knowledge required

- Know an overview of the history of development of psychiatry and theories of personality
- Understand national mental health priorities and their application to rural/remote medical practice
- Know the social, cultural, ethnic, geographical, and environmental characteristics of rural/remote communities that have an impact on the presentation and management of mental health problems
- Understand the national and state legislation that relating to mental health
- Define the nature, natural history, incidence and prevalence of mental health disorders across the lifespan and current psychiatric diagnostic classification systems
- Basic understanding of the aetiology and pathogenesis of mental health disorders, including: depression (major and minor), anxiety disorders (generalised anxiety disorder, acute stress disorder, adjustment disorder, obsessive compulsive disorder, panic disorder, post-traumatic stress disorder), sleep disorders, personality disorders, psycho-geriatrics (dementia, depression delirium), psychoses (bipolar, unipolar, schizophrenia, toxic and organic brain disorders), substance misuse
- Describe a range of psychotherapeutic techniques appropriate for use in general practice
- Understand the major drug classes of pharmacotherapeutics for the treatment of mental health disorders

Essential skills required

- Demonstrate an ability to communicate with patients in a respectful, empathic and empowering manner
- Use effective active/empathic listening
- Interpret non-verbal language
- Conduct a mental state examination and synthesis of differential diagnosis
- Assess suicide risk
- Help patients develop and institute a personal relapse prevention plan

Learning resources

Recommended texts and other resources

- The Mental Health Professionals Network (MHPN) Webinars - <http://www.mhpn.org.au/Webinars.aspx>
- Semple D & Smyth R (2013) *Oxford Handbook of Psychiatry*, 3rd Ed, Oxford Press, Oxford.
- Davies J (2003) *A Manual of Mental Health Care in General Practice*, National Mental Health Strategy, Commonwealth of Australia, Canberra.
- The Department of Health - Mental Health Publications - <http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-pubs>
- Mental health services in Australia website - <http://mhsa.aihw.gov.au/home/>
- BeyondBlue - <http://www.beyondblue.org.au/>
- Consumer Self-management programs - <https://www.ontrack.org.au/web/ontrack/programs>
- CBT Resources - <http://www.cci.health.wa.gov.au/resources/doctors.cfm>
- Youth BeyondBlue – youth focused consumer and support information - <http://www.youthbeyondblue.com/>
- Consumer self-help, professional resources and research information - <http://www.ehub.anu.edu.au/>
- Sane Australia - Patient information - <http://www.sane.org/>
- Headspace - Consumer information and resources - <http://www.headspace.org.au/>
- Royal Australian College of General Practitioners. *Guidelines for preventative activities in general practice (Red Book)* - <http://www.racgp.org.au/your-practice/mh/resources/#>
- Australian Indigenous Mental Health - <http://indigenous.ranzcp.org/index.php>
- Fourth National Mental Health Plan: an agenda for collaborative government action in mental health 2009-2014 - <http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-pubs-f-plan09>

6.10 Musculoskeletal Medicine

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- MSK 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- MSK 1.2 Obtain a clinical history that reflects contextual issues including: presenting problems, detailed characteristics of pain or dysfunction and effects on patient's life and work
- MSK 1.3 Perform an appropriate musculoskeletal examination, expanded where indicated into examination of other systems
- MSK 1.4 Accurately reproduce pain specifically related to the presenting complaint
- MSK 1.5 Order and interpret appropriate imaging including X-ray, CT, bone scan, ultrasound scan and MRI
- MSK 1.6 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnosis taking into account common and important conditions affecting the musculoskeletal system
- MSK 1.7 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- MSK 1.8 Formulate a comprehensive evidence-based management plan in concert with the patient and/or carer, designed to restore the patient as far as possible to optimum functionality
- MSK 1.9 Integrate allied musculoskeletal therapy into patient management plans, in accordance with patient preference and evidence
- MSK 1.10 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- MSK 1.11 Enhance autonomy and personal responsibility of patients with both acute and chronic musculoskeletal conditions
- MSK 1.12 Encourage the family to be a resource in recovery, including psychological support
- MSK 1.13 Recognise any Red Flag or Yellow Flag factors that may require urgent attention or impede recovery for patients
- MSK 1.14 Provide and/or arrange follow-up to monitor recovery and institute appropriate intermediate activities in the return to full function
- MSK 1.15 Refer, facilitate and coordinate access to specialised support services as required to assist patients to return to functional life / work

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- MSK 2.1 Manage admission of patients to hospital in accordance with institutional policies
- MSK 2.2 Develop, implement and maintain a management plan for hospitalised patients with a range of acute conditions specific to the musculoskeletal system requiring inpatient admission in concert with the patient and/or carer
- MSK 2.3 Apply relevant checklists and clinical management pathways for common conditions affecting the musculoskeletal system
- MSK 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- MSK 2.5 Order and perform a range of diagnostic and therapeutic procedures
- MSK 2.6 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- MSK 2.7 Communicate effectively with the health care team, patient and/or carer and external third parties including effective clinical handover
- MSK 2.8 Recognise and respond early to the deteriorating patient
- MSK 2.9 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- MSK 2.10 Undertake early, planned and multi-disciplinary planning for discharge and return to work including liaison with external third parties
- MSK 2.11 Contribute medical expertise and leadership in a hospital team
- MSK 2.12 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- MSK 2.13 Recognise, document and manage adverse events and near misses
- MSK 2.14 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- MSK 3.1 Undertake initial assessment and triage of patients with acute or life-threatening musculoskeletal conditions
- MSK 3.2 Stabilise critically ill patients and provide primary and secondary care
- MSK 3.3 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- MSK 3.4 Perform required emergency procedures
- MSK 3.5 Arrange and/or perform emergency patient transport or evacuation when needed
- MSK 3.6 Demonstrate resourcefulness in knowing how to access and use available resources
- MSK 3.7 Communicate effectively at a distance with consulting or receiving clinical personnel
- MSK 3.8 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- MSK 3.9 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- MSK 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of musculoskeletal disease and access to health-related services
- MSK 4.2 Apply a population health approach that is relevant to the clinical practice profile
- MSK 4.3 Integrate evidence-based injury prevention, early detection of musculoskeletal problems and health maintenance activities including podiatrists, chiropractors, osteopaths, physiotherapists, personal trainers to encourage physical achievement and fitness
- MSK 4.4 Provide continuity and coordination of care for own practice population
- MSK 4.5 Evaluate quality of health care for musculoskeletal patients
- MSK 4.6 Fulfil reporting requirements in relation to statutory notification of health conditions
- MSK 4.7 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- MSK 4.8 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- MSK 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- MSK 5.2 Communicate effectively and in a culturally safe manner with patients and their families and external third parties, using interpreters, key community contacts and networks as appropriate
- MSK 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- MSK 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- MSK 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- MSK 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and the determinants of musculoskeletal health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- MSK 6.1 Ensure safety, privacy and confidentiality in patient care
- MSK 6.2 Maintain appropriate professional boundaries
- MSK 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- MSK 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- MSK 6.5 Disclose suspected physical abuse with particular reference to mandatory reporting
- MSK 6.6 Keep clinical documentation in accordance with legal and professional standards and provide accurate and timely reports to third parties when required
- MSK 6.7 Use community resources to assist in musculoskeletal conditions to aid in quality of life and return to work
- MSK 6.8 Maintain appropriate professional boundaries with patients and their families
- MSK 6.9 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- MSK 6.10 Liaise with employers, work insurance officials, rehabilitation agencies and where necessary with lawyers, in facilitating return to work
- MSK 6.11 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes

- MSK 6.12 Manage, appraise and assess own performance in the provision of medical care for patients
- MSK 6.13 Teach and clinically supervise health students, junior doctors and other health professionals
- MSK 6.14 Engage in continuous learning and professional development and pursue further training in musculoskeletal medicine as required to service your local area
- MSK 6.15 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- MSK 7.1 Recognise differences in presentation of patients in a rural and remote context
- MSK 7.2 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- MSK 7.3 Provide effective clinical care when away from ready access to musculoskeletal specialist medical, diagnostic and allied health services
- MSK 7.4 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- MSK 7.5 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- MSK 7.6 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- MSK 7.7 Use information and communication technology to network and exchange information with distant colleagues
- MSK 7.8 Respect local community norms and values in own life and work practices
- MSK 7.9 Identify and acquire extended musculoskeletal medicine knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

<p>Musculoskeletal examination includes</p>	<p>Look - Inspection including: surface appearance, symmetry, alignment and gait</p> <p>Feel - Palpation of surface temperature, bones, muscles, tendons, joint lines</p> <p>Move - active, passive, resisted, relative smoothness and end point quality</p> <p>Test function - appropriate provocation tests (special tests)</p> <p>Measure - length or circumference</p> <p>Look elsewhere - compare to the other side for all aspects above, assess neurovascular if appropriate</p>
<p>Common and important conditions affecting the musculoskeletal system include</p>	<p>General include:</p> <p>Spinal referred pain, neoplasia, including myeloma and cancer of lung - breast and prostate</p> <p>Inflammatory conditions including:</p> <p>Gout, pseudogout, osteoarthritis, rheumatoid arthritis, psoriatic arthritis, SLE, polymyalgia rheumatica, ankylosing spondylitis, Reiter's disease, inflammatory bowel (disease related), fibromyalgia syndrome</p> <p>Infections including:</p> <p>TB, other bacterial, herpes zoster, discitis, osteomyelitis, osteoporosis and spinal wedging, Paget's disease</p> <p>Referred including:</p> <p>Referred visceral and somatic pain both serious and benign, vascular claudication, migrainous phenomena, neurological conditions including Complex Regional Pain Syndromes. Depression induced spinal pain, psychogenic pain, anticoagulant intraspinal haemorrhage, Raynaud's phenomenon and other neurovascular disorders, Sympathetic dystrophy (diabetics)</p> <p>Cervical spine including:</p> <p>Vertebral stiffening - age, ankylosis, spondylitis, postural syndromes, facet joint dysfunction, disc prolapse, disruption, foraminal obstruction, radiculopathy, myelopathy, torticollis (wry neck), trauma, sprain, 'whiplash', (fractures), cervical syndromes / cervicogenic headache</p> <p>Temporomandibular conditions:</p> <p>Dental malocclusion, stress-related tooth grinding, referred cervical (e.g. whiplash), TMJ syndrome, locked jaw, sprains, arthritic conditions, trauma</p> <p>Shoulder conditions including:</p> <p>Capsulitis/frozen shoulder, subdeltoid bursitis/supraspinatus tendinitis, infraspinatus and other shoulder muscle conditions, rotator cuff syndromes, bicipital tendinitis, acromioclavicular conditions, sternoclavicular arthritis, psychogenic shoulder/arm syndromes, recurrent shoulder dislocations</p> <p>Elbow and arm conditions including:</p> <p>Lateral elbow pain, medial elbow pain, toddler's pulled elbow, biceps lesions, olecranon bursitis, entrapment neuropathies, loose bodies, overuse syndromes, industrial, psychosomatic, thoracic outlet syndromes</p> <p>Wrist and hand conditions including:</p> <p>Carpal tunnel syndrome (and pronator teres syndrome), de-Quervain's tenosynovitis, trigger finger and thumb, spindle finger, scaphoid fracture, ganglion, lunate avascular necrosis, dislocation, occult foreign body</p>

	<p>Thoracic spine conditions including:</p> <p>Postural syndromes including minor kyphoscoliosis and TV backache, simple thoracic spine dysfunction, sprains, costovertebral and facet joint syndromes, T4 syndrome, combined thoracic and cervical dysfunction, thoracic myofascial syndrome, Tietze's costochondritis, kyphoscoliosis (moderate to severe), Scheuermann's disorder, age changes, osteoporosis, vertebral compression</p> <p>Lower back conditions including:</p> <p>Mechanical back pain including facet/zygapophyseal and disc joint dysfunction, posture syndromes, dysfunction syndromes, sprains and 'derangements', minor and major trauma to muscle/bone, spondylosis (degenerative osteoarthritis), symptomatic spondylolysis and spondylolisthesis, acute and chronic intervertebral disc prolapse and other discogenic pain, nerve root compression, spinal stenosis, acute cauda equina syndrome</p> <p>Buttock, hip, pelvis and thigh including:</p> <p>Sacroiliac joint related pain: sacroiliitis, mechanical hypermobile and hypo mobile sacroiliac syndromes, psoas bursitis, trochanteric bursitis, hip arthritis, capsulitis, loose bodies in the hip, muscle strain, irritability, referred spasm, tendinitis including psoas, glutei, piriformis, adductors (rider's sprain), quadriceps, hamstrings, coxalgia, coccydynia, referred lumbar and sacral syndromes: nerve entrapment / meralgia paraesthetica, injuries, fracture, snapping hip (iliopsoas tendinitis or dancer's hip), pregnancy related pain</p> <p>Knee including:</p> <p>Minor trauma, strain, sprain, synovitis, bursitis, tendinitis, cartilage, ligamentous injury (ACL, PCL, medial collateral), effusion, haemarthrosis, fracture, loose bodies, Baker's cyst (simple and leaking), osteochondritis dissecans, locking and pseudolocking, chondromalacia patella (jogger's knee), patella subluxation and dislocation, patellar tendinitis (jumper's knee), Osgood-Schlatter's, traction epiphysitis, osteoarthritis, iliotibial band syndrome</p> <p>Lower leg, ankle and foot including:</p> <p>Achilles tendinitis, bursitis, partial and complete rupture, peroneal muscle strain, tibialis posterior tendinitis, Periostitis (shin splints), compartment syndrome, common peroneal entrapment, ankle sprains and associated minor fractures, deltoid ligament sprain, loose body in ankle, plantar fasciitis, mid-tarsal sprain, metatarsalgia, stress fracture, tarsal tunnel syndrome, disparate leg length, corns, calluses, ingrowing toenail, bunion, hallux rigidus and other osteoarthritides, Morton's neuroma, fractured 5th toe or metatarsal, claw toe, hammer toe, postural problems including inversion, eversion and bumbling</p> <p>Children including:</p> <p>Congenital dislocation of hip, synovitis, Perthes Disease, slipped upper femoral epiphysis, stress fracture, iliac traction apophysitis, gait problems, calf tightness, Sever's traction apophysitis, Toddler's pulled elbow, Injury, sprain, bone and chondral fracture, Kohler's and Freiberg's Diseases, Infection including septic arthritis</p>
<p>"Red Flag" factors in musculoskeletal assessments include</p>	<p>Infection, underlying disease process, immunosuppression, penetrating wound, fracture; history of trauma or minor trauma if > 50 years or history of osteoporosis and taking corticosteroids, tumour: past history of malignancy, age > 50 years, failure to improve with treatment, unexplained weight loss, pain at multiple sites, pain at rest, aortic aneurysm; will have absence of aggravating features</p>
<p>"Yellow Flag" factors in musculoskeletal assessments include</p>	<p>Personal, family and social issues include: high levels of pain, attitudes and beliefs about their pain and dysfunction (avoidance, fear of re-injury, catastrophising), diagnosis and treatment, emotional state e.g. anxiety, depression, grief and family/relationship difficulties.</p> <p>Workplace and injured worker interaction include: workplace environment (physical, safety issues, past safety record), interpersonal life and relationships at work (support, reaction to injury, return to work), specific return to work issues (availability of duties, industrial pressures).</p> <p>Workers compensation issues (financial and legal) include: dispute about the injury or cause of injury, dispute about income maintenance payments, financial hardship if no income maintenance, claim lodgement delays, lack of understanding of workers compensation e.g. your patient or their employer misunderstands the compensation or rehabilitation process or the information provided.</p> <p>Poor outcomes predictors: the presence of a belief that all pain is always harmful/ potentially severely disabling, fear-avoidance behaviour (avoiding movement or activity due to misplaced</p>

	anticipation of harm from any increase in pain) and reduced activity levels, tendency to low mood and withdrawal from social interaction, an expectation that passive treatment rather than active participation in therapy would help.
Mandatory reporting	Specified people are required to report suspected child maltreatment (abuse or neglect) to statutory child protection services in Australia. The legal requirement to report suspected cases of child abuse and neglect is known as mandatory reporting. All jurisdictions possess mandatory reporting requirements of some description. However, the people mandated to report and the abuse types for which it is mandatory to report vary across Australian states and territories. Doctors are mandated to report across all jurisdictions in Australia.

Knowledge and Skills

Essential knowledge required

- Know the scope of musculoskeletal problems commonly occurring in rural/remote general practice, in particular those affecting school age children, different sporting groups, different industrial groups especially manual labourers, women of child-bearing age and the aged
- Describe basic anatomy, physiology and biomechanics relevant to musculoskeletal disorders including normal functioning of the axial and appendicular skeleton and musculature, pathways of innervation of muscles, dermatome innervation, functional anatomy of joints and surface anatomy
- Outline the functional anatomy of the patellofemoral system
- Understand the mechanisms, characteristics and patterns of pain, including somatic, referred somatic, radicular, referred visceral and referred trigger point pain
- Understand and work with the “look, feel, move, test function/sensation, measure, look elsewhere and image” algorithm.
- Use a comprehensive approach to recovery including specific therapy, psychological support, self-directed activities, therapist conducted therapies, motivation, a supportive environment and general health initiatives
- Demonstrate awareness of the importance of foot problems in determining mobility and general fitness especially in the elderly
- Understand the general principles of podiatry and how the correct application of orthotic devices can restore effective ambulation and relieve pain
- Interpret the differential diagnosis and patterns of pain in, referred within and from the thorax, and the cervical spine
- Use algorithms for the differentiation of visceral and somatic pain in the thorax and pain referred to the abdomen, especially for red flag conditions, such as cardiac ischaemia, aortic dissection, pneumothorax, pulmonary neoplasm, spinal infections and neoplasia, confusing painful conditions such as herpes zoster, oesophagitis, peptic ulcer, cholelithiasis and psychogenic pain
- Explain the differential diagnosis and patterns of somatic pain in and referred from the low back and lumbar spine and visceral sources of pain
- Explain the sources of pain referred to and emanating from buttock, hip, pelvis and thigh, particularly from the spine and the sacroiliac joint, and the downward referral of hip pain to the leg. Know the age and sex related conditions of this region
- Knows appropriate use of orthotic devices

Essential skills required

- Conduct a musculoskeletal examination of the all parts of the body with functional testing that includes:
 - Cervical spine glide and foraminal compression test, brachial plexus tension
 - Shoulder apprehension and specific impingement tests
 - Elicit Tinel's and Phalen's sign at the wrist
 - Waddell's test when appropriate in spinal examinations
 - Hip – Trendelenburg's sign
 - Special tests for the hip in children – Barlow's, Ortolani's tests
 - Knee tests including Lachman's, McMurray's, Apley's, and pivot shift tests as appropriate to assess functionality
- Apply active, passive and resisted movements in examination, including neurological testing by resisted movement
- Provide management of acute soft tissue trauma
- Administer corticosteroid injections of joints, ganglions and around tendons
- Aspirate of bursae and joints
- Undertakes skin/muscle biopsy
- Unlock a locked temporomandibular joint or knee
- Teach exercises / stretches relevant to all common musculoskeletal conditions including techniques for self-correction of posture, use of appropriate lumbar support and improving posture whilst lying down
- Order and evaluate hydrodilatation of the shoulder
- Apply fibreglass and plaster casts or immobilisation of other fractures
- Reduce simple dislocations
- Stabilise a spinal injury
- Conduct spinal mobilisation
- Inject and dry needle trigger points (desirable)
- Provide instruction on when to avoid certain exercises and stretches
- Provide instruction on relevant pharmacotherapy
- Administer caudal epidural injection (desirable)
- Provide treatment of plantar wart

Learning resources

Recommended texts and other resources

- Murtagh J (2011) *Murtagh's General Practice*. 5th Ed. McGraw-Hill.
- Murtagh J & Kenna C (1997) *Back pain and spinal manipulation: A practical guide*. 2nd Ed. Butterworths, Oxford.
- Hertling D (2005) *Management of Common Musculoskeletal Disorders, Physical Therapy Principles and Methods*. 4th Ed. Lippincott, Philadelphia.
- Corrigan B & Maitland G (1993) *Practical Orthopaedic Medicine*. Butterworths, Oxford.
- Cyriax JH (1982) *Textbook of Orthopaedic Medicine Vol 1: Diagnosis of Soft Tissue Lesions*. 8th Ed. Bailliere Tindall, Oxford.
- Cyriax JH & Cyriax PJ (1996) *Cyriax's Illustrated Manual of Orthopaedic Medicine*. 3 Ed. Butterworth-Heinemann, Oxford.
- Maitland G, Hengeveld E, Banks K & English K (2005) *Maitland's Vertebral Manipulation*. 7th Ed, Butterworth-Heinemann, Oxford.
- McKenzie R & May S (2003) *The Lumbar Spine: Mechanical Diagnosis & Therapy*. 2 Vol set. 2nd Ed. Orthopedic Physical Therapy Products, Minneapolis, Minnesota.
- McKenzie R & May S (2006) *The Thoracic Spine: Mechanical Diagnosis & Therapy*. 2 Vol set. 2nd Ed. Orthopedic Physical Therapy Products, Minneapolis, Minnesota.
- McKenzie R (2011) *Treat Your Own Back*. 9th Ed. Orthopedic Physical Therapy Products, Minneapolis, Minnesota.
- McKenzie R (2011) *Treat Your Own Neck*. 5th Ed. Orthopedic Physical Therapy Products, Minneapolis, Minnesota.
- Ombregt L (2013) *A System of Orthopaedic Medicine*. 3rd Ed, Churchill Livingstone, Chatswood, Australian.
- Australian Association of Musculoskeletal Medicine: Australasian Musculoskeletal Medicine Journal - <http://www.musmed.com/australasian-musculoskeletal-medicine-journal/>
- Family Practice Notebook website - <http://www.fpnotebook.com/ortho/index.htm>
- National Health and Medical Research Council: *Evidence-based Management of Acute Musculoskeletal Pain - A Guide for Clinicians*: http://www.nhmrc.gov.au/files_nhmrc/publications/attachments/cp95.pdf?q=publications/synopses/files/cp95.pdf
- WorkCover South Australia - Injury management by health discipline - <http://www.workcover.com/health-provider/injury-management-by-health-discipline/yellow-flags>

6.11 Obstetrics and Women's Health

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- O&WH 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- O&WH 1.2 Obtain a comprehensive obstetric and gynaecological history that reflects contextual issues including: presenting problems, epidemiology, culture and geographic location
- O&WH 1.3 Conduct a thorough pre-pregnancy consultation including lifestyle counselling
- O&WH 1.4 Provide non-directive advice and counselling to patients presenting with an unplanned pregnancy
- O&WH 1.5 Perform an initial antenatal assessment and identifying the potential risk factors for mother and foetus during pregnancy
- O&WH 1.6 Undertake routine antenatal screening and counsel women about screening for chromosomal abnormalities
- O&WH 1.7 Determine an antenatal management plan tailored to the specific needs of individual patients including counselling and advice on the management of common antenatal conditions in pregnant women
- O&WH 1.8 Recognise and manage important first trimester conditions and late pregnancy complications and non-pregnancy related conditions
- O&WH 1.9 Work with patients, families and other health care providers to develop mutually acceptable birthing plans
- O&WH 1.10 Provide advice and support regarding conditions affecting breastfeeding
- O&WH 1.11 Provide counselling and advice on the physical and emotional issues experienced by women in the first 12 months following childbirth
- O&WH 1.12 Recognise the spectrum of psychological responses to pregnancy or infertility, to childbirth, to complications of pregnancy and childbirth including miscarriage and stillbirth, and to the care of an infant
- O&WH 1.13 Recognise, support and manage postnatal depression
- O&WH 1.14 Diagnose and manage common gynaecological, menstrual and breast problems
- O&WH 1.15 Identify and use maternal and perinatal clinical practice guidelines to assist in determining best practice patient management strategies
- O&WH 1.16 Identify and manage co-morbidities in the patient and effectively communicate these to the patient/carer
- O&WH 1.17 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- O&WH 1.18 Educate patients about choice and use of contraceptive methods and negotiating safe sex
- O&WH 1.19 Diagnose and manage sexually transmitted diseases

- O&WH 1.20 Demonstrate non-judgemental attitude to the human sexual response, sexuality and the spectrum of sexual behaviours
- O&WH 1.21 Recognise and provide advice and treatment to patients experiencing menopause
- O&WH 1.22 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- O&WH 1.23 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- O&WH 2.1 Manage admission of patients to hospital in accordance with institutional policies
- O&WH 2.2 Participate in the management of labour and birthing complications
- O&WH 2.3 Perform a postnatal assessment, identifying the ongoing care requirements
- O&WH 2.4 Perform a routine neonatal examination and provide ongoing care of common neonatal problems
- O&WH 2.5 Manage common gynaecological conditions
- O&WH 2.6 Apply relevant hospital checklists and clinical management pathways for obstetric and gynaecological health conditions
- O&WH 2.7 Monitor and regularly re-evaluate patient progress and problem list and modify the management plan accordingly
- O&WH 2.8 Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing
- O&WH 2.9 Order and perform a range of diagnostic and therapeutic procedures
- O&WH 2.10 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- O&WH 2.11 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- O&WH 2.12 Recognise and respond early to the deteriorating condition of a woman during labour and post-partum
- O&WH 2.13 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- O&WH 2.14 Undertake early, planned and multi-disciplinary discharge planning
- O&WH 2.15 Participate in maternity service teams contributing medical expertise and leadership
- O&WH 2.16 Provide direct clinical supervision and support to junior medical staff and students
- O&WH 2.17 Recognise, document and manage adverse events and near misses
- O&WH 2.18 Participate in institutional quality and safety improvement and risk-management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- O&WH 3.1 Perform an assessment and emergency management of a woman in third trimester presenting as acutely unwell
- O&WH 3.2 Stabilise critically ill patients and provide primary and secondary care
- O&WH 3.3 Provide definitive emergency resuscitation and management of primary and secondary postpartum haemorrhage and endometritis in keeping with clinical need, own capabilities and local context and resources
- O&WH 3.4 Perform required emergency procedures
- O&WH 3.5 Manage normal labour and delivery under emergency circumstances in consultation with a GP Obstetrician, specialist or retrieval program as appropriate
- O&WH 3.6 Recognise the signs and symptoms of abnormal labour that require further emergency assistance
- O&WH 3.7 Arrange and/or perform emergency patient transport or evacuation when needed
- O&WH 3.8 Demonstrate resourcefulness in knowing how to access and use available resources
- O&WH 3.9 Communicate effectively at a distance with consulting or receiving clinical personnel
- O&WH 3.10 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- O&WH 3.11 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- O&WH 4.1 Identify local community maternal and infant health problems and sexual health risk behaviours
- O&WH 4.2 Identify antenatal problems of specific high risk groups
- O&WH 4.3 Undertake community education and health promotion activities to promote improved maternal and infant health status
- O&WH 4.4 Consider current national maternal and infant health priorities and policies and their application to rural/remote medical practice and the local community
- O&WH 4.5 Integrate systematic evidence-based screening, brief interventions and other health maintenance activities into practice
- O&WH 4.6 Use clinical information systems for the organised management and evaluation of fertile women in practice populations
- O&WH 4.7 Provide continuity and coordination of care for own practice population
- O&WH 4.8 Evaluate quality of antenatal care for practice populations
- O&WH 4.9 Fulfil reporting requirements in relation to statutory notification of health conditions

- O&WH 4.10 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- O&WH 4.11 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of maternal and infant wellbeing

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- O&WH 5.1 Apply knowledge of the differing profile of disease, health risks and beliefs among women and babies from culturally diverse and disadvantaged groups
- O&WH 5.2 Communicate effectively and in a culturally safe manner with mothers and babies, using interpreters, key community contacts and networks as appropriate
- O&WH 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care to mothers and babies
- O&WH 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- O&WH 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- O&WH 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and the improve the determinants of mothers' and babies' health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- O&WH 6.1 Ensure safety, privacy and confidentiality in patient care
- O&WH 6.2 Maintain appropriate professional boundaries
- O&WH 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- O&WH 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- O&WH 6.5 Keep clinical documentation in accordance with legal and professional standards
- O&WH 6.6 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care of mothers and babies
- O&WH 6.7 Contribute to the management of human and financial resources within a health service
- O&WH 6.8 Work within relevant *national and state legislation relating to women's health* and work within the professional and ethical guidelines

- O&WH 6.9 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes
- O&WH 6.10 Manage, appraise and assess own performance in the provision of medical care for women and babies
- O&WH 6.11 Develop and apply strategies for self-care, personal support and caring for family
- O&WH 6.12 Teach and clinically supervise others in providing care to mothers and babies
- O&WH 6.13 Engage in continuous learning and professional development
- O&WH 6.14 Critically appraise and apply relevant published literature and research pertaining to maternal and infant health issues

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- O&WH 7.1 Demonstrate an understanding of the social, cultural and environmental influences on obstetric and women's health service needs in rural/remote communities
- O&WH 7.2 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- O&WH 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- O&WH 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- O&WH 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- O&WH 7.6 Use information and communication technology to network and exchange information with distant colleagues
- O&WH 7.7 Respect local community norms and values in own life and work practices
- O&WH 7.8 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local women and babies

Definition of terms

<i>Pre-pregnancy consultation includes</i>	Health assessment that includes rubella immunity, consideration of Pap smear, determination of blood group and blood group antibodies. Lifestyle counselling which includes drug and alcohol use; smoking; nutrition; exercise; safe sex, folic acid supplementation; avoidance of listeria prone foods and reducing risk of toxoplasmosis and CMV
<i>Lifestyle counselling includes</i>	Alcohol use, drug use, smoking, nutrition, exercise, folate supplementation, safe sex, avoiding listeria prone foods, reducing risk of toxoplasma and CMV infections
<i>Initial antenatal assessment includes</i>	Take a detailed obstetric history and antenatal examination to identify women who are at high risk of complications
<i>Routine antenatal screening includes</i>	Testing for anaemia, Group B streptococcus, HIV, hepatitis B, rubella, syphilis, asymptomatic bacteriuria Dating ultrasound, chromosomal testing
<i>Common antenatal conditions in pregnancy include</i>	Nausea, vomiting, urinary frequency, cramps, syncope, back pain, pelvic pain and intercurrent infections
<i>Important first trimester conditions include</i>	Early bleeding, miscarriage, blighted ovum, molar pregnancy and ectopic pregnancy
<i>Common and important late pregnancy complications include</i>	Preeclampsia, eclampsia, fetal growth restriction, spontaneous pre term birth, bleeding, placental complications
<i>Conditions affecting breastfeeding include</i>	Inverted and cracked nipples, mastitis, breast engorgement, misconceptions regarding lactation and supply and demand, decreased supply, drug contraindications
<i>Physical and emotional issues experienced by women in the first 12 months following childbirth include</i>	Tone of pelvic floor and other muscles, mastitis, UTI, perineal wound infections, sexuality after childbirth, stress and social demands, depression
<i>Labour and birthing complications include</i>	Haemorrhage, pre-eclampsia, eclampsia, failure to progress in labour, analgesia, fever, amnionitis, various presentations such as breech, OP, shoulder dystocia
<i>Common neonatal problems include</i>	Transient tachypnoea of the newborn, neonatal hypoglycaemia and hypothermia
<i>Abnormal labour includes</i>	Incoordinate labour, abnormal bleeding, hypertension, failure to progress in labour, induction of labour
<i>Common gynaecological conditions include</i>	Urinary tract infections, candidal infections, abnormal cervical smear results, endometriosis, pelvic pain, sexually transmitted infections, pelvic inflammatory disease, Bartholin's cysts/abscess, ovarian cysts, uterine fibroids, cervical and uterine polyps, uterine prolapse cystocele and rectocele
<i>Specific high risk groups in</i>	Aboriginal and Torres Strait Islander women; migrant women, women with a drug addiction and

obstetrics include	women over 35 years of age
National and state legislation relating to women's health	Legal responsibilities regarding notification of disease, birth, death and autopsy relevant to the state concerned. State legislation and relevant cost, availability and accessibility of services for termination of pregnancy

Knowledge and Skills

Essential knowledge required

- Describe relevant anatomy, physiology, pathology and current research findings in the management of common obstetric post natal and women's health conditions
- Outline the principles management of labour and delivery complications
- Describe current treatment options for infertility
- Have knowledge of the use of therapeutics during pregnancy, in particular an awareness of medication that may pose a risk to the foetus or affect breast feeding

Essential skills required

- Perform a pelvic examination
- Perform pap smear
- Insert an IUCD (desirable)
- Insert an Implanon
- Perform urine pregnancy testing
- Perform fetal heart sound detection using a doppler or ultrasound
- Perform fundal height assessment
- Perform CTG interpretation
- Perform episiotomy
- Perform perineal repair
- Catheterise the urethra
- Manage an unplanned normal delivery
- Manage a shoulder dystocia
- Assist with an obstetrics ultrasound

Learning resources

Recommended texts and other resources

- Oats J & Abraham S (2010) *Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology*. 9th Ed. New York: Elsevier Mosby, Edinburgh.
- Congress Alukura, Nganampa Health Council (2008) *Minymaku Kutju Tjukurpa Women's Business Manual* (4th edition). Alice Springs: Congress Alukura and Nganampa Health Council Inc - <https://crana.org.au/shop/>
- South Australian Government. *Maternity and perinatal clinical practical guidelines* - <http://www.health.sa.gov.au/PPG/Default.aspx?tabid=35>
- Department of Health (2012) *Clinical Practice Guidelines Antenatal Care – Module 1*, Commonwealth of Australia - <http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-antenatal-care-index>
- Dog T & Micozzi M (2004) *Women's Health in Complementary and Integrative Medicine: A clinical guide*. 1st Ed, Churchill Livingstone.
- Youngkin E, Davis M, Schadewald D & Juve C (2012) *Women's Health: A Primary Care Clinical Guide*. 4th Ed. Prentice Hall.
- Mazza, D (2011) *Women's Health in General Practice*. 2nd Ed, Kindle Edition, Churchill Livingstone, Australia.
- Pregler J & Decherney A (2002) *Women's Health: Principles and Clinical Practice*. 1st Ed, PMPH USA.
- National Maternity Services Plan 2010 - <http://www.health.gov.au/internet/publications/publishing.nsf/Content/pacd-maternityservicesplan-toc>

6.12 Ophthalmology

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- OPH 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- OPH 1.2 Obtain a general and ocular history, taking into account the special needs of the patient
- OPH 1.3 Perform a problem-focussed eye examination relevant to clinical history and risks, epidemiology and cultural context
- OPH 1.4 Use specialised clinical equipment for examination of the eye as required for further assessment and interpret findings
- OPH 1.5 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- OPH 1.6 Diagnose and interpret abnormalities of the optic nerve and fundus
- OPH 1.7 Diagnose and provide initial treatment for strabismus and abnormal eye movements
- OPH 1.8 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- OPH 1.9 Manage a range of ophthalmological conditions including common and important eye pathologies, injuries to the eye and acute visual loss
- OPH 1.10 Perform therapeutic ocular procedures necessary to fulfil management of patient care including prescription of topical and systemic medical treatments
- OPH 1.11 Understand the psycho-social effects of visual loss and demonstrate a compassionate and supportive approach to care
- OPH 1.12 Formulate a management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- OPH 1.13 Identify and manage co-morbidities in the patient and effectively communicate these to the patient/carer
- OPH 1.14 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- OPH 1.15 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- OPH 1.16 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- OPH 1.17 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of hospitalised patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- OPH 2.1 Manage admission of patients to hospital in accordance with institutional policies ensuring a sound clinical diagnostic process
- OPH 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer and in discussion with their community based general practitioner or other health professional
- OPH 2.3 Identify ocular conditions that raise suspicion of child abuse
- OPH 2.4 Apply relevant checklists and clinical management pathways
- OPH 2.5 Monitor clinical progress, regularly re-evaluate and modify management as required
- OPH 2.6 Order and perform a range of diagnostic and therapeutic procedures
- OPH 2.7 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- OPH 2.8 Explain to the patient the role of other health care professionals including ophthalmologists, optometrists, opticians and general practitioners
- OPH 2.9 Communicate effectively with the health care team, patient and/or carer including effective clinical handover to other specialisations if required in systemic disease
- OPH 2.10 Recognise and respond early to the deteriorating patient
- OPH 2.11 Anticipate and judiciously arrange safe patient transfer of patients with ocular conditions that require specialist care to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- OPH 2.12 Undertake early, planned and multi-disciplinary discharge planning utilising support systems in the community to assist patients with ocular disease
- OPH 2.13 Participate in institutional quality and safety improvement

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- OPH 3.1 Undertake initial assessment and triage of patients with injuries to the eye and acute loss of vision
- OPH 3.2 Stabilise critically-ill patients and provide primary and secondary care
- OPH 3.3 Perform required emergency procedures
- OPH 3.4 Arrange and/or perform emergency patient transport or evacuation when needed for patients with eye trauma or other emergencies
- OPH 3.5 Demonstrate resourcefulness in knowing how to access and use available resources
- OPH 3.6 Communicate effectively at a distance with consulting or receiving clinical personnel
- OPH 3.7 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- OPH 3.8 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- OPH 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services for ocular conditions including diabetic retinopathy, cataracts and glaucoma
- OPH 4.2 Apply a population health approach that is relevant to the clinical practice profile
- OPH 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level to prevent blindness and minimise deterioration of function
- OPH 4.4 Provide continuity and coordination of care for own practice population
- OPH 4.5 Evaluate quality of health care for patients with ocular conditions
- OPH 4.6 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- OPH 4.7 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- OPH 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- OPH 5.2 Communicate effectively with the patient and their families/carers and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- OPH 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- OPH 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- OPH 5.5 Harness the resources available in the extended health care team, the local community and family to improve outcomes of care for ophthalmology patients
- OPH 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and the determinants of ocular health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- OPH 6.1 Ensure safety, privacy and confidentiality in patient care
- OPH 6.2 Maintain appropriate professional boundaries with patients and their families
- OPH 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- OPH 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- OPH 6.5 Keep clinical documentation in accordance with legal and professional standards
- OPH 6.6 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- OPH 6.7 Contribute to the management of human and financial resources within a health service
- OPH 6.8 Work within relevant national and state legislation and professional and ethical guidelines
- OPH 6.9 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes for patients with ocular conditions
- OPH 6.10 Manage, appraise and assess own performance in the provision of medical care for patients

- OPH 6.11 Develop and apply strategies for self-care, personal support and caring for family
- OPH 6.12 Teach, mentor and clinically supervise health students, juniors and other health professionals learning about ocular conditions, examinations and treatment
- OPH 6.13 Engage in continuous learning and professional development
- OPH 6.14 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- OPH 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- OPH 7.2 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- OPH 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- OPH 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- OPH 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- OPH 7.6 Use information and communication technology to network and exchange information with distant colleagues
- OPH 7.7 Respect local community norms and values in own life and work practices
- OPH 7.8 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

Specialised clinical equipment for examination of the eye	Fine beamed torch (with optional blue filter for examination using Fluorescein), local anaesthetic eye drops, fluorescein strips or Minims, Magnification – slit lamp, indirect ophthalmoscope, loupes or Woods lamp
Abnormalities of the optic nerve and fundus include	Glaucoma, optic disc swelling, optic atrophy, diabetic retinopathy, hypertensive retinopathy and age related maculopathy
Strabismus and abnormal eye movements include	Hypermetropia and convergent squint, amblyopia, divergent squint, palsies and other adult squints
Common and important eye pathologies include	Conjunctivitis (viral, herpetic eye disease, herpes simplex, herpes zoster, bacterial, allergic, trachoma, and trichiasis), conjunctival tumours, corneal diseases: (keratitis - corneal ulcers), conjunctival naevus: (pterygium, pinguecula), iritis, uveitis and drug allergy, nasolacrimal obstruction, episcleritis / scleritis, neonatal sticky eye, dry eyes, eyelid disorders (blepharitis, entropion, ectropion, sty and chalazion), cataracts, vitreous floaters, double vision, visual impairment including refractive errors, palsies, and thyroid eye disease
Injuries to the eye include	Chemical, blunt and penetrating trauma to eye and surrounding tissues, subtarsal and corneal foreign bodies, scratches and abrasions, hyphaema, blowout fracture, signs of child abuse, UV trauma, welders' flash burns and snow blindness
Acute loss of vision includes	Vascular occlusion, giant cell arteritis, acute glaucoma, vitreous haemorrhage, retinal detachment, optic neuritis, papilloedema and proptosis
Topical and systemic medications for eye treatment include	Antibiotics, antivirals, topical steroids, anti-glaucoma, mydriatics and cycloplegics, diagnostic agents, local anaesthetics

Knowledge and Skills

Essential knowledge required

- Describe the anatomy of the eye and visual pathways
- Know the physiology of vision
- Explain normal neurological, motor responses and appearance of the eye
- General understanding of how ophthalmic optics are designed to correct vision
- Understand the ageing process of the eye
- Know common causes of blindness, and how to use screening and low vision services
- Describe signs, symptoms, diagnosis, treatment options, management and epidemiology of cataracts, glaucoma and diabetic retinopathy
- Explain the ocular side effects of topical and systemic drugs
- Describe the irrigation of a blocked nasolacrimal duct

Essential skills required

- Test and evaluate visual function including: eye movements and position, visual acuity, visual fields, colour vision, ocular motility and pupillary function

- Perform an examination of the external eye including the conjunctivae, sclera, cornea and eyelids and be able to evert the upper lid
- Perform examinations using an ophthalmoscope, including fundoscopy
- Measure intraocular pressure using applanation tonometry techniques and be familiar with other techniques for measuring intraocular pressure
- Instil eye drops and ointment, tape lids to prevent corneal and conjunctival exposure
- Perform fluorescein staining of the cornea and sclera
- Perform dilatation of the pupils
- Assess for strabismus including the cover test and differentiate from pseudostrabismus
- Perform slit lamp examinations to diagnose and remove corneal foreign bodies diagnose iritis, assess corneal ulcers and assess eye trauma
- Perform the following therapeutic procedures
 - pressure patch an eye
 - irrigate an eye
 - remove contact lenses
 - shield eye
 - removal of corneal foreign bodies
 - removal of subtarsal foreign bodies

Learning resources

Recommended texts and other resources

- Denniston A & Murray P (2009) *Oxford Handbook of Ophthalmology*. 2nd Ed, Oxford University Press, Oxford.
- The Wills Eye Manual - <http://willseyemanual.com/>
- Hoyt C & Taylor D (2013) *Pediatric Ophthalmology and Strabismus*. 4th Ed, Saunders Ltd, Edinburgh.
- American Academy of Ophthalmology - *Basic and Clinical Science Course* - <http://store.aao.org/clinical-education/product-line/basic-and-clinical-science-course-bcsc/2013-2014-basic-and-clinical-science-course-complete-set.html>

6.13 Oral Health

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- ORAL 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- ORAL 1.2 Obtain a clinical history that reflects contextual issues including: presenting problems, epidemiology, culture and geographic location
- ORAL 1.3 Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context
- ORAL 1.4 Use specialised clinical equipment as required for further assessment and interpret findings
- ORAL 1.5 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- ORAL 1.6 Apply diagnostic reasoning to arrive at one or more provisional diagnoses of common and important oral and dental conditions in both children and adults, considering uncommon but clinically important differential diagnoses
- ORAL 1.7 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- ORAL 1.8 Formulate a management plan common and important oral and dental conditions in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- ORAL 1.9 Provide prophylactic tetanus booster when warranted and prescribe appropriate oral pain relief and antibiotic treatment as necessary
- ORAL 1.10 Identify and manage co-morbidities in the patient and effectively communicate these to the patient/carer
- ORAL 1.11 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- ORAL 1.12 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- ORAL 1.13 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- ORAL 1.14 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- ORAL 2.1 Manage admission of patients to hospital in accordance with institutional policies
- ORAL 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer
- ORAL 2.3 Apply relevant checklists and clinical management pathways
- ORAL 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- ORAL 2.5 Identify potential oral complications associated with systemic conditions such as diabetes, HIV, bulimia and malignancy as well as prolonged use of steroids, anti-depressant medication and also associated with prolonged hospitalisation and palliative care
- ORAL 2.6 Maintain a clinically relevant plan of fluid, electrolyte and blood product use with relevant pathology testing
- ORAL 2.7 Order and perform a range of diagnostic and therapeutic procedures
- ORAL 2.8 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- ORAL 2.9 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- ORAL 2.10 Recognise and respond early to the deteriorating patient
- ORAL 2.11 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- ORAL 2.12 Undertake early, planned and multi-disciplinary discharge planning
- ORAL 2.13 Contribute medical expertise and leadership in a hospital team
- ORAL 2.14 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- ORAL 2.15 Recognise, document and manage adverse events and near misses
- ORAL 2.16 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, communication and planning

Abilities

- ORAL 3.1 Undertake initial assessment and triage of patients with acute or traumatic dental injuries and acute dental conditions
- ORAL 3.2 Stabilise critically ill patients and provide primary and secondary care
- ORAL 3.3 Provide definitive emergency procedures and management in keeping with clinical need, own capabilities and local context and resources
- ORAL 3.4 Arrange and/or perform emergency patient transport or evacuation when needed
- ORAL 3.5 Demonstrate resourcefulness in knowing how to access and use available resources
- ORAL 3.6 Communicate effectively at a distance with consulting or receiving clinical personnel
- ORAL 3.7 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- ORAL 3.8 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- ORAL 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of dental and oral disease and access to health-related services
- ORAL 4.2 Apply a population health approach that is relevant to the clinical practice profile
- ORAL 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- ORAL 4.4 Provide parental instruction in oral hygiene techniques for children to prevent dental caries, and injury prevention
- ORAL 4.5 Advise parents on remedies for excessive or prolonged thumb/finger sucking
- ORAL 4.6 Provide continuity and coordination of care for own practice population
- ORAL 4.7 Evaluate quality of health care for practice populations
- ORAL 4.8 Fulfil reporting requirements in relation to statutory notification of health conditions
- ORAL 4.9 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- ORAL 4.10 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- ORAL 5.1 Apply knowledge of the differing profile of general and oral disease and health risks among culturally diverse and disadvantaged groups
- ORAL 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- ORAL 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- ORAL 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- ORAL 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of dental care
- ORAL 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to dental and oral health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- ORAL 6.1 Ensure safety, privacy and confidentiality in patient care
- ORAL 6.2 Maintain appropriate professional boundaries
- ORAL 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- ORAL 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- ORAL 6.5 Keep clinical documentation in accordance with legal and professional standards
- ORAL 6.6 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- ORAL 6.7 Contribute to the management of human and financial resources within a health service
- ORAL 6.8 Work within relevant national and state legislation and professional and ethical guidelines
- ORAL 6.9 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes
- ORAL 6.10 Manage, appraise and assess own performance in the provision of medical and oral health care for patients
- ORAL 6.11 Develop and apply strategies for self-care, personal support and caring for family

- ORAL 6.12 Teach and clinically supervise health students, junior doctors and other health professionals
- ORAL 6.13 Engage in continuous learning and professional development
- ORAL 6.14 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- ORAL 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- ORAL 7.2 Provide effective clinical care when away from ready access to specialist medical, dental, diagnostic and allied health services
- ORAL 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- ORAL 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- ORAL 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- ORAL 7.6 Use information and communication technology to network and exchange information with distant colleagues
- ORAL 7.7 Respect local community norms and values in own life and work practices
- ORAL 7.8 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

<p><i>Common oral and dental conditions include</i></p>	<p>Children</p> <p>Oral thrush, teething, nursing or bottle caries, juvenile periodontal disease, ulcerations, oral swellings, dental caries, tooth abscess, fluorosis cleft lip and palate</p> <p>Adults</p> <p>Oral cancer, gingivitis/periodontal disease, pregnancy related gingivitis, ulcerations, swellings, salivary and parotid gland blockage, dental caries, dry socket, pericoronitis, tooth abscess, wisdom teeth, sensitive teeth, dry mouth, temporomandibular joint pain and bruxism, denture hygiene, candida and other oral infections</p>
<p><i>Traumatic dental injuries include</i></p>	<p>Injuries to periodontal structures: intrusion, subluxation, concussion, intrusive luxation, extrusive luxation, lateral luxation, avulsion, trauma involving bone, jaw dislocation, jaw fracture, enamel fracture, pulpal exposure, soft tissue injuries of the oral cavity</p>
<p><i>Acute dental conditions include</i></p>	<p>Root abscess, fractured cusp in filled tooth</p>
<p><i>Emergency procedures include</i></p>	<p>Re-implantation of adult teeth, management of dental fractures, initial treatment for root abscess</p>

Knowledge and Skills

Essential knowledge required

- Understand the main concepts and principles of:
 - dental history taking
 - brief stages of dentition
 - tooth structure
 - extra- and intra-oral examination
 - dental treatment procedures

Essential skills required

- Perform a neurological assessment if head trauma is sustained
- Re-implantation of adult teeth (desirable)
- Management of dental fractures (desirable)
- Perform dental blocks using different techniques (desirable)

Learning resources

Recommended texts and other resources

- The Royal Children's Hospital Melbourne - *Clinical Practice Guidelines – Dental Injuries* - http://www.rch.org.au/clinicalguide/cpg.cfm?doc_id=11224
- The Royal Children's Hospital Melbourne - *Clinical Practice Guidelines – Dental conditions non-traumatic* - http://www.rch.org.au/clinicalguide/cpg.cfm?doc_id=13558
- Dental Health Services of Victoria - Knocked out or broken teeth - <http://www.dhsv.org.au/dental-advice/Knocked-out-teeth/>
- Australian Dental Association Inc - <http://www.ada.org.au/>
- Australian Research Centre for Population Oral Health - The University of Adelaide - *National Oral Health Plan 2004-2013* - <http://www.adelaide.edu.au/arcpoh/publications/reports/national-oral-health-plan>

6.14 Palliative Care

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- PAL 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- PAL 1.2 Obtain a clinical history including assessment of pain that reflects contextual issues including: presenting problems, epidemiology, culture, geographic location, family support systems and access to social services
- PAL 1.3 Perform a problem-focused physical examination relevant to clinical history and risks, epidemiology and cultural context
- PAL 1.4 Use specialised clinical equipment as required for further assessment of conditions experienced by palliative patients and interpret findings
- PAL 1.5 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- PAL 1.6 Diagnose and manage common recurrent conditions including any psychological disturbances experienced by the palliative care patient
- PAL 1.7 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- PAL 1.8 Respect the need for maintenance of autonomy by giving the patient and family a central role in determining treatment
- PAL 1.9 Formulate a management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- PAL 1.10 Set realistic pain management goals in consultation with the patient and their family
- PAL 1.11 Utilise both pharmacological and non-pharmacological treatment options
- PAL 1.12 Anticipate and minimise potential problems caused by either the disease or treatments
- PAL 1.13 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions including the main goal of symptom control rather than diagnosis
- PAL 1.14 Utilise palliative care resources in the community including appliances, physiotherapy and community support services
- PAL 1.15 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health, respite care and social support services
- PAL 1.16 Provide and/or arrange follow-up and continuing medical care
- PAL 1.17 Respect the right of patients and carers to have his/her beliefs, needs and wishes recognised and respected with regard to end of life care
- PAL 1.18 Continue to be responsible for the patient after death and be an advocate for the family and friends during their time of grief

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- PAL 2.1 Manage admission of patients to hospital in accordance with institutional policies and Patients Advanced Care Directive
- PAL 2.2 Develop, implement and maintain a management plan for common recurrent conditions including any psychological disturbances experienced by the palliative care patient in concert with the patient and/or carer
- PAL 2.3 Apply relevant checklists and clinical management pathways
- PAL 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- PAL 2.5 Maintain a plan of food and fluids relevant to patient condition and patient and family wishes
- PAL 2.6 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- PAL 2.7 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- PAL 2.8 Provide accurate and comprehensible information about diagnosis and/or deterioration to patients and carers in a sensitive manner
- PAL 2.9 Anticipate and judiciously arrange safe patient transfer to other facilities such as hospice services, considering clinical indications, service capabilities, patient preferences, transportation and geography
- PAL 2.10 Undertake early, planned and multi-disciplinary discharge planning involving palliative care and community services
- PAL 2.11 Contribute medical expertise and leadership in a hospital team
- PAL 2.12 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- PAL 2.13 Respond appropriately to any negative outcomes of terminal illness on patients and carers, in particular the loss of independence, role, appearance, sexuality and perceived self-worth
- PAL 2.14 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- PAL 3.1 Undertake initial assessment and triage of palliative care patients with acute conditions
- PAL 3.2 Stabilise critically-ill patients and provide primary and secondary care if appropriate for the palliative care patient
- PAL 3.3 Arrange and/or perform emergency patient transport when needed
- PAL 3.4 Demonstrate resourcefulness in knowing how to access and use available resources
- PAL 3.5 Communicate effectively at a distance with consulting or receiving clinical personnel
- PAL 3.6 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- PAL 3.7 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- PAL 4.1 Provide continuity and coordination of care for own practice population
- PAL 4.2 Evaluate quality of health care for practice populations

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- PAL 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- PAL 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- PAL 5.3 Demonstrate respect for life and acceptance of death as a natural part of living
- PAL 5.4 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- PAL 5.5 Seek help in responding to the cultural and spiritual needs and questions of the patient when appropriate
- PAL 5.6 Use family dynamics, cultural, social, and religious supports to assist the patient in all aspects of palliative care
- PAL 5.7 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- PAL 5.8 Harness the resources available in the health care team, the local community and family to improve outcomes of palliative care
- PAL 5.9 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- PAL 6.1 Ensure safety, privacy and confidentiality in patient care
- PAL 6.2 Be an advocate for palliative care patients and seek to provide the highest possible quality of life for the patient and their carers throughout the palliative care process
- PAL 6.3 Acknowledge that a patient's comfort and dignity is the ultimate priority of care provision
- PAL 6.4 Integrate a supportive component into all aspects of providing palliative care
- PAL 6.5 Maintain appropriate professional boundaries
- PAL 6.6 Understand the issues surrounding requests for euthanasia
- PAL 6.7 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- PAL 6.8 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements

- PAL 6.9 Keep clinical documentation in accordance with legal and professional standards
- PAL 6.10 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- PAL 6.11 Work within relevant national and state legislation and professional and ethical guidelines
- PAL 6.12 Fulfil reporting requirements in relation to medico-legal requirements and statutory notification of health conditions when dealing with certification of death, cremation, liaison with coroner's office and the role of the undertaker
- PAL 6.13 Manage, appraise and assess own performance in the provision of medical care for patients
- PAL 6.14 Develop and apply strategies for self-care, personal support and caring for family
- PAL 6.15 Teach and clinically supervise health students, junior doctors and other health professionals
- PAL 6.16 Engage in continuous learning and professional development
- PAL 6.17 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- PAL 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- PAL 7.2 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- PAL 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- PAL 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- PAL 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- PAL 7.6 Use information and communication technology to network and exchange information with distant colleagues
- PAL 7.7 Respect local community norms and values in own life and work practices
- PAL 7.8 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

<p>Assessment of pain includes</p>	<p>Site of pain, quality of pain, exacerbating and relieving factors, its temporal onset, its exact onset, the associated symptoms and signs, interference with activities of daily living, impact on psychological state, response to previous and current analgesic therapies</p>
<p>Common recurrent conditions include</p>	<p>Gastrointestinal tract problems include:</p> <p>Oesophageal problems, dyspepsia, ascites, nausea and vomiting, constipation, bowel obstruction, diarrhoea, stomas, rectal discharge, squashed stomach syndrome, oral candidiasis, dry mouth, stomatitis, dysphagia and cachexia, faecal incontinence, hepatic encephalopathy</p> <p>Respiratory problems include:</p> <p>Cough, dyspnoea, superior vena cava obstruction, death rattles, choking, tracheostomy and hiccough, haemoptysis, epistaxis</p> <p>Genitourinary problems include:</p> <p>Dysuria, haematuria, urinary tract infection, incontinence, fistulae, uraemia, contraception, decreased urine output, vaginal bleeding and discharge, bladder innervation, urinary frequency and urgency and bladder spasms</p> <p>Neurological disturbances include:</p> <p>Convulsions, spinal cord compression, twitching, confusion, delirium and hypercalcaemia</p> <p>Musculoskeletal and skin problems include:</p> <p>Deep vein thrombosis, pathological fractures, wounds and pressure areas, pressure areas, pruritus, dry skin and lymphoedema</p> <p>Psychological disturbances include:</p> <p>Anxiety/panic attacks, insomnia, depression, suicide risk and terminal restlessness, anger</p>
<p>Pharmacological treatment options include</p>	<p>Non opioid analgesics, opioids, adjuvants: NSAIDS – antidepressants - local anaesthetic agents - corticosteroids - antispasmodics - anticonvulsants - antiarrhythmics - anxiolytics, palliative intent specific medical therapy e.g. hormonal agents, palliative intent chemotherapy, targeted therapies, monoclonal antibodies, radiopharmaceuticals</p>
<p>Non-pharmacological treatment options include</p>	<p>Radiotherapy, nerve blocking procedures, epidural/spinal injections, ventriculostomy, other neurological techniques, transcutaneous electrical nerve stimulators (TENS), physiotherapy, occupational therapy and complementary medicine/therapy</p>
<p>Patients Advanced Care Directive</p>	<p>This is a written statement intended to apply to future periods of impaired decision making capacity. The directive provides a legal means for a competent adult to instruct a substitute decision maker and/or record preferences for future health and personal care</p>

Knowledge and Skills

Essential knowledge required

- Understand and apply the aims of palliative medicine
- Know the natural history, markers of progression and range of treatments available at each stage of both malignant and non-malignant conditions
- Describe the definitions, physiology and concepts of pain and pain management
- Understand emotional issues involved in pain management

Essential skills required

- Undertake a pain assessment including types of pain (nociceptive, non-nociceptive, acute, chronic)
- Apply opioid conversion guidelines when changing opioid drug therapy
- Perform basic procedural skills relevant to palliative care: wound care; nasogastric tube feeding; suprapubic urinary catheterisation; urethral catheterisation; therapeutic paracentesis abdominis; pleurocentesis
- Provide grief and bereavement counselling

Learning resources

Recommended texts and other resources

- User Guide - Advanced Care Directive, Central Coast Division of General Practice in collaboration with Northern Sydney Central Coast - <http://www.nscchealth.nsw.gov.au/carersupport/resources/otherpublication/003772155.pdf>
- RRMEO module on Palliative Care
- Therapeutic Guidelines Limited (2005) *Therapeutic guidelines: Palliative care: Version 2*. Therapeutic Guidelines Ltd. Melbourne.
- Palliative Care Curriculum for Undergraduate (PCC4U) - <http://www.pcc4u.org/>
- The Australian & New Zealand Society of Palliative Medicine (October 2010) Clinical Indicators for End of Life Care and Palliative Care - <http://www.anzspm.org.au/c/anzspm?a=da&did=1005077>
- Watson M, Lucas C, Hoy A & Wells J (2009) *Oxford Handbook of Palliative Care*, 2nd Ed, Oxford University Press, Oxford.
- Department of Health: Palliative Care resources - <http://www.health.gov.au/palliativecare>

6.15 Radiology

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- RAD 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- RAD 1.2 Obtain a clinical history that reflects contextual issues including: presenting problems, epidemiology, culture and geographic location
- RAD 1.3 Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context
- RAD 1.4 Apply an understanding of imaging techniques when requesting investigations for the purpose of diagnosis, monitoring and treatment
- RAD 1.5 Identify normal features on skull, spinal, abdominal, skeletal and chest radiology in adults and children
- RAD 1.6 Use a systematic approach for detecting findings on all medical imaging modalities
- RAD 1.7 Detect any radiological technical faults that may affect film quality and mimic disease
- RAD 1.8 Detect common fractures, common bony abnormalities, and prosthetic appearances on radiograph
- RAD 1.9 Recognise important features of any fracture, dislocation, subluxation or epiphyseal injury and joint conditions on radiograph
- RAD 1.10 Interpret and report on imaging modalities of the chest, abdomen, head / face, spine and renal system including common pathologies
- RAD 1.11 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses
- RAD 1.12 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- RAD 1.13 Formulate a management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- RAD 1.14 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- RAD 1.15 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- RAD 1.16 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- RAD 2.1 Manage admission of patients to hospital in accordance with institutional policies and imaging guidelines
- RAD 2.2 Apply relevant checklists and clinical management pathways
- RAD 2.3 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- RAD 2.4 Request when appropriate more sophisticated Diagnostic Imaging Modalities in clinical practice including Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Radio-Isotope Studies, Mammography, Image Intensifier Services
- RAD 2.5 Request contrast studies when appropriate and accurately interpret any findings
- RAD 2.6 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- RAD 2.7 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- RAD 2.8 Recognise and respond early to the deteriorating patient
- RAD 2.9 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- RAD 2.10 Undertake early, planned and multi-disciplinary discharge planning
- RAD 2.11 Contribute medical expertise and leadership in a hospital team
- RAD 2.12 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- RAD 2.13 Recognise, document and manage adverse events and near misses
- RAD 2.14 Participate in institutional quality and safety improvement and risk-management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- RAD 3.1 Undertake initial assessment and triage of patients with acute or life-threatening conditions including severe contrast reaction
- RAD 3.2 Order and interpret trauma radiology
- RAD 3.3 Recognise limitations in the clinical application of skull radiography in the investigation of suspected head trauma
- RAD 3.4 Stabilise critically ill patients and provide primary and secondary care
- RAD 3.5 Treat an acute allergic reactions with adrenaline, steroids, anti-histamines and IV fluid resuscitation

- RAD 3.6 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- RAD 3.7 Perform required emergency procedures
- RAD 3.8 Arrange and/or perform emergency patient transport or evacuation when needed
- RAD 3.9 Demonstrate resourcefulness in knowing how to access and use available resources
- RAD 3.10 Communicate effectively at a distance with consulting or receiving clinical personnel
- RAD 3.11 Be aware of risks and direct staff to wear appropriate protective equipment when accompanying patients during X ray imaging
- RAD 3.12 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- RAD 3.13 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- RAD 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- RAD 4.2 Apply a population health approach that is relevant to the clinical practice profile
- RAD 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- RAD 4.4 Provide continuity and coordination of care for own practice population
- RAD 4.5 Evaluate quality of health care for practice populations
- RAD 4.6 Fulfil reporting requirements in relation to statutory notification of health conditions
- RAD 4.7 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- RAD 4.8 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, Working with groups to improve health outcomes

Abilities

- RAD 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- RAD 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- RAD 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- RAD 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- RAD 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- RAD 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- RAD 6.1 Ensure safety, privacy and confidentiality in patient care
- RAD 6.2 Maintain appropriate professional boundaries
- RAD 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- RAD 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- RAD 6.5 Keep clinical documentation in accordance with legal and professional standards
- RAD 6.6 Demonstrate commitment to teamwork and collaboration, with specialist teams and coordination and continuity of care
- RAD 6.7 Work within relevant national and state legislation and professional and ethical guidelines
- RAD 6.8 Balance the risks and benefits of each investigation and explain these to the patient as necessary to enable informed consent

- RAD 6.9 Manage, appraise and assess own performance in the provision of medical care for patients
- RAD 6.10 Develop and apply strategies for self-care, personal support and caring for family
- RAD 6.11 Teach and clinically supervise health students, junior doctors and other health professionals
- RAD 6.12 Engage in continuous learning and professional development
- RAD 6.13 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- RAD 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- RAD 7.2 Adapts selection of imaging techniques to factors such as distance, clinical urgency, transport costs, staff and equipment availability
- RAD 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- RAD 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- RAD 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- RAD 7.6 Use information and communication technology to network and exchange information with distant colleagues
- RAD 7.7 Respect local community norms and values in own life and work practices
- RAD 7.8 Identify and acquire extended knowledge and radiology skills as may be required to meet health care needs of the local population

Definition of terms

Medical imaging modalities include	X ray, ultrasound, echocardiography, CT, MRI, PET scanning and radio isotope studies, including the use of contrast agents
Radiological technical faults include	Defects in developer - fixer, recognition of poor film quality due to under or over exposure or bodily habitus such as extreme obesity, interpret normal heart borders on X ray
Common fractures include	Shoulder girdle - clavicle - acromioclavicular joint - scapula, upper limb - ulna - humerus - radius - wrist - forearm - scaphoid, elbow - hand, ribs, pelvic girdle - hip - sacrum - coccyx, lower limb - femur - tibia - fibula - knee - ankle - foot
Common bony abnormalities include	Infection (osteomyelitis), inflammation, degenerative disease (osteoporosis), metabolic disease, inherited abnormalities - osteogenesis - imperfect - dwarfism, benign lesions, neoplasia (multiple myeloma, primary bone tumours, bony metastases etc) injury, Paget's disease osteomalacia/rickets, bone cysts

Prosthetic appearances include	Hip, knee replacements and spinal fusions
Fracture/dislocation/subluxation or epiphyseal injuries include	Displaced/non-displaced, simple/comminuted, presence of foreign bodies, associated soft tissue injury - localised oedema - surgical emphysema - gas gangrene, joint or growth plate involvement, special risks or complications, precautions (particularly "readily missed"), slipped femoral epiphysis
Joint conditions include	Osteoarthritis, rheumatoid arthritis, gout, ankylosing spondylitis, Perthes' disease, arthritis (see Richardson's rules of arthritis - in online textbook)
Pathological conditions detected on chest radiology include	Pain in chest - acute chest trauma, closed chest injuries - penetrating chest injuries, inhaled foreign body, pleural effusions - loculated effusion, pneumothorax - hydropneumothorax, pulmonary collapse/atelectasis, widened mediastinum (aortic aneurysm appearance, mediastinal pathology or tumours e.g. thymoma), densities in the lungs, emphysema, bronchitis - asthma - COPD - pulmonary contusion, pneumonia (inflammatory consolidation), staphylococcal pneumonia, bacterial pulmonary (lung) abscess - amoebic lung abscess, acute tuberculous cavitation, pulmonary tuberculosis with cavity formation, enlarged lymph nodes (abnormal hilar patterns such as sarcoidosis, bronchial carcinoma etc.), hydatid cysts, primary lung cancer - secondary (metastatic) lung cancer, mycetoma (fungus ball), diffuse increase in lung pattern, pneumoconiosis (industrial disease), pulmonary embolism/infarction, cardiac failure such as: Kerley "B" lines - bat's wing shadowing - left ventricular hypertrophy - atrial enlargement - obliteration of costophrenic angles - altered upper/lower lobe perfusion, enlarged heart, pericardial effusion and cardiomyopathy, pulmonary oedema
Common abdominal pathologies include	Intestinal obstruction - small bowel - large bowel, ileus, normal bowel patterns, faecal loading, pseudo obstruction, perforation of the gut, foreign bodies, abdominal calcifications - search pattern and differential diagnosis, cholelithiasis, renal calculi, ureteric calculi, bladder calculi, lymph node calcification, phleboliths, pelvis (uterine fibroids, dermoid cysts), calculi in the prostate, vascular calcification
Common skull and facial bone pathologies include	Depressed head fracture, penetrating head injury, facial trauma, lytic defects in skull, dense areas in skull, salivary calculus, orbit injury
Spinal system including common pathologies	Ageing, kyphoscoliosis, joint conditions as above, fractures, dislocations and subluxations, spinal trauma, changes in vertebral density and outline without injury, pathological fractures, fractured pelvis recognition, metastatic lesions
Imaging modalities and common pathologies for the renal system include	KUB (Kidneys, ureters and bladder) intravenous pyelography, retrograde cystography, retrograde urethrography, retrograde micturating urethrography, missing kidney, variations in anatomy, calyceal patterns, large kidney - small kidney - ureters - bladder, prostatic calculi

Knowledge and Skills

Essential knowledge required

- Understand basic physics principles for each modality: X ray, ultrasound, CT, MRI, PET scanning and radio isotope studies, including the use of contrast
- Explain the indications, contraindications and limitations for each medical imaging modality
- Interpret normal radiographic features of bone, chest, heart, kidneys and ureters, skull and spine
- Explain differences between adult and child chest radiograph
- Know the variable appearance of paediatric radiographs including normal variants
- Read, interpret and report radiographs in children including identification of technical faults (ie poor inspiration, thymus)
- Use means of confirming such normal variants e.g. x-ray other side, refer to reference text on normal variants, interval x-ray
- Apply advantages and disadvantages of different x-ray views of the chest, including portable films, being aware of:
 - different appearance of AP versus PA projections
 - limitations and altered appearance of portable films
 - use of expiratory films to diagnose pneumothorax and foreign bodies
- Know radiological characteristics of:
 - normal cervical spine
 - normal thoracic spine
 - normal lumbosacral
 - normal coccyx
- Be aware of the limitations and medico-legal dangers of performing and reporting imaging as a generalist, particularly in pregnancy
- Know the comparative radiation doses of imaging modalities
- Use correct shielding techniques, particularly for children

Note: GPs who wish to perform ultrasonography and X-rays need to complete an accredited course in this specialty.

Essential skills required

- Order appropriate imaging techniques
- Read and interpret films according to experience, training and institutional policy
- Perform obstetric ultrasound (desirable)
- Use FAST scanning (desirable)
- Use ultrasound to guide procedures, e.g. aspiration of collection, administration of nerve block (desirable)
- Interpret CT head (desirable)

Learning resources

Recommended texts and other resources

- Government of Western Australia - Department of Health - A Clinical Decision Support Tool and Educational Resource for Diagnostic Imaging - <http://www.imagingpathways.health.wa.gov.au>
- Report of a WHO Scientific Group, Technical Report Series No. 795 (1990) *Effective Choices for Diagnostic Imaging in Clinical Practice* - <http://www.who.int/dsa/cat98/diag8.htm>
- Radiographers Reporting Website - <http://www.radiographersreporting.com/>
- Report of a WHO Study Group Technical Report Series No. 875 (1998) *Training in Diagnostic Ultrasound: Essentials, Principles and Standards*, Geneva, (now out of print),
- *Imaging Guidelines*, The Royal Australian and New Zealand College of Radiologists - <http://www.ranzcr.edu.au/resources/professional-documents/guidelines>
- Sacharias N & Rose W (2004-2008) *Radiology Beyond a Textbook*, Department of Radiology, The Alfred Melbourne, Australia.

6.16 Rehabilitation

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- REH 1.1 Establish a doctor-patient relationship and use a patient-centred approach to care
- REH 1.2 Obtain a clinical history that reflects the presenting problems and demonstrates competence determining the functional capacities and rehabilitative needs of patients
- REH 1.3 Perform a clinical evaluation of pain, cognition and functional limitations
- REH 1.4 Use specialised clinical equipment as required for further assessment and interpret findings
- REH 1.5 Order and/or perform diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- REH 1.6 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses
- REH 1.7 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- REH 1.8 Formulate a comprehensive treatment and rehabilitation management plan for common conditions requiring rehabilitation in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- REH 1.9 Apply the principles of rehabilitation to patient care
- REH 1.10 Institute a therapeutic process designed to: restore with minimum delay optimum physical, psychological, social and vocational function of the patient; prevent secondary complications of disability
- REH 1.11 Identify factors relating to the therapist, the patient and his or her environment liable to impede recovery
- REH 1.12 Identify and manage co-morbidities in the patient and effectively communicate these to the patient/carer
- REH 1.13 Ensure safe and appropriate prescribing of medications and treatment options in the clinical context
- REH 1.14 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- REH 1.15 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health, social support and community services
- REH 1.16 Provide support and counselling for patients with physical or mental disability or disfigurement
- REH 1.17 Demonstrate skills in the education of patients and significant others about the disease and the short and longer term goals
- REH 1.18 Work in close collaboration with other health professionals and community resources
- REH 1.19 Provide and/or arrange follow-up and continuing medical care

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- REH 2.1 Manage admission of patients to hospital in accordance with institutional policies
- REH 2.2 Develop, implement and maintain a management plan for hospitalised patients in concert with the patient and/or carer
- REH 2.3 Apply relevant checklists and clinical management pathways
- REH 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- REH 2.5 Order and perform a range of diagnostic and therapeutic procedures
- REH 2.6 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- REH 2.7 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- REH 2.8 Recognise and respond early to the deteriorating patient
- REH 2.9 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- REH 2.10 Undertake early, planned and multi-disciplinary discharge planning
- REH 2.11 Contribute medical expertise and leadership in a hospital team
- REH 2.12 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- REH 2.13 Recognise, document and manage adverse events and near misses
- REH 2.14 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- REH 3.1 Undertake initial assessment and triage of patients with acute or life threatening conditions
- REH 3.2 Diagnose and manage medical emergencies associated with spinal injury such as autonomic dysreflexia, acute cauda equina compression
- REH 3.3 Stabilise critically-ill patients and provide primary and secondary care
- REH 3.4 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- REH 3.5 Perform required emergency procedures
- REH 3.6 Arrange and/or perform emergency patient transport or evacuation when needed
- REH 3.7 Demonstrate resourcefulness in knowing how to access and use available resources
- REH 3.8 Communicate effectively at a distance with consulting or receiving clinical personnel

- REH 3.9 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- REH 3.10 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- REH 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- REH 4.2 Apply a population health approach that is relevant to the clinical practice profile
- REH 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level for conditions that lead to disability
- REH 4.4 Provide continuity and coordination of care for own practice population
- REH 4.5 Work with geriatricians and allied health members in relation to rehabilitation management
- REH 4.6 Evaluate quality of health care for practice populations
- REH 4.7 Fulfil reporting requirements in relation to statutory notification of health conditions
- REH 4.8 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- REH 4.9 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, working with groups to improve health outcomes

Abilities

- REH 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- REH 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- REH 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- REH 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- REH 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- REH 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- REH 6.1 Ensure safety, privacy and confidentiality in patient care
- REH 6.2 Maintain appropriate professional boundaries
- REH 6.3 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- REH 6.4 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- REH 6.5 Keep clinical documentation in accordance with legal and professional standards
- REH 6.6 Demonstrate an ability to work in close collaboration with other health professionals, community based organisations and support groups in rehabilitating a patient
- REH 6.7 Interpret and apply legislative, regulatory and medico-legal aspects of rehabilitative medicine including: Palliative Care Act; enduring medical power of attorney; vehicle licence regulations; workcover; insurance providers
- REH 6.8 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes
- REH 6.9 Manage, appraise and assess own performance in the provision of medical care for patients
- REH 6.10 Develop and apply strategies for self-care, personal support and caring for family
- REH 6.11 Teach and clinically supervise health students, junior doctors and other health professionals
- REH 6.12 Engage in continuous learning and professional development
- REH 6.13 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- REH 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation
- REH 7.2 Demonstrate appropriate knowledge, skills and attitudes to provide comprehensive medical care in the rural setting to patients with long term disabilities due to trauma, disease, congenital and degenerative conditions and pain, in ongoing collaboration with relevant units and providers
- REH 7.3 Provide effective clinical care when away from ready access to specialist medical, diagnostic and allied health services
- REH 7.4 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs

- REH 7.5 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- REH 7.6 Use information and communication technology to provide medical care or facilitate access to specialised care for rehabilitation patients
- REH 7.7 Use information and communication technology to network and exchange information with distant colleagues
- REH 7.8 Respect local community norms and values in own life and work practices
- REH 7.9 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

<i>Assessment of functional capacities and rehabilitative needs of patients includes</i>	Assess 'activities of daily living' (ADLs), level of functioning, assistance required and limiting factors Elicit a patient history including: chief complaint, present illness, functional history, aids used; past medical history, review of systems, psychological profile, social and cultural aspects, carers involved, agencies involved, education, training, work and finance history
<i>Evaluation of pain includes</i>	Site of pain, quality of pain, exacerbating and relieving factors, its temporal onset, its exact onset, the associated symptoms and signs, interference with activities of daily living, impact on psychological state, response to previous and current analgesic therapies
<i>Evaluation of cognition includes</i>	Language and speech, reading ability, listening comprehension, communication capability, memory, concentration, emotional state
<i>Common conditions requiring rehabilitation include</i>	Stroke, traumatic brain injury (TBI), spinal injuries, amputations, osteoarthritis, osteoporosis, cardiac disease, chronic pain, arthritis and other common conditions, neurogenic bladder and bowel conditions
<i>Principles of rehabilitation include</i>	Rehabilitation: encompasses physical, psychological, social, relational, vocational, recreational and educational issues and needs to be culturally sensitive spans primary, secondary and tertiary health care; involves the use of a health care team at local, regional and state levels, which may involve/require multi-skilling of some staff in remote areas
<i>Evidence-based prevention, early detection and health maintenance activities into practice at a systems level for conditions that lead to disability include</i>	Nutrition; social interaction; monitor alarms; fall prevention, poly-pharmacy, diabetes, safety belts, fatigue management, drug and alcohol abuse, smoking

Knowledge and Skills

Essential knowledge required

- Describe relevant anatomy, physiology, the causation and epidemiology of common conditions requiring rehabilitation
- Analyse the causes of pathological gait including: structural; joint and soft tissue issues; neurological disorders
- Possess a general knowledge of commonly used evidence-based, mainstream and alternative rehabilitation treatments including:
 - patient conducted techniques e.g. general exercise; aerobic; anaerobic; cardiovascular and respiratory fitness
 - nutrition: understanding of cultural variables, access, affordability, availability etc
 - specific exercises and stretches, post isometric exercises, allied to breathing techniques
 - correct posture
 - application of cold and heat
 - relaxation and meditation techniques
 - relevant lifestyle interventions including weight loss, stress reduction, recreational substance reduction and sleep improvement
 - orthotics and prosthetics and aids to assist differing gaits
 - therapist conducted techniques including: thermal therapy; hydrotherapy; massage; biofeedback; joint mobilisation; joint manipulation
 - continence management and aids
 - pharmacological and non-pharmacological methods as appropriate for neurogenic bladder and bowel conditions
- Explain the relative efficacy, uses, side effects, poly-pharmacology and potential abuses of pharmaceutical agents commonly used in rehabilitation
- Have knowledge of:
 - the classification of types of stroke and their potential outcomes within the context of low to high level rehabilitation intervention
 - the types of spinal cord injury and associated injuries/medical conditions
 - the risk factors for amputation
- Promote measures aimed at reducing falls and their impact for injury
- Know mobility aids and home modifications available

Pain

- Distinguish pain concepts and terms used to describe these
- Know how to distinguish between acute and chronic pain; musculoskeletal and malignancy associated pain
- Apply relevant investigations to assess symptoms using pain assessment units' scales
- Apply modes of pain treatment effectively including the advantages and disadvantages of opioid analgesics
- Describe the role of pharmacology in treating acute pain: the place or otherwise of narcotics and other medications

Sexuality

- Know how to counsel and advise patients experiencing sexual problems and dysfunction and identify available community support services
- Know drugs that affect sexual function
- Understand sexual issues relating to cultural and religious beliefs
- Understand cultural justice practices involving punishment causing wounds

Complications

- Understand social issues that may be faced by patients with a spinal cord injury
- Describe the potential effects of traumatic brain injury on awareness, cognition, emotion, physical state and behaviour
- Recognise abnormal illness behaviour
- Describe factors involved in causation of skin conditions including pressure, trauma, burns or scalds, scars, keloids
- Explain the rehabilitation of patients with neurogenic bowel and bladder conditions
- Apply effective management to prevent and treat pressure areas

Essential skills required

- Provide management plan for prosthesis and stump care
- Write a medico-legal report

Learning resources

Recommended texts and other resources

- Frontera W (2010) *DeLisa Physical Medicine and Rehabilitation*. 1st Ed. Lippincott Williams & Wilkins, Philadelphia.
- Braddom R (2011) *Physical Medicine and Rehabilitation*, 4th Ed, WB Saunders, Philadelphia.
- Brier S (1999) *Primary Care Orthopaedics*. 1st Ed, Mosby, St. Louis.
- Grundy D & Swain A (1988) *ABC of Spinal Cord Injury* (Kindle Edition) 4th Ed, BMJ Books, London.
- Magee D & Sueki D *Orthopedic Physical Assessment Atlas*. 5th Ed, Saunders Publishing, Philadelphia.

6.17 Research and Teaching

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- R&T 1.1 Apply knowledge of the epidemiology of disease and findings from clinical assessment to estimate prior probability of relevant differential diagnoses and to inform the choice of further clinical tests
- R&T 1.2 Discuss the utility of elements of clinical history, physical examination and clinical investigation in the formulation of provisional, differential and definitive diagnoses for a presenting clinical problem
- R&T 1.3 Appraise the performance of a range of screening and diagnostic tests that may be used to screen for or confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- R&T 1.4 Explain the scientific basis of the diagnostic reasoning used to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses
- R&T 1.5 Communicate the scientific basis of clinical assessment and a proposed plan management to patients and/or carers effectively and sensitively
- R&T 1.6 Source, appraise and apply scientific evidence in response to clinically generated questions

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- R&T 2.1 Critically appraise relevant checklists and clinical management pathways for use in the local hospital context
- R&T 2.2 Communicate effectively the results of relevant research to peers and colleagues
- R&T 2.3 Undertake a critical scientific review of a clinical topic and present findings to colleagues
- R&T 2.4 Contribute scientific knowledge to institutional quality and safety improvement activities

Domain 3: Respond to Medical Emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- R&T 3.1 Source current evidence-based guidelines for emergency management rapidly
- R&T 3.2 Describe the processes involved in and the expected outcomes of a critical incident review
- R&T 3.3 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- R&T 3.4 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- R&T 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- R&T 4.2 Apply a population health approach that is relevant to the clinical practice profile
- R&T 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- R&T 4.4 Conduct evaluations of the quality of health care for practice
- R&T 4.5 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- R&T 4.6 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, Working with groups to improve health outcomes

Abilities

- R&T 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- R&T 5.2 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to research and training
- R&T 5.3 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health
- R&T 5.4 Demonstrate the principles of respectful engagement of disadvantaged and culturally diverse groups in setting research priorities

- R&T 5.5 Demonstrate respect for self-determination through the development of meaningful research partnerships and active contribution of community to the development of health intervention models through participatory research models
- R&T 5.6 Apply teaching methods that take into account the current knowledge level of the learner, their health needs, their motivation, and capacity to learn, and their social, cultural and economic background

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- R&T 6.1 Ensure safety, privacy and confidentiality of participants in clinical audit and clinical research activities
- R&T 6.2 Adhere to human research ethics guidelines in conduct of clinical audit and research
- R&T 6.3 Teach and clinically supervise health students, junior doctors and other health professionals
- R&T 6.4 Access, interpret and critically evaluate information pertaining to own learning needs from relevant professional associations, specialty colleagues, scientific literature, reference books, meetings and electronic resources
- R&T 6.5 Engage in continuous learning and professional development to maintain currency of knowledge of the scientific basis of medicine
- R&T 6.6 Develop own mentoring strategy, including setting aside time for mentoring
- R&T 6.7 Provide advice and guidance to others with respect to issues such as short term learning, vocational training and long term career goals
- R&T 6.8 Demonstrate ability to undertake relevant research to inform practice

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, Teamwork and technology, Responsiveness to context

Abilities

- R&T 7.1 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- R&T 7.2 Use information and communication technology to access medical and scientific resources
- R&T 7.3 Use information and communication technology to network and exchange information with distant colleagues
- R&T 7.4 Provide direct and distance clinical supervision and support for other rural and remote health care personnel
- R&T 7.5 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

Definition of terms

<p>Evaluation quality of care includes:</p>	<p>Conduct of clinical audit including case finding, collecting data in an ethical manner, statistical analysis of data, identifying and implementing change, and monitoring progress</p>
<p>Adherence to human research ethics requirements includes:</p>	<p>Adherence to information privacy principles, research ethics guidelines and institutional policy in use of clinical information</p>
<p>Teach and clinically supervise includes:</p>	<p>Using 'active' educational methods that include intellectually active and 'hands-on' engagement and which challenge learners</p> <p>Providing handouts to accompany presentations for learners (students, peers, other staff, and patients) that are clear, factually correct, up-to-date, relevant, and at a level appropriate for the learners</p> <p>Using a structured approach to teaching a skill or procedure to a learner, that includes explanation, demonstration, observation of performance and feedback</p> <p>Developing plans for learners' clinical attachments that include an orientation, scheduled learning opportunities and sessions, and involvement in supervised patient care</p> <p>Reliable assessment of learners when required, by effective implementation of assigned assessment tools, observing performance, and recording honest and fair judgements of their performance</p> <p>Clarifying how supervision will occur and allow medical students and junior colleagues input into the supervision process</p> <p>Providing feedback that identifies strengths and areas for improvement, relates to expected learning, is timely, specific, descriptive, detailed and honest, and includes guidance for improvement</p> <p>Challenging learners to develop the predisposition and skill of self-assessing their own performance as a basis for defining their learning needs, and for identifying opportunities inherent in everyday clinical practice through questioning and role modelling</p> <p>Analysing learners' errors (near misses or adverse events) using root cause analyses, and ensure learning from an event through discussion in a non-punitive environment</p>

Knowledge and Skills

Essential knowledge

- Epidemiological concepts including: incidence; prevalence; rate ratio; relative risk; attributable risk; adult, infant, perinatal and maternal-mortality rates; age standardisation
- Statistical concepts including: sensitivity and specificity; positive and negative predictive value; Bayes theorem; odds ratios; Chi-squared tests; student t-tests; p-values; study power; normal distribution; number-needed-to-treat; statistical versus clinical significance
- Research design including randomised controlled trials, case-control studies and cohort studies
- Scientific reviews methodologies including: literature review, systematic reviews and other forms of meta-analysis, clinical guidelines
- Sources of scientific information including Medline, Cochrane Reviews, specialty associations, research journals, reference books, meetings and electronic databases
- Ethical and legal principles governing collection, storage, access to and use of patient data
- Key (milestone) research undertaken on rural and remote medicine and rural health issues
- The structure and function of rural health services and impact on clinical outcomes in comparative studies of urban versus rural/remote health issues

Essential skills

- Ability to communicate scientific information effectively with patients and colleagues
- Ability to access, interpret and critically evaluate scientific information

Learning resources

Recommended texts and other resources

- The Bridging Project: Integrating Medical Education and Training in Australasia - <http://thebridgingproject.com.au/thebridgingproject/200812/index.htm>.
- Kelly L (2012) *Community Based Medical Education: A Teacher's Handbook*. 1st Ed, Radcliffe Publishing, Milton Keynes.
- Blaxter L, Hughes C & Tight M (2010) *How to Research*. 4th Ed, Open University Press, Buckingham.
- Dawson C (2010) *Introduction to Research Methods: A Practical Guide for Anyone Undertaking a Research Project*. 4th Ed, How to Books, London.

6.18 Surgery

Domain 1: Provide medical care in the ambulatory and community setting

Themes: Patient-centred clinical assessment, Clinical reasoning, Clinical management

Abilities

- SURG 1.1 Establish a doctor-patient relationship and use a patient-centred approach to surgical care
- SURG 1.2 Obtain a clinical history that reflects contextual issues including: presenting problems, epidemiology, culture and geographic location
- SURG 1.3 Perform a problem-focussed physical examination relevant to clinical history and risks, epidemiology and cultural context
- SURG 1.4 Use specialised clinical equipment as required for further assessment and interpret findings
- SURG 1.5 Order and/or perform diagnostic tests where required to confirm a surgical diagnosis, monitor medical care and/or exclude treatable or serious conditions
- SURG 1.6 Apply diagnostic reasoning to arrive at one or more provisional diagnoses, considering uncommon but clinically important differential diagnoses
- SURG 1.7 Diagnose and provide initial management for common and important conditions that require surgical treatment
- SURG 1.8 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- SURG 1.9 Formulate a surgical management plan in concert with the patient and/or carer, judiciously applying best evidence and the advice of expert colleagues
- SURG 1.10 Demonstrate the skills to competently perform a range of common minor surgical procedures under minimal or distant supervision
- SURG 1.11 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- SURG 1.12 Refer, facilitate and coordinate access to specialised medical and diagnostic and other health and social support services
- SURG 1.13 Offer timely and safe analgesia for painful surgical conditions
- SURG 1.14 Early to recognise and promptly stabilise critically ill surgical patients and arrange timely transfer to the appropriate facility
- SURG 1.15 Provide comprehensive post-operative care for patients after hospital discharge

Domain 2: Provide care in the hospital setting

Themes: Medical care of admitted patients, Medical leadership in a hospital team, Health care quality and safety

Abilities

- SURG 2.1 Manage admission of patients to hospital in accordance with institutional policies
- SURG 2.2 Develop, implement and maintain a management plan for hospitalised patients with surgical conditions in concert with the patient and/or carer
- SURG 2.3 Apply relevant pre-anaesthetic, pre- and post- operative checklists and clinical management pathways
- SURG 2.4 Monitor clinical progress, regularly re-evaluate the problem list and modify management accordingly
- SURG 2.5 Maintain a clinically relevant plan of fluid, electrolyte, nutrition and blood product use with relevant pathology testing and pain management
- SURG 2.6 Order and perform a range of diagnostic and therapeutic procedures
- SURG 2.7 Maintain timely and accurate patient documentation in hospital records including drug prescription and administration
- SURG 2.8 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- SURG 2.9 Recognise and contribute to the management post-operative complications
- SURG 2.10 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- SURG 2.11 Undertake early, planned and multi-disciplinary discharge planning
- SURG 2.12 Contribute medical expertise and leadership in a hospital team
- SURG 2.13 Provide direct and remote clinical supervision and support to nurses, junior medical staff and students
- SURG 2.14 Recognise, document and manage adverse events and near misses
- SURG 2.15 Participate in institutional quality and safety improvement and risk management activities

Domain 3: Respond to medical emergencies

Themes: Initial assessment and triage, Emergency medical intervention, Communication and planning

Abilities

- SURG 3.1 Recognises medical emergencies and involves appropriate consultation early
- SURG 3.2 Undertake initial assessment and triage of patients with acute or life threatening conditions and seeking team assistance
- SURG 3.3 Stabilise critically-ill patients and provide primary and secondary care
- SURG 3.4 Provide definitive emergency resuscitation and management across the lifespan in keeping with clinical need, own capabilities and local context and resources
- SURG 3.5 Perform required emergency procedures
- SURG 3.6 Arrange and/or perform emergency patient transport or evacuation when needed
- SURG 3.7 Demonstrate resourcefulness in knowing how to access and use available resources
- SURG 3.8 Communicate effectively at a distance with consulting or receiving clinical personnel
- SURG 3.9 Participate in disaster planning and implementation of disaster plans, and post-incident analysis and debriefing
- SURG 3.10 Provide inter-professional team leadership in emergency care that includes quality assurance and risk management assessment

Domain 4: Apply a population health approach

Themes: Community health assessment, Population-level health intervention, Evaluation of health care, Collaboration with agencies

Abilities

- SURG 4.1 Analyse the social, environmental, economic and occupational determinants of health that affect the community burden of disease and access to health-related services
- SURG 4.2 Apply a population health approach that is relevant to the clinical practice profile
- SURG 4.3 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level
- SURG 4.4 Provide continuity and coordination of care for own practice population
- SURG 4.5 Evaluate quality of health care for practice populations
- SURG 4.6 Fulfil reporting requirements in relation to statutory notification of health conditions
- SURG 4.7 Access and collaborate with agencies responsible for key population health functions including public health services, employer groups and local government
- SURG 4.8 Participate as a medical advocate in the design, implementation and evaluation of interventions that address determinants of population health

Domain 5: Address the health care needs of culturally diverse and disadvantaged groups

Themes: Differing epidemiology, Cultural safety and respect, Working with groups to improve health outcomes

Abilities

- SURG 5.1 Apply knowledge of the differing profile of disease and health risks among culturally diverse and disadvantaged groups
- SURG 5.2 Communicate effectively and in a culturally safe manner, using interpreters, key community contacts and networks as appropriate
- SURG 5.3 Reflect on own assumptions, cultural beliefs and emotional reactions in providing culturally safe care
- SURG 5.4 Apply principles of partnership, community ownership, consultation, capacity building, reciprocity and respect to health care delivery, health surveillance and research
- SURG 5.5 Harness the resources available in the health care team, the local community and family to improve outcomes of care
- SURG 5.6 Work with culturally diverse and disadvantaged groups to address barriers in access to health services and improve the determinants of health

Domain 6: Practise medicine within an ethical, intellectual and professional framework

Themes: Ethical practice, Professional obligations, Intellectual engagement including teaching and research

Abilities

- SURG 6.1 Ensure safety, privacy and confidentiality in patient care
- SURG 6.2 Support the patient to come to an informed decision to agree to the surgery offered
- SURG 6.3 Understand the medico-legal implications of performing surgical procedures on a patient
- SURG 6.4 Maintain appropriate professional boundaries
- SURG 6.5 Be aware of duty of care issues arising from providing health care to self, family, colleagues, patients and the community
- SURG 6.6 Recognise unprofessional behaviour and signs of the practitioner in difficulty among colleagues and respond according to ethical guidelines and statutory requirements
- SURG 6.7 Keep clinical documentation in accordance with legal and professional standards
- SURG 6.8 Demonstrate commitment to teamwork, collaboration, coordination and continuity of care
- SURG 6.9 Contribute to the management of human and financial resources within a health service
- SURG 6.10 Work within relevant national and state legislation and professional and ethical guidelines
- SURG 6.11 Provide accurate and ethical certification when required for sickness, employment, social benefits and other purposes

- SURG 6.12 Manage, appraise and assess own performance in the provision of medical care for patients
- SURG 6.13 Develop and apply strategies for self-care, personal support and caring for family
- SURG 6.14 Teach and clinically supervise health students, junior doctors and other health professionals
- SURG 6.15 Engage in continuous learning and professional development
- SURG 6.16 Critically appraise and apply relevant research

Domain 7: Practise medicine in the rural and remote context

Themes: Resourcefulness, Flexibility, teamwork and technology, Responsiveness to context

Abilities

- SURG 7.1 Demonstrate resourcefulness, independence and self-reliance while working effectively in geographic, social and professional isolation whilst maintaining own personal safety
- SURG 7.2 Provide effective surgical care within own limitations when away from ready access to specialist medical, diagnostic and allied health services
- SURG 7.3 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- SURG 7.4 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- SURG 7.5 Use information and communication technology to provide medical care or facilitate access to specialised care for patients
- SURG 7.6 Use information and communication technology to network and exchange information with distant colleagues
- SURG 7.7 Respect local community norms and values in own life and work practices
- SURG 7.8 Identify and acquire extended knowledge and skills to competently undertake appropriate investigations and formulate diagnosis of surgical conditions in rural and remote practice
- SURG 7.9 Demonstrate a commitment to self-directed learning, continuing education and the conduct of quality assurance activities in the provision of surgical services in rural and remote practice

Definition of terms

<p>Common and important conditions that require surgical treatment include</p>	<p>Benign and malignant skin lesions</p> <p>Skin infections (impetigo, cellulitis, abscesses, boils, haematomata)</p> <p>Acute abdomen (appendicitis, biliary colic, cholelithiasis cholangitis, pancreatitis, oesophagitis / G.U./D.U., inflammatory bowel disease, renal causes, aortic/vascular aneurysm disease, diverticulitis / ischaemic colitis, acute infective diarrhoeal illness, perforate viscus, strangulated herniae, visceral perforation and peritonitis)</p> <p>Tumours of the colon</p> <p>Acute urinary retention</p> <p>Non-surgical causes of abdominal pain</p> <p>Pneumothorax, upper and lower airway obstruction, pleural effusion and haemathorax, pericardial effusion, perforated oesophagus/Boerhaave's syndrome, rib fractures</p> <p>Renal tract tumour, renal tract calculus, renal trauma, urinary tract infections, torsion of testis</p> <p>Anorectal disorders: perianal haematoma, perianal abscess</p> <p>Neurosurgical conditions understanding the importance of localised/generalised signs (closed head injury, acute and chronic subdural haematoma, tumours of the CNS, vascular disasters of the CN, berry aneurysm, AVM, trauma to the spinal cord and peripheral nerves, intracranial haemorrhage)</p> <p>Ophthalmological surgical conditions: sudden loss of vision, non-penetrating ocular trauma, corneal foreign bodies, corneal abrasion, hyphaema, lens dislocation, retinal detachment, penetrating eye wounds, eyelid and skin tumours, trauma and infections</p> <p>Vascular surgical conditions: acute peripheral vascular occlusive disease/threatened limb, DVT, varicose veins, abdominal aortic aneurysm, venous ulceration and deep venous incompetence</p> <p>ENT surgical conditions: tympanic perforation, aural foreign bodies, otitis externa, tumours of the ear, nasal foreign bodies, nasal polyps and tumours, sinusitis, maxillary, and other sinuses, medical nasal conditions, throat and pharynx conditions, uvular oedema, tonsillitis/quinsy, glottic and pharyngeal foreign bodies, epiglottitis, acute and chronic sinusitis</p> <p>Emergency treatment for fractures: (Skull, cervical spine, orbit, zygoma, face, jaw, thoracic and lumbar spine, clavicle, ribs, pelvis, neck of humerus, supracondylar humerus, head of radius, mid forearm, distal forearm including Colles', Smith's, metacarpals especially scaphoid, digits, femur, tibia, Potts fracture, calcaneus, metatarsals)</p> <p>Crush injuries: systemic complications (fat embolism), compartment syndrome</p> <p>Dislocations: jaw (temporomandibular joint), shoulder - anterior/posterior, patella, interphalangeal joints, lunate, femur, ankle</p>
<p>Surgical management plans include</p>	<p>Arrange for referral and transfer if appropriate; outline indications for referral to specialised care; implement local management or local management with consultation; further investigations</p>
<p>Common minor surgical procedures include</p>	<p>See essential skills below</p>

Knowledge and Skills

Essential knowledge required

- Have basic knowledge of the normal embryology, anatomy, and pathology
- Possess the knowledge and clinical skills to competently undertake appropriate investigations and formulate diagnosis of surgical conditions
- Can explain common surgical procedures to patients
- Know appropriate sterilisation procedure for surgical instruments
- Understand concepts of angioplasty and bypass surgical techniques
- Describe and use triage principles for surgical conditions

Essential skills required

- Perform a physical examination: systemic signs and observations, inspection, percussion, abdominal palpation, rectal examination, pelvic examination and auscultation
- Perform cannulation, intravenous cutdown, fluid replacement, electrolyte balance assessment and replacement; blood gas analysis, transurethral catheterisation, suprapubic catheterization, nasogastric drainage
- Prescribe appropriate analgesia
- Excise benign and malignant skin lesions including: lipomata/sebaceous cysts; sub cutaneous foreign bodies
- Perform cryotherapy of skin lesions
- Repair skin lacerations
- Curettage skin lesions
- Debride wounds and apply wound dressing
- Perform flap repair
- Perform skin graft repairs
- Resect nail bed for chronic ingrown toenails,
- Perform local anaesthesia and tourniquet procedures
- Aspirate a subungual haematoma
- Drain thrombosed peri-anal haematoma
- Drain peri-anal abscess
- Drain thrombosed pile
- Incise and drain abscess
- Examine the nares with a nasal speculum
- Differentiate between anterior and posterior bleeding for epistaxis
- Treat epistaxis including Simpsons balloon, perform nasal packing, including chemical, electrocautery
- Examine ear canals and recognise common and serious ear disease e.g. cholesteatoma, round window rupture
- Undertake hearing assessment including the interpretation of audiometry and tympanometry
- Syringe the external auditory canal and perform an aural toilet
- Insert 'wicks' into the ear canal
- Remove foreign bodies from the ear, nose and throat
- Perform indirect laryngoscopy, and identify laryngeal conditions (desirable)

Learning resources

Recommended texts and other resources

- Tjandra JJ (2006) Textbook of surgery, 3rd Edn. Blackwell Pub, Malden, Mass.

Appendix 1: Training

ACRRM Training Standards

ACRRM aims to support doctors through its vocational preparation program to ensure they learn the knowledge and skills they will need to work safely, competently, independently and confidently, as general practitioners anywhere in Australia. Particular focus is placed on preparation for work in the diverse range of rural and remote general practice settings.

ACRRM's training standards define the content, context, implementation and assessment of training.

These standards include the ACRRM:

- Primary Curriculum
- Advanced Specialised Training Curricula
- Standards for Accreditation of Supervisors and Teaching Posts for each stage of training and each Advanced Specialised Training Curricula and
- Standards for Accreditation of Training Providers.

The ACRRM training standards ensure that registrars receive the highest quality training across a range of rural and remote general practice settings. To facilitate delivery of training in keeping with these standards, the College has developed a range of educational resources, and mechanisms for tracking, recording and certifying the achievement of training goals and assessment requirements. These resources are available to registrars who seek to train towards ACRRM Fellowship and to the training providers who are accredited to deliver this training.

ACRRM Training Pathways

ACRRM offers three different pathways by which registrars may train to meet the requirements for Fellowship of ACRRM (FACRRM). All pathways have the same training and assessment requirements.

Vocational Preparation Pathway

The Vocational Preparation Pathway (VPP) is the predominant pathway for training towards FACRRM and is ideal for new graduates. In this pathway, training is delivered by Regional Training Providers (RTPs) in the Australian General Practice Training program (AGPT). This pathway is funded by the Australian Government and auspiced by General Practice Education and Training Limited (GPET).

Registrars who wish to undertake training via this pathway must successfully gain a training place in the AGPT and enrol with ACRRM. Further information regarding AGPT enrolment is available at www.agpt.com.au.

Remote Vocational Training Scheme

The Remote Vocational Training Scheme (RVTS) was established in 1999 as a joint training initiative of ACRRM and the RACGP. It is now managed by the Remote Vocational Training Scheme Limited, and is funded by the Australian Government. This pathway provides vocational training for isolated rural general practitioners who otherwise could not undertake training except

by leaving their communities. The RVTS delivers a structured training program to these doctors mainly by distance education.

Registrars who wish to undertake their FACRRM training via this pathway must gain a training place with RVTS and enrol with ACRRM. Further information regarding RVTS enrolment is available at www.rvts.com.au.

Independent Pathway

The Independent Pathway (IP) is administered directly through ACRRM. The IP is pathway suited to practitioners who have broader and more extensive range of work experience than those who might elect to pursue training through the VPP or RVTS. Registrars on the IP must undertake a significant amount of self-directed learning. The pathway includes a structured education program. The pathway is a full fee paying pathway and is not subsidised or funded the Australian government.

Registrars who wish to undertake training via this pathway must successfully apply for training position with ACRRM. Further information regarding the IP is found at www.acrrm.org.au.

Duration of Training

FACRRM registrars are required to complete a minimum of 48 months full-time or equivalent part-time training in posts accredited by ACRRM. This has been determined as the minimum time required to achieve competence in the skills required for safe, independent general practice across a full and diverse range of healthcare settings across Australia, including rural and remote settings.

Training is comprised of:

- **12 months Core Clinical Training** in an accredited metropolitan, regional or rural hospitals
- **24 months Primary Rural and Remote Training** in accredited posts including general practices, hospitals, Aboriginal Medical Services, small rural hospitals and/or community-based facilities. Training must include experience in primary and community care, hospital and emergency care and living and practising in rural or remote locations.
- **12 months Advanced Specialised Training** in accredited advanced posts. Approved training areas for advanced posts include: Aboriginal and Torres Strait Islander Health, Academic Practice, Adult Internal Medicine Anaesthetics, Emergency Medicine, Mental Health, Obstetrics and Gynaecology, Paediatrics, Population Health, Remote Medicine and Surgery.

Teaching and Learning Methods

ACRRM accredited training providers are encouraged to use a variety of different teaching and learning methods in the delivery of the curriculum content. All teaching and learning methods should:

- be easily accessible and well designed
- be interactive and problem-based
- require critical thinking
- require application to the realities of rural and remote general practice, and
- challenge the learner to choose, judge and manipulate ideas and be resourceful.

Registrar learning experiences should include:

Supervised Structured Clinical Experience

- Opportunistic learning - learning and practising clinical skills in supervised environments
- Formative assessment - registrars are provided with feedback and guidance about their progress from their supervisor, external clinical educators and patients through two formative assessment tools: multi source feedback (MSF) and the mini clinical evaluation exercise (miniCEX)

Structured Learning Activities

- Learning plan development, documentation and review
- Workshops and courses - these may be undertaken in the registrar's region, or in conjunction with a conference or other event, and can be used to teach specific clinical skills or problem-based approaches
- ACRRM accredited emergency medicine courses - e.g. EMST, APLS, ALSO, or REST
- Small group teaching - through seminars and tutorials, problem-based learning to encourage collaborative practice, problem solving, and knowledge and skill development
- Guided reflection on practice
- Regular education sessions with supervisor
- Online tutorials, discussion forums, satellite broadcasts, interactive videoconferencing and teleconferencing
- Problem based learning - learning based around specific clinical problems, which are solved through research, analysis and problem-solving, and presented back to a small group
- Videos, CD-ROMS and other audio visual resources
- Demonstration of particular skills - especially advanced clinical skills practice
- Teleconferencing - to provide a peer group support to discuss the various issues and case studies
- Small project work, case audits and research activities, and
- Application to practice - teaching and learning methods that are designed to apply evidence and theory to the practical realities of contemporary rural and remote general practice. This could include issues-based activities, critical thinking, decision-making exercises, leadership and management activities that include planning, implementation and evaluation; cross cultural issues and organisational skills development.

Self-Directed Learning Activities

- Peer group discussion – registrars may work in a tutorless group, which may include structured activities, projects, journal article review, problem solving and be used for collaborative research skills development
- Interactive computer based learning activities
- Undertaking research and projects, and
- Reflective journals – the use of reflective journals to record and monitor: attitudinal change, developing capability, clinical reasoning skills, insight and skills development; and to assist registrars to reflect upon their practice.

Teachers' Roles

A network of accredited training providers delivers ACRRM vocational training. They must provide registrars with vocational preparation programs that comply with ACRRM Standards. The following describes the main roles.

- *Supervisor* – each registrar must be linked to an ACRRM accredited supervisor who provides supervision, clinical skills training, monitoring, guidance and feedback on professional and educational development.
- *Clinical teachers* – a variety of teachers including general practitioners, experts in particular content areas, and specialists will contribute to various activities and workshops throughout the training time.
- *Cultural teachers* – community leaders and other experts will be involved in teaching the registrar about Aboriginal and Torres Strait Islander culture and health.
- *Medical educator* – The medical educator is a senior clinician, with experience in teaching and medical education, who works for a training provider. The medical educator:
 - provides information to the registrar cohort regarding opportunities to train towards Fellowship of ACRRM
 - provides advice to administrators, supervisors and registrars regarding the key components of the pathway
 - facilitates the development of a training plan to ensure training requirements are met
 - participates in the development of learning plans for ACRRM registrars
 - monitors the registrar's achievement of their broad goals through learning plans
 - participates in, and advises on, placement allocation for ACRRM registrars, including the Advanced Specialised Training year, and
 - facilitates and encourages ACRRM accreditation of posts, including Advanced Specialised Training posts.

Essential Resources

There are a number of essential resources that registrars will need to access throughout their training time. These can be found electronically on the ACRRM website www.acrrm.org.au.

The core educational resources include:

- ACRRM Primary Curriculum
- Advanced Specialised Training Curricula
- ACRRM Standards for Accreditation of Supervisors and Teaching Posts for Core Clinical Training, Primary Rural and Remote Training and Advanced Specialised Training
- Handbook for Fellowship Assessment
- Procedural skills logbooks
- Training Policies
- ACRRM online training modules.

Appendix 2: Assessment

Assessment Principles

The ACRRM assessment program is based on the following principles:

- *Integration* – assessment is integrated across the full duration of learning, taking place at regular intervals throughout the entire training program
- *Validity, reliability, fairness* – the assessment program is based on best practice evidence, international perspectives and proven valid, reliable, clinically relevant and fair methods that are adapted to the rural and remote context
- *Academic rigour and educational impact* – the assessment program is academically rigorous and is designed to have a positive educational impact that drives learning favourably
- *Flexibility* – the assessment program has multiple pathways, flexible timing and options for registrars, that are practice-based or modular, depending upon their learning style and progress
- *Performance focus* – where possible the assessment program is performance-based, which enables a smooth transition into ACRRM's ongoing Professional Development Program
- *Practice orientation and acceptability* – some of the assessment tools, are designed to take place in the doctor's own workplace, to ensure relevance and acceptability by the profession
- *Outcomes focus* – the Primary Curriculum abilities are organised under the seven domains of rural and remote general practice these form the basis for the assessment blueprint. The abilities, are then applied to the content listed in the 18 curriculum statements
- *Feasibility* – assessment is designed to be feasible with regards to cost, timeframe and the geographical location of registrars
- *Legal defensibility* – assessment covers the core areas of competence required for general practice vocational registration anywhere in Australia, plus the extended skills required of a general practitioner working in rural or remote settings
- *Accessibility, flexibility* – the assessment tools are designed specifically to meet the needs of rural and remote contexts, including distance learning modes, flexible delivery, and interactive information technology approaches, and
- *Adherence to values and standards* – The assessment components reflect the values of ACRRM in process, content and the nature of rural and remote general practice, and are based on professional standards and criteria for assessment and certification.

Assessment Framework

The structure of assessment is based on an adaptation of *Miller's Pyramid*²³ shown below (Figure 1). This Pyramid represents a behavioural approach to assessment with four progressive hierarchical phases of competence. The first being that the registrar 'knows', the second that they 'know how', the third that they can 'show how', and finally, what the registrar actually 'does' in the workplace.²⁴

Figure 1: Miller's Pyramid¹

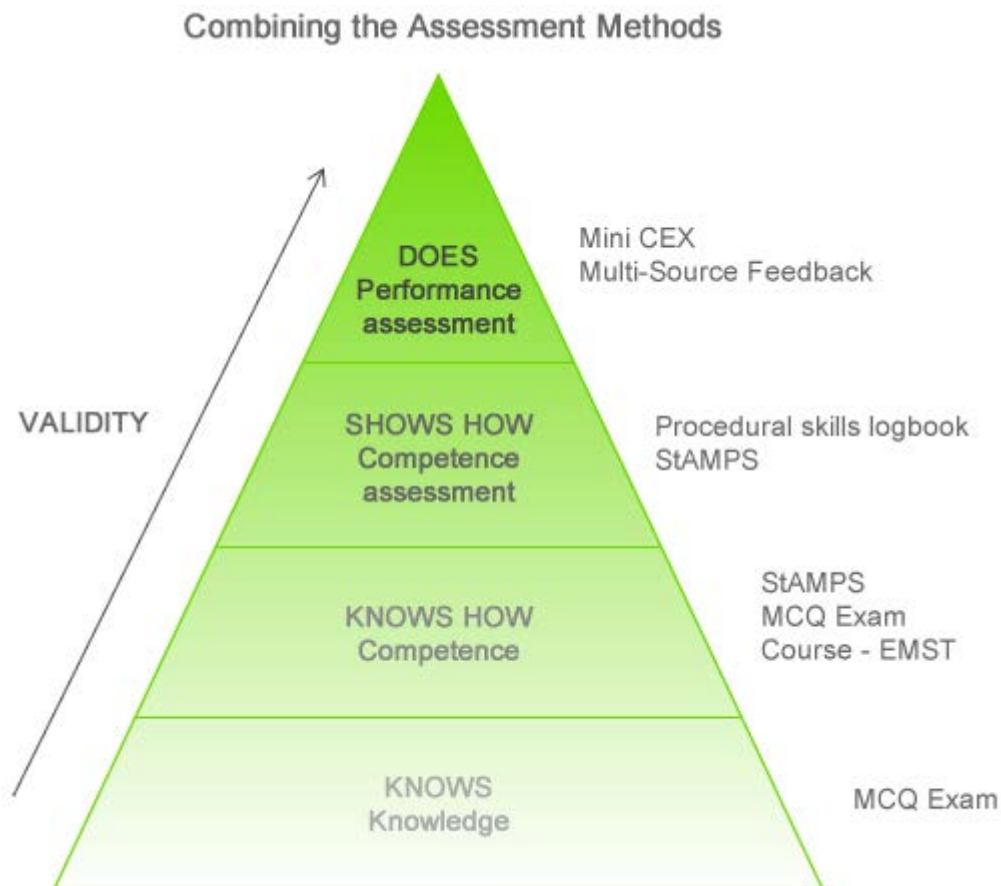


Figure 1 above, illustrates the well-established principle that assessment of knowledge, while important, is not sufficient to predict the application of this knowledge to practice.²⁵ Therefore registrars are assessed using a range of formative and summative assessment methods, which cover the four stages of Miller's Pyramid. When combined together, these assessment methods form a rigorous, defensible formative and summative assessment program with positive educational impact.

Formative Assessment

²³ Miller G (1990) The assessment of clinical skills / competence / performance. *Academic Medicine*, vol. 65, no. 9 supplement, S63-S67.

²⁴ Hays R, Strasser R & Wallace A (1997) Development of a national training program for rural medicine in Australia. *Education for Health*, vol. 10, no. 3, pp. 275-285.

²⁵ Bashook P (2005) Best practices for assessing competence and performance of the behavioural health workforce. *Administration and Policy in Mental Health*, vol. 32, no. 5-6, pp. 563-592

The assessment program includes formative processes that provide opportunities for the registrar to receive feedback and gauge their own performance throughout the course of training. These include:

1. *Regular supervisor feedback* – timely and ongoing feedback on performance in practice
2. *Practice Multiple Choice Question (MCQ) Examination*
3. *Multiple direct observations of performance* – this includes formative *Mini Clinical Evaluation Exercises (miniCEX)* and other direct observation and
4. *StAMPS Study groups and coaching workshops*

Summative Assessment

There are five summative assessments that all registrars must complete successfully in order to be awarded the FACRRM. The summative assessment methods were chosen for their combined reliability, validity, feasibility, acceptability and educational impact.²⁶

They have been mapped against the assessment blueprint, to ensure that each learning outcome is assessed using the most appropriate method.

The five summative assessment methods are:

1. *Multiple Choice Question (MCQ) Examination*
2. *Structured Assessment using Multiple Patient Scenarios (StAMPS) Examination*
3. *Procedural Skills Log Book (Log book)*
4. *Multi-Source Feedback (MSF)*, and
5. *Mini-clinical evaluation exercises (MiniCEX)* – to assess clinical and interpersonal skills.

Description of Assessment Methods

MCQ Examination

The MCQ examination is a highly reliable method for testing knowledge and clinical reasoning. It is used to test the registrars' applied clinical knowledge, recall and reasoning across the curriculum content areas. The examination consists of 125 multiple-choice questions undertaken online in examination conditions over a three-hour period. It can be undertaken anytime from the beginning of the second year of training, though it is strongly recommended that registrars undertake it at a later stage in their training to ensure they have reasonable experience in rural and remote practice.

StAMPS Examination

Structured Assessment using Multiple Patient Scenarios (StAMPS) is an innovative assessment modality in which a combined OSCE / VIVA styles of examination is undertaken via videoconference or face-to-face. It is similar to an OSCE in that clinical scenarios are presented within specific "stations". It also has some similarities to the "admission OSCE" or "multiple mini-interview" used by some medical schools to assist in admission into their medical program.²⁷ In an OSCE, the registrars rotate around a series of stations. The key difference with StAMPS is that the registrars remain in one place (at a videoconference facility in, or close to, their own community) or in a room at an exam centre and the examiners rotate around the registrars.

²⁶van der Vleuten CPM & Schuwirth LWT (2005) Assessing professional competence: from methods to programmes. *Medical Education*, vol. 39, no. 3, pp. 309–317.

²⁷ Eva KW, Rosenfeld J, Reiter HI, and Norman GR (2004) An admissions OSCE: the multiple mini-interview. *Medical Education*, vol. 38, no. 3, pp. 314-26.

The StAMPS examination was developed specifically to provide FACRRM registrars in rural and remote locations with a reliable, affordable, flexible, acceptable and contextually relevant method for assessment of clinical reasoning and problem solving skills. It measures each registrar's ability to discuss, within a realistic period of time, the implications arising from several common and important clinical scenarios seen in rural and remote contexts. It has been delivered twice a year since 2008.

Procedural Skills Log Book

The procedural skills logbook enables registrars to record achievement of the essential psychomotor skills required for competent independent general practice. These skills have been derived from the curriculum statements in the ACRRM Primary Curriculum. As the clinical skills are competently achieved, the registrar records them in the logbook and the supervisor/ clinical teacher provides 'sign off'. This is an ongoing process throughout the entire course of the training program.

Multi Source Feedback

Multi Source Feedback (MSF) is a 360-degree practice-based assessment of the registrars' interpersonal and professional attributes.^{28 29} It is not designed to assess clinical knowledge or skills.

The registrar undertakes a process of gaining structured written feedback from those people that they interact with on a daily basis:

1. *Health professionals* – supervisors, practice managers, practice nurses, specialists, hospital staff, Indigenous Health Workers, allied health professionals, others, and
2. *Community-Patients* – families and carers who have consulted with the registrar.

MiniCEX

The Mini Clinical Evaluation Exercise (miniCEX) is a practice-based method for simultaneously observing and assessing registrars and offering them feedback on their performance.³⁰

The miniCEX assesses history taking, physical examination, professionalism, clinical judgment, communication skills, organisation skills, efficiency and overall clinical competence. It is used both formatively and summatively. Formative miniCEX enables registrars to identify their strengths and weaknesses through immediate feedback.

The miniCEX provides a valid, reliable and realistic clinical assessment which examines clinical skills in the registrar's own clinical setting. In particular, it has been found to have high face validity³¹.

²⁸ Lockyer J, Blackmore D, Fidler H, Crutcher R, Salte B, Shaw K, Ward B & Wolfish N (2006) A study of a multi-source feedback system for international medical graduates holding defined licences. *Medical Education*, vol. 40, no. 4, pp. 340-347.

²⁹ Rees C & Shepherd M (2005) The acceptability of 360-degree judgements as a method of assessing undergraduate medical students' personal and professional behaviours. *Medical Education*, vol. 39, no.1, pp. 49-57.

³⁰ Norcini JJ (2005) The Mini Clinical Evaluation Exercise (miniCEX). *The Clinical Teacher*, vol. 2, no. 1, pp. 25-30.

³¹ Hays RB, Davies HA, Beard JD, Caldon LJM, Farmer EA, Finucane PM, McCrorie P, Newble DI, Schuwirth LWT & Sibbald GR (2002) Selecting performance assessment methods for experienced physicians: Papers from the 10th Cambridge conference. *Medical Education*, vol. 36, no. 10, pp. 910-917.

Acknowledgements

ACRRM would like to thank the following individuals for their valuable contribution to the development and/or revision of the ACRRM Primary Curriculum:

- Professor Richard Murray
- Professor Liz Farmer
- Dr Sandra Mendel
- Mrs Lynn Saul
- Dr Elizabeth Wood
- Health Consumers of Rural & Remote Australia

6.1 Aboriginal and Torres Strait Islander Health

Writers

- Associate Professor John Wakerman
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- Professor Richard Murray
- Dr Louis Peachey
- Dr Carmel Nelson
- Dr David Atkinson

6.2 Adult Internal Medicine

Writers

- Dr Tony McLellan
- Dr Harry Johnston
- Dr Kenneth Lim
- Dr Jeremy Hayllar
- Dr Jenny Allen
- Dr Andrew McKenzie

Acknowledgement of further comment from

- Dr Rick McLean
- Dr Tom Doolan
- Dr Bill Lang
- Professor Max Kamien
- Dr Frank McLeod
- Dr Stephen Sullivan

6.3 Aged Care

Writers

- Dr Kathryn Kirkpatrick
- Dr Tom Doolan
- Dr Sandra Mendel
- Dr Chris Carroll

Acknowledgement of further comment from

- Dr Brian Murphy
- Dr Ken Pearson
- Associate Professor Dennis Pashen
- Dr Andrew Swanson

6.4 Anaesthetics

Writers

- Dr Claire Jukka
- Dr Dan Manahan
- Dr Mike Moynihan
- Dr Tom Doolan

Acknowledgement of further comment from

- Dr Jon McKeon
- Dr Chris O'Brien
- Dr Kate Leslie
- Dr Geoffrey Harper
- Dr Linda Brown
- Dr Luke Mitchell
- Dr Richard Abbott
- Dr Rob Phair

6.5 Business and Professional Management

Writers

- Dr Pat Giddings
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- Dr Jonas Kasauskas
- Dr Stephen Webb
- Ms Jeanne Webb

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