Australian College of Rural
and Remote Medicine

FELLOWSHIP HANDBOOK

ADVANCED SPECIALISED TRAINING

Adult Internal Medicine

ACRRM

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ACRRM acknowledges Australian Aboriginal People and Torres Strait Islander People as the first inhabitants of the nation. We respect the traditional owners of lands across Australia in which our members and staff work and live and pay respect to their elders past present and future.

Contents

Introduction

Fellows of ACRRM receive specialist registration as a general practitioner with the Medical Board of Australia and can practise in any location throughout Australia.

ACRRM's standards and training also prepare doctors to be rural generalists.

> A rural generalist is a general practitioner who has specific expertise in providing medical care for rural and remote communities. A rural generalist understands and responds to the diverse needs of Aboriginal, Torres Strait Islander and other rural communities; this includes applying a population approach, providing safe primary, secondary and emergency care as required and providing specialised medical care in at least one additional discipline.

Adult Internal Medicine (AIM) is recognised as one of the additional disciplines in which a rural generalist may undertake Advanced Specialised Training (AST).

Advanced Specialised Training in Adult Internal Medicine is a training program that builds on ACRRM Core Generalist Training in Adult Internal Medicine.

Rationale

Adult internal medicine is an important specialty area for rural generalists. Much of the caseload in primary and secondary care are AIM presentations. With the ageing population, the complexity of such presentations is increasing. It is often impractical for patients from rural or remote areas to travel to a regional centre for specialist physician consultation. Therefore, rural generalists are often required to diagnose and manage an extended range of adult internal medical conditions with a greater degree of independence compared to their urban counterparts.

Credentials

A rural generalist who has completed the advanced specialised training program in Adult Internal Medicine can:

- work independently as a senior medical officer in a rural hospital
- work without local specialist AIM support
- work as part of an on-site team with other skilled medical, nursing and allied health practitioners
- diagnose and manage common acute and chronic AIM conditions
- diagnose and manage less common or more complex, acute and chronic conditions with consideration of clinical services capability
- provide primary, secondary and emergency care
- provide an advisory resource in AIM to other rural generalists
- maximize the effectiveness of specialist outreach and telemedicine services in their communities
- assist in training rural generalists
- assist in the development, provision and promotion of AIM services
- engage in, foster, and encourage research
- develop health policies and procedures for AIM services.

Eligibility

Prior to undertaking this training, candidates must meet the following criteria:

- satisfactory completion of 12 months Core Generalist Training component of ACRRM Fellowship training or
- have completed postgraduate year two for those doctors who are not in Fellowship Training.

Advanced Specialised Training in Adult Internal Medicine should be ideally undertaken in the third or fourth year of ACRRM Fellowship training or at least fifth post graduate year.

Completion of some rural training time will provide the registrar with the opportunity to gain the core AIM knowledge and skills and background experience with which to contextualise their Advanced AIM training.

Training

Advanced Specialised Training in AIM requires a minimum 12 months full time (FTE) or equivalent part time training in an ACRRM accredited training post. If part-time, registrars should be employed no less than 0.5 FTE. The training may be undertaken in two or more blocks or concurrently with Core Generalist Training.

Education

Registrars are expected to average a minimum of four hours per week engaged in educational activities related to the AST. A record of education must be kept by the registrar and discussed with the Supervisor and Medical Educator regularly throughout training.

Registrars participate in the RACP registrar education program and education tailored to the AST curriculum.

Registrars must successfully complete or be a recognised instructor in one of the following adult EM courses:

- Rural Emergency Skills Training (REST), or
- Adult Life Support Australian Resuscitation Council Level 2 (ALS2), or
- Emergency Life Support (ELS), or
- Advanced and Complex Medical Emergencies (ACME)

Registrars must attain one or more advanced diagnostic and/or therapeutic procedures eg exercise stress testing, Holter monitoring, ultrasound, endoscopy.

Assessment

The assessments required for Advanced Specialised Training are additional to the assessments undertaken for Core Generalist Training.

Registrars must submit to their training organisation and ACRRM the following:

- AST Plan and Progress Report completed by registrar and supervisor every three months
- Five miniCEXs conducted by their supervisor
- Five Case Based Discussions conducted by their supervisor (strongly encouraged)

Registrars must gain a pass in AST AIM StAMPS.

See the Fellowship Assessment Handbook for further information on assessment requirements.

Training posts

Training for the Advanced Specialised Training year in adult internal medicine may be undertaken across one or more posts. An appropriate post or combination of posts must be prospectively accredited by ACRRM.

Such posts must have the caseload and teaching capacity to provide appropriate experience and training in a sufficient range of general and sub-specialty AIM conditions to meet the requirements of this AST. To achieve the AST outcomes, it may be necessary for a registrar to split his/her training across more than one post. It may also be necessary to undertake one or more short-term secondments to learn specific skills.

Appropriate posts would have the following features:

- inpatient care facilities
- outpatient and community-based care
- registrar employed as Principal House Officer or equivalent
- on-call or after-hours services
- at least one resident general physician full-time or Visiting Medical Officer
- meets RACP requirements for basic training in general medicine
- ideally in a rural or regional location.

The following are examples of posts that would be valuable to include as a component of training: General Medicine Units, Acute Medicine Units, Renal Units, Diabetic Clinics, Respiratory Clinics, Palliative Care and Geriatric.

A training post accredited for RACP for basic / advanced physician training will generally be suitable but must also gain accreditation for AST AIM training. Institutions with established educational links to other institutions and involvement with undergraduate teaching and other vocational training would be highly desirable.

See Supervisor and Training Post Standards for further information.

The AST registrar must be employed as a Registrar or in an equivalent position.

Supervision

Candidates undertaking Advanced Specialised Training in Adult Internal Medicine will require specific medical, professional and personal support and supervision arrangements.

This will include at least one:

- *Specialist supervisor* – a doctor holding a Fellowship of RACP or other Fellowship with relevant qualifications and experience who is overall responsible for the clinical and educational supervision of the registrar.

See Supervisor and Training Post Standards for further information.

Competencies

Rural Generalist competencies are grouped under the eight domains of rural and remote practice. They describe the key competencies that are required in each context of practice.

These competencies are required to be met by all Rural Generalists prior to Fellowship, they are described in the Rural Generalist Curriculum.

The specific competencies that are extended in Adult Internal Medicine Advanced Specialised Training are described below at Core and Advanced levels.

Competencies		Core Generalist	Advanced Specialised
1.3	Diagnose and manage common and important conditions in rural primary, secondary and emergency settings	Provides patient with most plausible diagnoses based on evidence gathered Negotiates individual evidence-based management plan, considering impact of the condition and proposed management on the patient's lifestyle/function	Diagnoses and manages less common or more complex, acute and chronic conditions with consideration of clinical services capability: Autonomously delivers a defined scope of specialised clinical practice
1.6	Appropriately order, perform and interpret diagnostic investigations	Judiciously orders investigations with the risks and benefits of investigations explained to the patient Able to explain how each investigation contributes to the patient's management. Assists with development of robust and efficient systems to ensure that results are interpreted and communicated to patients	Performs and interprets a broader range of diagnostic investigations as identified in the relevant syllabus and within clinical services capability
1.7	Ensure safe and appropriate prescribing of medications and non-pharmacological treatment options	Reviews and revises own patterns of prescribing to improve quality and safety Performs non-pharmacological treatment options from Core	Delivers a broader range of pharmacological and non-pharmacological treatment options as identified in the relevant syllabus and within clinical services capability
1.8	Formulate an appropriate management plan, incorporate specialist practitioner's advice or referral where applicable	Arranges referrals in concert with the patient and/or carer considering the balance of potential benefits, harms and costs	Works with a team on and off site to provide specialised clinical care
1.9	Demonstrate commitment to teamwork, collaboration, coordination and continuity of care	Provides leadership and participates as a respectful team member with local and distant teams to optimise quality patient care Works collaboratively, including during challenging situations and transitions of care Negotiates and manages conflict amongst the healthcare team	Provides leadership for the defined scope of specialised clinical practice

Syllabus

The Core Generalist Training knowledge and skills for adult internal medicine required by all rural generalists are defined in the Rural Generalist Curriculum. The Advanced Specialised Training Adult Internal Medicine knowledge, skills and attributes that build on this core are described below.

Knowledge

AS.K.1 Describe the clinical presentation, initial investigations, initial management, potential complications and disease associations, therapeutic options, adverse effects of disease management and indications for referral for the following less common or more complex conditions

AS.K.2 Explain the interpretation and significance of relevant investigations and reports

Skills

AS.S.1 For the less common or more complex, acute and chronic conditions with consideration of clinical services capability:

- recognise the presentation
- establish a provisional diagnosis
- plan and arrange appropriate initial investigation
- initiate empiric therapy
- discuss broad therapeutic options
- refer appropriately
- provide ongoing management.

AS.S.2 Perform and interpret one or more advanced diagnostic and/or therapeutic procedure according to community need, eg exercise stress testing, Holter monitoring, endoscopy

Attributes

At.1 Accountability

At.2 Adaptability

At.15 Reflection

Presentations and conditions

- Common, undifferentiated clinical presentations
  - chest pain
  - palpitations
  - fever/pyrexia of unknown origin/night sweats
  - chronic fatigue/lethargy
  - syncope/collapse/loss of consciousness
  - acute and chronic confusional states

    - breathlessness
    - hemoptysis
    - weight loss
    - vomiting
    - abdominal pain
    - jaundice
    - functional decline
    - weakness
    - deformity/swelling
    - oedema
    - hematuria
    - recurrent unexplained presentation.
- Cardiac conditions, including:
    - hypertension
    - arrhythmia including supraventricular arrhythmias, ventricular arrhythmias
    - ischaemic heart disease
    - cardiac failure including acute left ventricular failure (LVF), congestive heart failure, chronic left ventricular failure and cor pulmonale
    - pericardial disease
    - cardiomyopathy
    - peripheral vascular disease including arterial and venous ulcers
    - rheumatic heart disease
    - cardiovascular manifestations of systemic and chronic disease
    - congenital heart disease
    - acute coronary syndromes including ST Elevation Myocardial Infarction (STEMI), Non-STEMI
- Nephrology conditions, including:
    - acid-base imbalance
    - electrolyte abnormalities
    - acute and recurrent urinary tract infections including pyelonephritis, cystitis, prostatitis, urethritis
    - acute and chronic glomerulonephritis
    - vascular disease of the kidney including polyarteritis nodosa, hypersensitivity vasculitis, haemolytic uraemic syndrome and atypical haemolytic uraemic syndrome, renal artery stenosis
    - urinary tract calculi
    - acute and chronic renal failure
    - complications of renal replacement therapy
    - acute tubular necrosis
    - renovascular disease

- diabetic nephropathy
- renal calculus disease and obstructive uropathy
- drug-related nephrotoxicity
- renal hypertension
- glomerulonephritis
- tubulo-interstitial kidney disease
- polycystic kidney disease

- Thoracic and sleep medicine conditions, including:
  - asthma
  - acute respiratory failure
  - chronic obstructive airways disease including Chronic Obstructive Pulmonary Disease (COPD), Chronic respiratory failure
  - respiratory infections including acute and chronic bronchitis, pneumonia, psittacosis
  - occupational/environmental lung disease including occupational asthma, asbestos related pleural and parenchymal disease (benign and malignant), interstitial lung disease from exposure to organic and inorganic dusts, coal workers pneumoconiosis
  - sleep apnoea
  - neoplasia
  - pulmonary embolism
  - pleural disease
  - spontaneous pneumothorax
  - hypersensitivity pneumonitis including farmer's lung, bird fancier's lung
  - interstitial lung disease including sarcoidosis, Wegener's granulomatosis, cryptogenic fibrosing alveolitis
  - pneumothorax
  - pulmonary hypertension
  - diffuse lung disease
  - sleep apnoea
  - lung cancer
  - cystic fibrosis
  - bronchiectasis
  - tuberculosis
  - pulmonary vasculitides
  - hemoptysis
- Infectious diseases, including:
  - zoonoses such as: Q fever, leptospirosis, brucellosis, rabies, toxoplasmosis
  - bacterial infections such as: meningococcal meningitis/ septicaemia, other meningitides, typhoid, pneumonia, tuberculosis, leprosy, melioidosis

- fungal infections such as athlete's foot
- hepatitis
- viral infections such as: influenza, Ross River Fever, measles, mumps, varicella, Epstein-Barr virus, dengue, rubella, herpes
- protozoal infections such as: malaria, giardiasis
- worms such as: round worms, hook worms, fluke worms, pin worms
- sexually transmitted disease such as: gonorrhoea, syphilis, NGU/chlamydia, herpes, genital warts, HIV/AIDS
- osteomyelitis
- septic arthritis
- TB
- HIV
- hepatitis viruses
- EBV/CMV/Toxo
- meningococcaemia
- infections in the immunocompromised host
- necrotising fasciitis
- fever in the returning traveller – including malaria, dengue fever, parasitic infections.

- Gastroenterology conditions, including:
  - Common gastrointestinal symptoms including weight loss, abdominal pain, dysphagia, iron deficiency anaemia, acute/chronic diarrhoea, nausea and vomiting
  - Gastrointestinal emergencies including acute gastrointestinal haemorrhage, liver failure, hepatic encephalopathy, acute colitis
  - Upper gastrointestinal disease including gastro-oesophageal reflux disease, peptic ulcer, helicobacter pylori associated ulcers, Non-steroidal Anti-inflammatory Drugs (NSAID) induced conditions including functional dyspepsia, gastric carcinoma, Barrett's oesophagus
  - Hepatobiliary disease such as: alcoholic liver disease, fatty liver, chronic liver disease (cirrhosis) and complications, ascites, liver failure, haemochromatosis, gall bladder disorders, gallstones, biliary obstruction
  - Pancreatic disease including acute pancreatitis and complications, chronic pancreatitis and complications, pseudocyst formulation and complications
  - Small and large bowel diseases including coeliac disease, irritable bowel syndrome, constipation, appendicitis, diverticulosis/ diverticulitis, lactose intolerance, inflammatory bowel disease, malabsorption, malignancy
- Rheumatology conditions, including:
  - Rheumatological emergencies including acute mono/oligo arthritis, acute polyarthritis, systemic vasculitis
  - Common rheumatological problems including rheumatoid arthritis, osteoarthritis, gout/pseudogout, back pain, soft tissue rheumatism, recognition of arboviral arthropathies, temporal arteritis/polymyalgia rheumatica, seronegative arthropathies, connective tissue disorders including SLE, vasculitis, scleroderma, myositis

- Endocrinology conditions, including:
    - common endocrinological disorders including diabetes mellitus including gestational diabetes, osteoporosis, polycystic ovary syndrome, thyroid disease and obesity
    - hypothyroidism
    - hyperthyroidism
    - parathyroid disease
    - Addison's disease
    - Cushing's syndrome
    - Paget disease
    - benign prostatic disease
    - hypogonadism
    - gender dysphoria
    - endocrine causes of hypertension
    - vitamin D deficiency
- Neurological conditions, including:
    - migraine
    - abnormal focal neurological signs
    - cerebrovascular accident
    - transient ischaemic attacks
    - headache
    - epilepsy
    - confusional states and intellectual impairment
    - central nervous system infection
    - space occupying lesions
    - post-concussion syndrome
    - head injuries in sport
    - acoustic neuroma
    - temporal arteritis
    - benign intracranial hypertension
    - peripheral neuropathy
    - Bell's palsy
    - trigeminal neuralgia
    - motor neurone acquired and hereditary
    - cerebral neoplasia
    - Parkinson's disease
    - Guillain Barre syndrome
    - multiple sclerosis
    - spinal cord compression

    - cerebellar disorders
- Haematological conditions, including:
    - anaemia, neutropenia, thrombocytopenia, pancytopenia
    - leucocytosis, polycythaemia, thrombocytosis
    - complications from blood transfusions, and immunosuppression
    - disorders of coagulation or thrombosis
    - bleeding disorders; thrombophilia, haemophilia
    - disseminated intravascular coagulopathy
    - aplastic anaemia/bone marrow failure
    - lymphadenopathy
    - amyloidosis
    - plasma cell dyscrasias/myeloma
    - myelodysplasia
    - myeloproliferative disease
    - haemolytic disorders
- Immunological conditions, including:
    - allergic disorders: anaphylaxis, food allergy, adverse drug reactions, allergic rhinitis/sinusitis/conjunctivitis, atopic dermatitis, urticaria
    - autoimmune diseases: systemic lupus erythematosus (SLE), progressive systemic sclerosis (PSS), dermatomyositis, polymyositis
    - acquired immunodeficiency syndromes: human immunodeficiency virus (HIV), immunosuppressive drugs, post transplantation.
    - vasculitis
- Oncological conditions, including:
    - lung, breast, gastrointestinal, prostate, skin, brain, lymphoma, multiple myeloma, leukaemia
    - complications of cancer: uncontrolled pain, malignant hypercalcemia, spinal cord compression (SVC), SVC obstruction, pericardial tamponade
    - complications of cancer therapy: bone marrow suppression, neutropenic sepsis, tumour lysis syndrome, mucositis, graft vs. host disease

Learning resources

ACRRM online courses are mapped to the Rural Generalist Curriculum. A range of courses are available on AIM, these may be identified through the search function. These courses also provide links to external learning resources.

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