



# Advanced Specialised Training Adult Internal Medicine

Curriculum



FELLOWSHIP

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



## **Contact details**

Australian College of Rural and Remote Medicine  
Level 2, 410 Queen Street  
GPO Box 2507  
Brisbane QLD 4001  
Ph: 07 3105 8200 Fax: 07 3105 8299  
Website: [www.acrrm.org.au](http://www.acrrm.org.au)  
ABN: 12 078 081 848

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- Dr Bill Lang, Principal Writer – Fellow of ACRRM, (formerly) Senior Medical Educator, Rural Training GPTQ
- Dr Spencer Toombes – Fellow of RACP, Staff Physician and Director of Physician Training, Toowoomba Hospital, QLD
- Dr Sandra Mendel – Fellow of ACRRM, Director of Education, ACRRM
- Dr John Douyere – Fellow of ACRRM, Medical Director, Queensland Rural Generalist Pathway
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- Dr Uma Lakshman – Fellow of RACP, Physician, Mount Isa Hospital, QLD
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# 1. Background

Completion of a minimum 12 months Advanced Specialised Training is an essential component of training towards ACRRM Fellowship. Candidates can select from a number of training areas which reflect rural and remote clinical practice needs.

Adult internal medicine (AIM) is a particular priority because it makes up the majority of the workload in rural and remote general practice, and because access to general physicians in these areas is limited.

This Advanced Specialised Training Curriculum in adult internal medicine includes and builds on the AIM curriculum statement of the ACRRM Primary Curriculum. This AST curriculum covers many of the same abilities that are covered in the Adult Internal Medicine Curriculum Statement in the Primary Curriculum. However, this AST curriculum requires higher levels of achievement in a number of these areas.

This AST curriculum recognises the overlap between the discipline of adult internal medicine and other AST disciplines such as emergency medicine and remote medicine.

## 2. Purpose and Requirements

### 2.1 Purpose

The purpose of this curriculum is to provide ACRRM trainees with the skills and knowledge to improve adult internal medicine services in rural and remote communities.

A doctor with an AST in Adult Internal Medicine will generally be employed in a senior medical officer role working at a distance from specialists, working across community and hospital settings.

This curriculum defines the advanced skills that will enable GPs to offer enhanced adult internal medicine care to their communities, to provide an advisory resource in AIM to other GPs and to maximize the effectiveness of specialist outreach and telemedicine services in their communities.

### 2.2 Target group

This curriculum is intended for ACRRM registrars who are undertaking an Advanced Specialised Training year in adult internal medicine. Registrars who undertake an AST in adult internal medicine should be interested in developing and using higher level diagnostic skills and taking responsibility for the management of chronic complex conditions in a rural setting. These skills are beneficial in all rural or remote general practice settings. Therefore, advanced training in adult internal medicine is highly relevant and valuable for all ACRRM registrars.

### 2.3 Training requirements

Advanced Specialised Training in adult internal medicine requires a minimum 12 months full time or equivalent part time training. The training program will take into account other professional, personal and family needs and will offer the flexibility for individuals to undertake this training on a part-time basis or in two or more blocks. Candidates who choose these options will not be disadvantaged. Subject to prior approval by the ACRRM censor, candidates may request to undertake up to 6 months of this training in one or two sub-specialty areas.

## 2.4 Potential 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 institutions 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 curriculum. To achieve the curriculum outcomes, it may be necessary for a registrar to split his/her training between 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.

Adult internal medicine is a very broad discipline, with approximately 20 sub-specialty areas. It is not possible for any registrar to gain extensive experience in more than a few of these areas during an AST year. Some posts will provide greater depth in a particular sub-specialty, while others will provide greater breadth of experience across different sub-specialties. It is desirable to spend at least part of this training year in a 'general medicine' specialty post. Similarly, hospital-based posts will give greater experience in acute AIM presentations whereas outpatient or community facilities will give greater experience in the ongoing management of complex and chronic disease. It is highly desirable for registrars to gain experience in both of these areas.

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

A teaching 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 [Advanced Specialised Training Standards for Supervisors and Teaching posts](#) for further information.

## 2.5 Prerequisites/co-requisites

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

- satisfactory completion of 12 months Core Clinical Training component of ACRRM Fellowship training or
- 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. Prior completion of some Primary Rural and Remote Training (PRRT) time will provide the registrar with background experience with which to contextualise their AIM year, and is therefore preferred but not essential.

It is strongly advised that an advanced life support course is completed satisfactorily prior to commencing AST in AIM or otherwise should be completed during the first 6 months of the AST year. Completion of a basic course in ultrasound would be desirable but is not required.

## 3. Rationale

Adult internal medicine is an important specialty area for rural and remote general practitioners. The vast bulk of the caseload for most rural or remote GPs, both in hospital and community settings, will be AIM presentations. With the ageing population, the complexity of such presentations is also increasing. It is often impractical for patients from rural or remote areas to travel to a regional centre for specialist physician consultation. Therefore rural and remote GPs 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.

A number of key features distinguish adult internal medicine practice in rural and remote regions from that in urban areas. These include:

- limited access to general and sub-specialty physicians
- extended role of GPs with advanced training in AIM
- reduced access to diagnostic modalities
- greater reliance on tele-medicine services

Specialty training in adult internal medicine requires patient centred care and broad problem-solving skills, both of which form an excellent foundation for rural and remote practice.

## 4. Learning abilities

The curriculum defines the abilities, knowledge and skills for Advanced Specialised Training in Adult Internal Medicine.

The seven domains of rural and remote general practice provide the framework for organising the abilities required in the curriculum.

The domains are:

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

These levels of achievement build on the abilities, knowledge and skills in the Adult Internal Medicine Curriculum statement in the ACRRM Primary Curriculum.

While many of the abilities and conditions are the same as described in the Primary Curriculum by completion of this AST, registrars should have developed higher level diagnostic skills and greater competency in management of complex and chronic conditions.



## 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 an accurate clinical history that reflects contextual issues including: presenting problems, epidemiology, occupation, family, gender, culture and geographic location
- 1.3 Obtain a relevant history in complex, chronic and multisystem disorders.
- 1.4 Perform a problem-focussed physical examination relevant to clinical history, epidemiology and cultural context. Accurately identify a wide range of clinical signs including subtle clinical signs.
- 1.5 Use specialised clinical equipment as required for further assessment and interpret findings.
- 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.
- 1.7 Use advanced skills in diagnosing undifferentiated presentations, chronic complex and multisystem disorders, and cases involve vague or inconclusive clinical pictures.
- 1.8 Order and/or perform appropriate diagnostic tests where required to confirm a diagnosis, monitor medical care and/or exclude treatable or serious conditions
- 1.9 Communicate findings of clinical assessment effectively and sensitively to the patient and/or carer
- 1.10 Formulate an appropriate management plan for common or important medical conditions for immediate and urgent treatment, recognising the role of local management, specialist consultation as required and/or arranging referral and transfer
- 1.11 Manage concurrent illness and co-morbidities being aware of implications for the primary medical condition and involve specialist advice and treatment if required
- 1.12 Ensure safe and appropriate prescribing of medications and other treatment options in the clinical context
- 1.13 Manage uncertainty and the need to evaluate the risks versus the benefits of clinical decisions
- 1.14 Refer, facilitate and coordinate access to other health and social support services fostering a team approach to health care
- 1.15 Provide and/or arrange ongoing medical care for patients

## **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 ensuring and documenting a relevant clinical diagnostic process with history, physical examination, investigation and differential diagnosis
- 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
- 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 Order and review relevant appropriate pathology tests
- 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
- 2.7. Review the pharmacotherapy for each patient, making rational and where possible evidence based decisions to initiate, maintain, titrate or cease each drug.
- 2.8. Review the patient's fluid and electrolyte status and where appropriate, make rational and evidence based decisions to use supplementary fluids, electrolytes and/or blood products.
- 2.9 Maintain timely and accurate patient documentation in hospital records including drug and fluid prescription and administration
- 2.10 Communicate effectively with the health care team, patient and/or carer including effective clinical handover
- 2.11 Recognise and respond early to the deteriorating patient
- 2.12 Anticipate and judiciously arrange safe patient transfer to other facilities, considering clinical indications, service capabilities, patient preferences, transportation and geography
- 2.13 Undertake early multi-disciplinary discharge planning including discussion with the general practitioner or health professional who will provide ongoing care in the community
- 2.14 Contribute medical expertise and leadership in a hospital team
- 2.15 Provide direct and remote clinical supervision and support to nurses, junior doctors and students
- 2.16 Recognise, document and manage adverse events and near misses identifying the benefit for learning and developing expertise
- 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**

- 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, local context and resources and patient advanced directives and limits of resuscitation
- 3.4 Perform required emergency procedures
- 3.5 Arrange and/or perform emergency patient transport or evacuation when needed
- 3.6 Demonstrate knowledge of how to access and use available resources locally and in secondary and tertiary referral centres
- 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 Assess local disease patterns, identify underlying community health issues, and develop appropriate management strategies
- 4.3 Apply a population health approach that is relevant to the clinical practice profile of the population served
- 4.4 Integrate evidence-based prevention, early detection and health maintenance activities into practice at a systems level for common or important medical conditions and infections
- 4.5 Provide continuity and coordination of care for own practice population
- 4.6 Evaluate quality of health care for practice populations in collaboration with local primary health care providers
- 4.7 Fulfil reporting requirements in relation to statutory notification of health conditions
- 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
- 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**

- 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, mentor 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
- 7.4 Arrange referral to distant services in concert with the patient and/or carer considering the balance of potential benefits, harms and costs
- 7.5 Provide direct and distant clinical supervision and support for other rural and remote health care personnel
- 7.6 Use information and communication technology to provide medical care or facilitate access to specialised care for patients, including becoming adept at facilitating telehealth services.
- 7.7 Use information and communication technology to network and exchange information with distant colleagues
- 7.8 Respect local community norms and values in own life and work practices
- 7.9 Identify and acquire extended knowledge and skills as may be required to meet health care needs of the local population

## 4.1 Definition of terms

<i>Common or important medical conditions and infections include</i>	
<b>Cardiac</b>	<p><b>Ischaemic heart disease including:</b> Acute Coronary Syndrome Stable angina</p> <p><b>Hypertensive heart disease including:</b> Resistant hypertension</p> <p>Acute coronary syndromes and differentiation from other cardiovascular emergencies</p> <p>Thoracic and abdominal aortic aneurism</p> <p><b>Arrhythmia including:</b> Supraventricular arrhythmias Ventricular arrhythmias Atrial fibrillation</p> <p>Thromboembolic disease</p> <p><b>Valvular heart disease including:</b> Aortic and mitral valve disease Ventricular septal defect (VSD) Atrial septal defect (ASD) Bacterial endocarditis Rheumatic heart disease</p> <p><b>Cardiac failure including:</b> Acute pulmonary oedema Chronic congestive heart failure</p> <p><b>Peripheral Vascular Disease including:</b> Arterial and venous ulcers Abdominal aortic aneurysm</p>
<b>Nephrology</b>	<p><b>Acute and recurrent urinary tract infections including:</b> Pyelonephritis, cystitis, prostatitis, urethritis</p> <p><b>Acute renal failure including:</b> Glomerulonephritis Acute tubular necrosis Common nephrotoxins Fluid and electrolyte management Indications for acute dialysis</p> <p><b>Chronic renal failure including:</b> Strategies for renal preservation Indications and contraindications for dialysis</p> <p><b>Vascular disease of the kidney including:</b> Differential diagnosis and initial investigation of vasculitis Renal artery stenosis</p> <p>Urinary tract calculi</p> <p>Acid base disorders</p>

<p><b>Thoracic and sleep medicine</b></p>	<p><b>Asthma</b></p> <p><b>Chronic Obstructive Airways Disease including:</b> Acute exacerbations Chronic management</p> <p><b>Respiratory Infections including:</b> Pneumonia Bronchiectasis Tuberculosis Cystic fibrosis</p> <p><b>Respiratory failure</b></p> <p><b>Lung Cancer including:</b> Screening, investigation, principals of staging and treatment</p> <p><b>Pulmonary embolism</b></p> <p><b>Obstructive Sleep Apnoea</b></p> <p><b>Pneumothorax</b></p> <p><b>Interstitial lung disease including:</b> Sarcoidosis and other granulomatous lung diseases Idiopathic pulmonary fibrosis. Asbestos related diseases Dust and occupational lung diseases</p>
<p><b>Infectious diseases</b></p>	<p>Management and stabilisation of acutely septic patients</p> <p>Investigation of febrile patients, including Pyrexia of Unknown Origin</p> <p>Emerging infections</p> <p><b>Bacterial infections such as:</b> Meningococcal disease, melioidosis Rheumatic fever</p> <p><b>Zoonoses such as:</b> Q fever, leptospirosis, brucellosis</p> <p><b>Hepatitis</b></p> <p><b>Viral infections such as:</b> Influenza, Ross River Fever, measles, mumps, varicella, Epstein-Barr virus, dengue, rubella, herpes</p> <p><b>Human Immunodeficiency Virus, including:</b> Initial diagnostic workup Chronic management AIDS defining illness, diagnosis and treatment</p> <p><b>Protozoal infections such as:</b> Malaria, giardiasis</p> <p><b>Worms such as:</b> Round worms, hook worms, fluke worms, pin worms</p> <p><b>Sexually transmitted disease</b></p>



<p><b>Gastroenterology</b></p>	<p><b>Gastrointestinal emergencies including:</b>  Acute gastrointestinal haemorrhage  Acute colitis  Liver failure  Hepatic encephalopathy</p> <p><b>Common gastrointestinal symptoms including:</b>  Weight loss, abdominal pain, dysphagia, iron deficiency anaemia, acute/chronic diarrhoea, nausea and vomiting</p> <p><b>Upper Gastrointestinal Disease including:</b>  Gastro-oesophageal reflux disease.  Peptic ulcer, including helicobacter pylori associated ulcers.  NSAID induced conditions.  Gastric carcinoma</p> <p><b>Hepatobiliary disease such as:</b>  Acute hepatitis, including alcoholic liver disease  Non-Alcoholic Steato-Hepatitis  Chronic liver disease (cirrhosis) and complications  Haemochromatosis  Gall bladder disorders</p> <p><b>Pancreatic disease including:</b>  Acute and chronic pancreatitis and complications  Pseudocyst</p> <p><b>Small and large bowel diseases including:</b>  Coeliac disease, irritable bowel syndrome, constipation,  Inflammatory bowel disease – diagnosis and chronic management  Colonic adenoma/carcinoma – diagnosis and screening  Diverticulosis/diverticulitis  Ischaemic bowel</p>
<p><b>Rheumatology</b></p>	<p><b>Rheumatological emergencies including:</b>  Acute mono/oligo arthritis, acute polyarthritis, systemic vasculitis</p> <p><b>Common rheumatological problems including:</b>  Osteoarthritis, back pain, soft tissue rheumatism  Inflammatory arthritis such as: Rheumatoid arthritis, Seronegative arthritis  Connective tissue disorders including: lupus, vasculitis, scleroderma, myositis  Temporal arteritis / polymyalgia rheumatica  Crystal arthropathies: gout/pseudogout  Insufficiency fractures  Septic arthritis</p>
<p><b>Endocrinology</b></p>	<p><b>Common endocrinological disorders including:</b>  Advanced management skills in Diabetes mellitus including insulin initiation and titration, and diagnosis and management of gestational diabetes  Thyroid disease, investigation and management, including acute thyrotoxicosis and thyroid crisis  Parathyroid disease  Osteoporosis  Basic investigation and initial management of more complex endocrine disorders including: adrenal disease, prolactin abnormalities, other pituitary disease, sex hormone disease.  Sexual dysfunction.</p>
<p><b>Neurology</b></p>	<p><b>Common neurological disorders including:</b>  Stroke &amp; TIA: differentiation of stroke mimics, recognition and emergency interventions, investigation, chronic management  Epilepsy  Headache, and benign intracranial hypertension  Parkinson's disease  CNS infection  Space occupying lesions (SOL)</p> <p><b>Other neurological disorders including:</b>  Guillain-Barre syndrome, Bell's palsy, trigeminal neuralgia  Multiple sclerosis</p> <p>Abnormal focal neurological signs and functional disorders</p>

<b>Haematology and oncology</b>	Anaemia: Initial investigation, differential diagnosis and management. Cytopenia and post chemo/RT cytopaenic emergencies or Suspected cancer: Initial investigation and appropriate referral Ongoing maintenance of patients co-managed by oncologists
<b>Geriatrics</b>	Dementia, investigation and management Acute confusional states, prevention, investigation, management. Polypharmacy, minimising. Falls Prevention Coordination of multidisciplinary care, role of residential care.
<b>Palliative care</b>	Psychosocial care – counselling and communication skills Symptom control - including advanced drug delivery Coordination of multidisciplinary care.
<b>Undifferentiated presentations including</b>	Chest pain, respiratory failure, neurological symptom complexes

## 4.2 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
- Understands appropriate initial pharmacological and non-pharmacological treatment of common or important medical conditions and infections, and can access up to date and evidence based treatment recommendations from online resources.
- Selects, locates and follows national evidence based and consensus guidelines for common medical conditions
- Understands the indications, contra-indications and techniques for a range of diagnostic investigations and the ability to arrange and interpret their results. These include but are not limited to:
  - medical imaging studies – X-ray, CT, MRI, Ultrasound and Nuclear medicine.
  - blood tests
  - coronary angiography
  - echocardiography
  - exercise testing
  - Holter monitoring
  - endoscopy, including colonoscopy and ERCP.
  - bronchoscopy
  - polysomnography
- Knows appropriate use of a wide range of drugs, including but not limited to drugs used for:
  - anticoagulation
  - thrombolytic therapy
  - inotropic therapy
  - disease modifying anti-rheumatic drugs (DMARDs)
  - insulin therapy
  - chemotherapy
  - advanced palliative care

### **Essential skills required**

- Rebreathing mask
- CPAP/BIPAP
- Spirometry and peak flow measurement
- Nebulisation therapy
- Supplemental oxygen delivery devices
- Oxygen concentrators
- Pleural tap/drainage
- Orogastric tube insertion
- Nasogastric tube insertion
- Intercostal catheter
- Thrombolytic therapy
- Lumbar puncture
- Arterial blood sampling
- Ascitic tap
- Pericardiocentesis
- Urthelial catheterisation on a male
- Suprapubic catheterisation
- Oxygen saturation monitoring
- Defibrillation
- Synchronised DC cardioversion
- Mechanical ventilators
- Reduction tension pneumothorax
- Adult sedation

### **Desirable skills**

It is recommended that registrars develop skills relevant to the needs of the community, for example

- Endoscopy and colonoscopy (fulfilling the requirements of the Conjoint Committee of the Gastroenterological Society of Australia (GESA))
- Ultrasound
- Echocardiography
- Haemo and peritoneal dialysis
- Bone marrow biopsy

## 5. Teaching and learning approaches

The emphasis for Advanced Specialised Training in adult internal medicine will be on acquiring relevant clinical experience and skills. Teaching approaches will include, but are not limited to:

Teaching approaches will include, but are not limited to:

- Formal academic study – University courses or programs relevant to the curriculum
- Clinical experience based learning – The majority of teaching and learning should take a case based experiential format. This is the most valuable approach to learning specific clinical skills.
- *Simulation laboratory sessions* – these may be needed for those situations that are encountered infrequently in the clinical setting, or those requiring rehearsal of team and inter-professional co-operation. Examples may include cardiac and resuscitation skills.
- Small group tutorials – These may be face-to-face, via videoconference or using online tele-tutorial technology.
- Face to face education meetings – These may be linked with regional training organisations, undertaken by teleconference or video conference, or opportunistically through relevant conferences.
- *Structured and semi-structured education meetings* – these will generally be inbuilt into an institution's educational responsibilities e.g. grand rounds, journal clubs.
- Distance learning modes – These are available via the internet, using Rural and Remote Medical Education Online (RRMEO) and other sources
- Self-directed learning activities

## 6. Supervision and support

Candidates undertaking AST in Adult Internal Medicine will require specific medical, cultural, professional and personal support and supervision arrangements.

This will include at least:

1. *Specialist supervisor* – a doctor holding a Fellowship of RACP, who is overall responsible for the clinical and educational supervision of the registrar.
2. *General Practitioner mentor* – a general practitioner who is working, or has worked in a similar situation to where the registrar intends to use their advanced skill. The mentor provides pastoral care and opportunities to debrief or act as a sounding board about cultural or personal issues. The supervisor should be a rural doctor who can put specialist information into rural context. This role may be filled by a specialist supervisor who fits these criteria.

See [Standards for Supervisors and Teaching posts in AST](#) for further information.

## 7. Assessment

The assessments required for Advanced Specialised Training in adult internal medicine are additional to the assessments undertaken for Core Clinical Training and Primary Rural and Remote Training.

Candidates undertaking Advanced Specialised Training in adult internal medicine are required to complete the following additional formative and summative assessment tasks.

Formative tasks:

- *Formative adult internal medicine supervisor feedback reports* – at 6 months
- *Formative adult internal medicine mini Clinical Evaluation Exercise (miniCEX)* – minimum 5 Adult Internal Medicine consultations

Summative tasks:

- *Summative adult internal medicine supervisor feedback reports* – at 12 months
- *Summative adult internal medicine Structured Assessment using Multiple Patients Scenarios (StAMPS)*

### 7.1 Adult internal medicine supervisor feedback reports

The registrar's supervisor will complete feedback reports half way through the training term (i.e. 6 months for a full-time registrar) and again at the completion of the training term (i.e. 12 months for a full-time registrar). The first feedback report will be completed as a formative activity to guide further registrar learning and development. The second feedback report will be a summative exercise used to determine the registrar's competence.

These reports are a collation of the feedback from staff that have supervised or worked alongside the registrar during the period of training. Feedback will be obtained from at least two consultants or colleagues, including the registrar's supervisor. It is the responsibility of the supervisor to obtain and this information and send to the College.

### 7.2 Formative MiniCEX

A miniCEX can be conducted at the instigation of the candidate with their supervisor or by any medical practitioner of their choosing, as long as the assessor is a fully trained general practitioner, hospital based senior candidate or consultant.

The five formative miniCEX consults may be undertaken consecutively by one reviewer however the process will be more valuable if conducted at different sessions or locations by different reviewers.

In each formative miniCEX consultation the assessor provides written and oral feedback to the candidate during and after each consultation using a standardised format. Formative miniCEX forms can be downloaded from the ACRRM website by visiting [www.acrrm.org.au/assessment](http://www.acrrm.org.au/assessment)

To assist candidates and assessors in this process, an online training module is available on the College's online learning platform. Users can enrol in this module via the Educational Inventory.

## 7.3 Adult Internal Medicine StAMPS

Structured Assessment using Multiple Patient Scenarios (StAMPS) is an OSCE / VIVA-type examination consisting of eight scenarios, each of 10 minutes duration. StAMPS examinations may be delivered via videoconference or face-to-face. Candidates remain in one place (at their videoconference facility or room) and the examiners rotate between the candidates.

The examiners observe and rate each candidate across five competencies:

1. Overall Impression
2. Develop appropriate management plan that incorporates relevant medical & rural (community profile) contextual factors
3. Define the problem systematically
4. Communication
5. Flexibility in response to new information

## 8. Learning resources

### Recommended texts and other resources

Access to Rural and Remote Medical Education On Line (RRMEO) [www.rrmeo.com](http://www.rrmeo.com)

Access to 'Up to date', 'Dynamed' or other reputable online database

Access to PubMed

Hampton JR. *The ECG Made Easy*. 8<sup>th</sup> Ed. Edinburgh; New York: Churchill Livingstone/Elsevier; 2013

Flynn JA, Longmore JM. *Oxford American Handbook of Clinical Medicine*. 8th Ed. Oxford; New York: Oxford University Press; 2010\*

Bickley LS, Szilagyj PG, Bates B. *Bates' Guide to Physical Examination and History Taking*. 11th Ed. Philadelphia: Lippincott Williams & Wilkins; 2012 \*

National Health and Medical Research Council (Australia). *The Australian immunisation handbook*. 10th Ed. Canberra: Australian Govt. Pub. Service; 2016\*

Sutherland SK, Tibballs J. *Australian Animal Toxins: The Creatures, their Toxins, and Care of the Poisoned Patient*. 2nd Ed. South Melbourne; New York: Oxford University Press; 2001.

Gill GV, Beeching N. *Tropical Medicine*. 7th Ed. Edited by Geoff Gill & Nick Beeching. ed. Oxford: Wiley-Blackwell; 2014.

Australian medicines handbook: AMH. Adelaide, S.Aust: Australian Medicines Handbook; 2013.

Therapeutic Guidelines Limited <http://www.tg.org.au/>

National Male Health Policy: <http://www.health.gov.au/malehealthpolicy>

## 9. Evaluation

The Advanced Specialised Training curriculum in adult internal medicine will be evaluated on an ongoing basis using both qualitative and quantitative methods. All stakeholders involved in the process will be asked to provide feedback regarding the content, feasibility, rigor and outcomes in preparing doctors to take on these roles. Stakeholders will include registrars, supervisors, employers, medical educators from the regional training organisations and others who may have been involved such as Rural Workforce Agencies, the Remote Vocational Training Scheme, universities and health service providers. The information gathered will be collated by ACRRM and will feed into a 3-5 yearly review of the curriculum.