Australian Curriculum Framework for Junior Doctors

Ian S Graham, Andrew J Gleason, Gregory W Keogh, Deborah Paltridge, Ian R Rogers, Merrilyn Walton, Caroline De Paola, Jagdishwar Singh and Barry P McGrath

ABSTRACT

- The Confederation of Postgraduate Medical Education Councils launched the Australian Curriculum Framework for Junior Doctors in October 2006.
- The curriculum framework:
  - balances the major areas of clinical management, communication and professionalism, and highlights the importance of an integrated approach to prevocational learning and teaching;
  - supports practice-based, opportunistic and continuous learning, and specifies performance and supervision requirements for junior doctors; and
  - has been published in both Internet and printable versions, to make the document accessible and easily usable by junior doctors and supervisors.
- The implementation of the curriculum framework will be overseen by a steering group that includes representatives from key stakeholder groups, including junior doctors and medical students.

MJA 2007; 186: S14–S19

Prevocational medical education is a critical phase in the continuum from medical undergraduate to vocational training, and the lack of a defined curriculum outlining the prevocational learning objectives has been an impediment to effective and efficient vertical integration of medical education in Australia.[1]

The Australian Curriculum Framework for Junior Doctors consolidates the work of a national core curriculum project led by the Postgraduate Medical Council of New South Wales (now part of the NSW Institute of Medical Education and Training [IMET]) and funded by the Australian Government Department of Health and Ageing's Medical Training Review Panel.[2]

Phase 1 of the project, completed in November 2004, included circulating a questionnaire to junior medical officers (JMOs) throughout NSW to outline their current clinical experiences and to identify their future learning needs. On the basis of the JMOs' responses to the questionnaire, a draft national core curriculum was developed, overseen by a national project steering committee. Phase 2 was intended to validate the draft curriculum nationally, and develop strategies for implementation. Initial progress was slow because of lack of agreement among the states. To move the project forward, a national meeting of key stakeholders was convened in October 2005 and the Confederation of Postgraduate Medical Education Councils (CPMEC) became actively involved in developing and implementing a new curriculum framework.

In November 2005, CPMEC convened a writing group to produce a draft document that would be subjected to comprehensive review and consultation involving a wide range of potential users and key stakeholders. The writing group membership was not constituted on the basis of equal representation of states, territories or key stakeholder groups but rather on the necessity to bring together a group of people with a common interest and breadth of experience in postgraduate medical training and development.

Development of the curriculum framework

The writing group met on four occasions between February and May in 2006 and reconvened in October 2006 to consider the preliminary feedback and amend the first draft of the curriculum framework in response to that feedback. A number of key principles underpinned the development of the draft curriculum framework. These are discussed below.

Understanding and reflecting the needs of stakeholders

The project team sought to understand and reflect the needs of a wide range of stakeholders involved in prevocational medical training, including patients and the community, junior doctors, other hospital and practice staff, health departments, universities, professional colleges and associations.

Building on national and international experience

Building on work undertaken in Australia and overseas, the writing group critically appraised existing prevocational curricula, in particular those developed or published by the:

- Postgraduate Medical Council of New South Wales (now part of IMET);[3]
- Postgraduate Medical Council of South Australia;[4]
- Postgraduate Medical Council of Western Australia;[5]
- United Kingdom Foundation Programme;[6] and
- Royal College of Physicians and Surgeons of Canada — CanMEDS.[7]

Mindmapping software (MindManager Pro 6, Mindjet Corporation, San Francisco, Calif, USA) was then used to represent these curricula in a standardised, branching tree format.[8,9] The same software was used to create a blank framework that was readily able to be restructured and progressively populated with the content of the Australian Curriculum Framework for Junior Doctors.

Reference was also made to other relevant documents, in particular the National Patient Safety Education Framework[10] and the Committee of Deans of Australian Medical Schools Indigenous Health curriculum.[11]

Balancing clinical practice, communication and professionalism

The curriculum framework structure that emerged comprised three major AREAS (clinical management; communication; and professionalism). Each area was subdivided into three to six CATEGORIES, and each category was further subdivided into four to seven TOPICS. For every topic, a set of three CAPABILITIES has been defined. Capabilities may describe knowledge elements, skills or behaviours. An example of the structure of the curriculum framework is shown in the Box.

Example of the structure of the curriculum framework

Clinical management (AREA)

- Patient management (CATEGORY)
  - ➢ Management options (TOPIC)
    - ➢ Understand the management options for the listed problems and conditions (CAPABILITY — knowledge)
    - ➢ Develop, implement and evaluate a plan of management relevant to a patient's problems or conditions (CAPABILITY — skill)
    - ➢ Understand the importance of considering different management options (CAPABILITY — behaviour) ◆

The entire Australian Curriculum Framework for Junior Doctors comprises 63 topics and is presented in this article (*pages S16-S18*). Eleven of the *Clinical management* topics, under the categories of *Patient assessment* and *Patient management*, refer to a list of common problems and conditions with which prevocational trainees should become familiar (*page S16*). The five topics relating to *Skills & procedures* are associated with a list of skills and procedures that should be mastered in the prevocational years (*page S16*).

Supporting practice-based, opportunistic and continuous learning

The curriculum framework supports continuous learning from undergraduate training through to prevocational and vocational education and training, underpinned by the principles of adult learning. These include the need to respect prior learning and experience, and provide clear learning outcomes, regular feedback on performance, and opportunities for reflection.

It focuses on practice-based learning, taking place as much as possible in the context of the learner's current work or professional environment. The curriculum framework is intended to exploit the rich opportunistic learning environment that the workplace provides.

The curriculum framework will enable individual learners to manage their own progression. Some interns may have mastered all the capabilities by the end of their internship, while others will require a longer period.

Ensuring usability by junior medical officers, supervisors, educators and organisations

Members of the writing group recognised the importance of presenting the curriculum framework in a format that would be accessible to and usable by a wide range of stakeholders. The use of a world-wide-web interface allows all of the areas, categories and topics to be displayed on a single screen. Clicking on a topic opens up a dialogue box with a description of the three capabilities identified for that topic. There is also a provision to include links to peer-reviewed learning and assessment resources through the Internet.

A printable version of the curriculum framework has also been published and is available for download from the CPMEC website (see *page S18*).

An integrated approach

The curriculum framework aims to integrate learning at every opportunity. Each clinical encounter will incorporate a variety of capabilities from across the curriculum framework. It was designed to enable educational managers to support and positively reinforce the integration of prevocational training throughout the whole organisation, and also encourage innovative strategies such as interdisciplinary and team-based learning. Vertical integration across the medical education spectrum is another key aim of the curriculum framework, and a number of medical schools and colleges have indicated their interest in undertaking this work.

Specifying performance and supervision requirements

The curriculum framework describes required learning in terms of performance elements. This provides a useful starting point for practice-based training that relies on performance or competency-based assessment. However, developing practical, effective, valid and acceptable assessment tools remains the greatest challenge in the implementation of the curriculum framework.

Prevocational doctors are expected to be actively supervised in the workplace. Supervision is a crucial element to achieving many of the competencies within the curriculum framework. It is expected that, over the 2–3 years of prevocational training, there will be a progressive increase in the level of individual clinical responsibility and a corresponding reduction in the level of supervision that is required.

Encouraging consultation, collaboration and feedback

The draft Australian Curriculum Framework for Junior Doctors was made accessible through the CPMEC website from August until October 2006. The website included a feedback mechanism whereby users could generate an email to CPMEC and provide feedback on any aspect of the curriculum framework. Written feedback was also sought from hospitals, universities, professional colleges and key stakeholder organisations. Three hundred and forty comments were received over the initial 3-month consultation period. Thirty-five per cent were supportive, 53% expressed reservations, and 12% identified critical concerns.

In October 2006, the writing group met again to review the feedback. Of the 340 issues raised, 81 (24%) were able to be resolved through minor modifications to the content of the curriculum framework. However, a significant number of critical issues still remained, particularly in relation to implementation and assessment. The revised version of the curriculum framework was launched at the 11th National Prevocational Medical Education Forum in Adelaide on 31 October 2006, and received strong support.

Future developments

A steering group will oversee the further development and implementation of the curriculum framework. This group and its subcommittees will guide the implementation process, identify learning resources that can be used in association with the curriculum framework, and consider issues relating to assessment. The steering group includes broad representation from postgraduate medical councils, doctors in training, medical students, and a range of peak bodies.

Key priorities over the next few years will include:

- Undertaking a mapping process to identify elements and themes common to the Australian Curriculum Framework for Junior Doctors and university, professional college, and other curricula.

Australian Curriculum Framework for Junior Doctors

Clinical Management

Safe Patient Care

Systems
Understand the complex interaction between the healthcare environment, doctor & patient
Use mechanisms that minimise error e.g. checklists, clinical pathways
Participate in continuous quality improvement e.g. clinical audit

Risk & prevention
Know the main sources of error & risk in the workplace
Understand how personal limitations contribute to risk
Promote risk awareness in the workplace by identifying & reporting potential risks to patients & staff

Adverse events & near misses
Understand the harm caused by errors & system failures
Document & report adverse events in accordance with local incident reporting systems
Recognise & manage adverse events & near misses (ADV.)

Public health
Understand the key health issues of your community
Inform authorities of 'notifiable diseases'
Understand disease outbreak management (ADV.)

Infection control
Understand prudent antibiotic/antiviral selection
Practice correct hand-washing and aseptic techniques
Always use methods to minimise transmission of infection between patients

Radiation safety
Know the risks associated with exposure to radiological investigations & procedures
Order radiological investigations & procedures appropriately
Regularly evaluate your ordering of radiological investigations & procedures (ADV.)

Medication safety
Know the medications most commonly involved in prescribing & administration errors
Prescribe & administer medications safely
Routinely report medication errors & near misses in accordance with local requirements

Patient Management

Management Options
Understand the management options for the listed problems & conditions
Develop, implement & evaluate a plan of management relevant to a patient's problems or conditions
Understand the importance of considering different management options

Therapeutics
Understand the actions, indications, contraindications & adverse effects of medications
Recognise the role of nurses, pharmacists & allied health professionals in medication management
Evaluate the outcomes of medication therapy (ADV.)

Pain management
Understand the hierarchy of therapies & options for pain control
Appreciate that pain therapies need to be matched to the patient's analgesia requirements
Develop, implement & evaluate a plan of timely pain control appropriate to a patient's needs (ADV.)

Fluid & electrolyte management
Demonstrate a knowledge of patient fluid & electrolyte requirements in all age groups
Understand the risks of gross fluid & electrolyte imbalance
Develop, implement & evaluate an individualised plan of fluid & electrolyte management (ADV.)

Subacute care
Know the services available to patients for subacute care
Understand the indications & implications of a change to a palliative approach to management
Identify patients suitable for aged care & rehabilitation programs

Ambulatory & community care
Know the services available to patients outside of the inpatient setting
Identify patients suitable for ambulatory & community care programs
Recognise that patient care can be provided in different settings

Discharge planning
Know the elements of effective discharge planning e.g. early, continuous, multidisciplinary
Follow organisational guidelines to ensure smooth discharge
Understand indications for & regulatory requirements of various levels of residential care (ADV.)

Patient Assessment

Patient identification
Know the stages of a verification process to ensure the correct identification of a patient
Comply with the organisation's procedures for avoiding patient misidentification
Always confirm with others the correct identification of a patient

History & Examination
Know the modes of presentation of the listed problems and conditions
Elicit symptoms & signs relevant to the presenting problem or condition
Understand the importance of a comprehensive patient assessment

Problem formulation
Know the possible differential diagnoses relevant to a patient's presenting problems or conditions
Use information gained from assessment to generate a ranked problem list & provisional diagnosis
Regularly re-evaluate the patient problem list as part of your clinical reasoning

Investigations
Identify & understand the investigations relevant to a patient's presenting problems or conditions
Select investigations thoughtfully in the context of a particular patient presentation
Use investigation results appropriately to guide patient management

Referral & consultation
Understand the criteria for referral or consultation relevant to a particular problem or condition
Identify & provide relevant & succinct information
Recognise the role of other health professionals in patient assessment

Common Problems & Conditions

LIST OF COMMON PROBLEMS & CONDITIONS

This list (see over) includes acute and chronic conditions and, unless otherwise specified, applies to patients of all ages.

The listed conditions are neither EXHAUSTIVE nor MANDATORY. They are provided to GUIDE learning and the construction of suitable junior doctor terms.

Emergencies

Assessment
Understand the abnormal physiology & manifestations of critical illness
Recognise & assess acutely ill, deteriorating or dying patients
Recognise that resuscitation may need to precede full assessment

Prioritisation
Understand the principles of medical triage
Identify patients who require immediate resuscitation & when to call for help e.g. Code Blue / MET
Provide clinical care in order of medical priority

Basic Life Support
Understand the theory of basic airway management, ventilatory & circulatory support
Demonstrate competency in basic airway management, ventilatory & circulatory support
Demonstrate competency in the use of semi-automatic or automatic defibrillators

Advanced Life Support
Practice advanced airway management including the use of laryngeal mask
Recognise malignant arrhythmias, use resuscitation/drug protocols & manual defibrillation
Participate in decision-making & debriefing regarding cessation of resuscitation

Acute patient transfer
Understand the risks inherent in patient transfer
Identify and manage factors that need to be addressed prior to transfer (ADV.)
Acknowledge the importance of maintaining or increasing the level of care during transport (ADV.)

Skills & Procedures

Decision-making
Know the indications & contraindications for the listed procedures
Select patients appropriately for the listed procedures
Provide a full explanation of the proposed procedure to the patient

Informed consent
Understand the principles of informed consent
Always apply the principles of informed consent in day to day clinical practice
Recognise that informed consent may need to be obtained by a senior clinician e.g. major procedures

Preparation & anaesthesia
Provide appropriate sedation and/or premedication
Prepare & position the patient appropriately
Arrange local, regional or general anaesthesia as appropriate

Procedures
Arrange appropriate equipment & understand its use
Arrange appropriate support staff & define their roles
Know & practice the appropriate technique

Post-procedure
Monitor the patient & provide appropriate analgesia & aftercare
Identify & manage common complications
Interpret results & evaluate outcomes of treatment

LIST OF SKILLS & PROCEDURES

Doctors should be able to provide safe treatment to patients through competently performing certain procedural and/or assessment skills (see over).

The listed skills are neither EXHAUSTIVE nor MANDATORY. They are provided to GUIDE learning in the clinical workplace during the prevocational years.


Australian Curriculum Framework for Junior Doctors
Communication
Professionalism
Patient Interaction
Context
Understand the impact of the environment on communication, e.g. privacy, location
Use good communication and know its role in effective healthcare relationships
Develop strategies to deal with the difficult or vulnerable patient
Respect
Treat patients courteously & respectfully, showing awareness & sensitivity to different backgrounds
Maintain privacy & confidentiality
Provide clear & honest information to patients & respect their treatment choices
Providing information
Understand the principles of good communication e.g. active listening, the role of information overload
Communicate with patients & carers in ways they understand e.g. use interpreters, diagrams, less jargon
Involve patients in discussions about their care
Meetings with families or carers
Understand the impact of family dynamics on effective communication
Ensure relevant family/carers are included appropriately in meetings and decision-making
Respect the role of families in patient health care
Breaking bad news
Understand loss & bereavement
Participate in breaking bad news to patients & carers
Show empathy & compassion
Open disclosure
Understand the principles of 'open disclosure'
Ensure patients are supported & cared for after an adverse event
Show understanding to patients following adverse events
Complaints
Understand the factors likely to lead to complaints
Respond appropriately to complaints using the local procedures
Adopt behaviours to prevent complaints
Doctor & Society
Access to healthcare
Understand how physical or cognitive disability can limit access to healthcare services
Provide access to culturally appropriate healthcare
Adopt a non-discriminatory approach to patient care
Culture, society & healthcare
Understand the social, economic & political factors in patient illness
Understand the impact of culture, ethnicity & spirituality on health
Identify your own cultural values that may impact on your role as a doctor
Indigenous patients
Understand the impact of history & the experience of Indigenous Australians on presentations
Understand Indigenous Australians' spirituality & relationship to the land
Appreciate the diversity of indigenous cultures, experiences & communities
Professional standards
Understand the legal requirements of being a doctor
Adhere to professional standards
Respect patient privacy & confidentiality
Medicine & the law
Understand the legal requirements in patient care e.g. Mental Health Act, death certification
Complete medico-legal documentation appropriately
Liaise with legal & statutory authorities, including mandatory reporting where applicable (ADV.)
Health promotion
Understand environmental & lifestyle risks to health & advocate for healthy lifestyles
Demonstrate a non-judgemental approach to patients & their lifestyle choices
Consider the positive & negative aspects of health screening & prevention (ADV.)
Healthcare resources
Use healthcare resources wisely to achieve the best outcomes
Understand that healthcare is a finite resource
Understand the nature & costs of the healthcare system (ADV.)
Managing Information
Written
Understand & comply with organisational policies regarding timely and accurate documentation
Demonstrate high quality written skills e.g. legible, concise & informative discharge summaries
Understand the structure & content of correspondence & orders e.g. referrals, investigation requests
Electronic
Understand the uses & limitations of electronic patient information & decision-support systems
Use electronic resources in patient care e.g. obtain results, discharge summaries, pharmacopoeia
Understand & comply with policies regarding information technology e.g. passwords, e-mail & internet
Prescribing
Know how to accurately communicate prescriptions
Accurately document drug prescription and administration
Recognise that prescribing is a form of communication within the healthcare team
Health records
Understand legal/institutional requirements for health records
Understand the role of the health record in continuity of care
Recognise that accurate documentation is necessary for appropriate coding & classification
Evidence-based practice
Know the principles of evidence-based practice & hierarchy of evidence
Use best available evidence in clinical decision-making
Critically appraise evidence & information (ADV.)
Handover
Understand the importance of handover in patient safety & continuity of care
Perform effective handover e.g. team-member to team-member, hospital to GP
Understand the consequences of ineffective handover
Professional Behaviour
Professional responsibility
Know the professional responsibilities relevant to your position
Demonstrate an appropriate standard of professional practice & work within personal capabilities
Reflect on personal experiences, actions & decision-making
Time Management
Understand how time management impacts on patient care & hospital function
Demonstrate an ability to prioritise daily workload & multiple demands
Demonstrate punctuality in the workplace
Personal well-being
Understand the personal health risks of medical practice e.g. fatigue, stress, needle-stick injuries
Be aware of and optimise personal health & well-being
Recognise the potential risk to others from your own health status
Ethical practice
Recognise the ethical complexity of practice & follow professional & ethical codes
Consult colleagues about ethical concerns
Accept responsibility for ethical decisions
Practitioner in difficulty
Know the support services available
Recognise the signs of a practitioner in difficulty
Refer appropriately & respond with empathy
Doctors as leaders
Understand the leadership role that may be required of a doctor
Understand what makes a good leader e.g. vision, strength, humility
Show an ability to work well with and lead others
Working in Teams
Team structure
Identify the different types of healthcare team e.g. medical team, multidisciplinary stroke team
Include the patient & carers in the team where possible
Respect the leadership role within a team e.g. nurse unit manager, trauma resuscitation leader
Team dynamics
Understand the characteristics of effective teams
Demonstrate an ability to work with others and resolve conflicts when they arise
Demonstrate flexibility & preparedness to change
Teams in action
Understand & respect the roles & responsibilities of team members
Participate fully in teams, recognising that teams extend outside the hospital e.g. GP, HITH
Demonstrate preparedness to adopt a variety of roles within a team (ADV.)
Case presentation
Understand the structure of an effective case presentation
Demonstrate an ability to present cases to senior medical staff & other health professionals
Recognise the importance of case presentation in patient care
Teaching & Learning
Self-directed learning
Identify & address personal learning needs
Understand common research methodologies
Demonstrate commitment to continuous learning
Teaching
Identify varied approaches to teaching & learning
Incorporate teaching into professional practice
Seek feedback on teaching
Supervision
Understand the elements of good supervision
Seek & provide supervision & feedback
Participate in assessment & appraisal
Career development
Know the career options available within medicine
Explore career opportunities
Be open to various career opportunities

Australian Curriculum Framework for Junior Doctors

Common Problems & Conditions

Doctors should be able to appropriately assess patients presenting with common, important conditions, including the accurate identification of symptoms, signs and/or problems and their differential diagnosis and then use that information to further manage the patient, consistent with their level of responsibility:

- Abdominal pain
- Asthma
- Cough
- Addiction (smoking, alcohol, drug)
- Anaphylaxis
- Bleeding in the 1st trimester
- Breathlessness
- Cardiac Arrhythmias
- Chest pain
- Child abuse
- Chronic Obst. Pulmonary Disease
- Coma
- Cognitive or physical disability
- Constipation
- Deliberate self-harm
- Delirium
- Dementia
- Depression and anxiety
- Diabetes: new cases/complications
- Diarrhoea
- Disturbed or aggressive patient
- Domestic violence
- Dysuria &/or frequent micturition
- Elder abuse
- Envenomation
- Falls, especially in the elderly
- Functional decline or impairment
- Gastrointestinal bleeding
- Genetically determined conditions
- Headache
- Heart failure
- Hypertension
- Ischaemic heart disease
- Injury
- Joint disorders
- Leg ulcers
- Limb ischaemia
- Liver disease
- Loss of consciousness
- Minor trauma
- Multiple trauma
- Neoplasia
- Non-accidental injury
- Non-specific febrile illness
- Pneumonia/respiratory infection
- Poisoning
- Post-operative care
- Psychosis
- Pyelonephritis and UTIs
- Reduced urinary output
- Renal failure
- Septicaemia
- Sexually Transmitted Infections
- Seizure disorders
- Spinal disease
- Stroke / TIA
- Subarachnoid haemorrhage
- Substance abuse
- Tiredness/Anaemia
- Upper airway obstruction
- Urinary Incontinence
- Weight gain
- Weight loss

Skills & Procedures

Doctors should be able to provide safe treatment to patients through competently performing certain procedural and/or assessment skills (ADV. = ADVANCED i.e. more likely to be learnt in PGY2 or above):

GENERAL

Measurement

- Blood pressure measurement
- Pulse oximetry reading
- Temperature measurement

Intravenous

- Venepuncture
- Intravenous cannulation
- Intravenous infusion set up
- Intravenous drug administration
- Intravenous fluid & electrolyte therapy

Diagnostic

- Blood sugar estimation
- Blood culture
- Wound swab

Respiratory

- Oxygen therapy
- Nebuliser/inhaler therapy

Therapeutics

- Anticoagulant prescription/monitoring
- Antibiotic prescription/monitoring
- Insulin prescription/monitoring

Injections

- Intramuscular injections
- Subcutaneous injections
- Joint aspiration or injection (ADV.)

CARDIOPULMONARY

- 12 lead electrocardiogram
- Arterial blood gas sampling
- Peak flow measurement
- Spirometry
- Pleural effusion/pneumothorax aspiration
- Central venous line insertion (ADV.)

GASTROINTESTINAL

- Nasogastric tube insertion
- Rectal examination
- Faecal occult blood analysis
- Anoscopy/proctoscopy (ADV.)
- Abdominal paracentesis (ADV.)

NEUROLOGICAL

- Glasgow Coma Score estimation
- Neck stiffness testing
- Focal neurological sign identification
- Papilloedema identification (ADV.)
- Lumbar puncture (ADV.)

MENTAL HEALTH

- Mini-mental state examination
- Psychiatric Mental State Examination
- Suicide risk assessment
- Alcohol withdrawal scale use
- Application of Mental Health Schedule

WOMEN'S HEALTH

- Fundal height assessment
- Foetal heart sound detection
- Urine pregnancy testing
- Speculum examination
- Endocervical swab / PAP smear (ADV.)
- Gynaecological pelvic examination (ADV.)

CHILD HEALTH

- Infant respiratory distress assessment
- Infant/child dehydration assessment
- Apgar score estimation
- Newborn examination (ADV.)
- Neonatal CPR (ADV.)

SURGICAL

- Scrub, gown & glove
- Assisting in the operating theatre
- Surgical knots & simple wound suturing
- Local anaesthesia
- Simple skin lesion excision
- Wound management
- Suture removal
- Complex wound suturing (ADV.)

EAR, NOSE & THROAT

- Throat swab
- Anterior rhinoscopy
- Anterior nasal pack insertion
- Auroscopy/otoscopy
- External auditory canal irrigation
- Ext. aud. canal ear wick insertion (ADV.)

OPHTHALMIC

- Visual field assessment
- Visual acuity assessment
- Direct ophthalmoscopy
- Eye drop administration
- Eye bandage application
- Eye irrigation
- Eyelid eversion

OPHTHALMIC cont'd.

- Corneal foreign body removal
- Intraocular pressure estimation (ADV.)
- Slit lamp examination (ADV.)

UROGENITAL

- Bladder catheterisation (M&F)
- Urine dipstick testing
- Urethral swab

TRAUMA

- Primary trauma survey
- In-line immobilisation of cervical spine
- Cervical collar application
- Pressure haemostasis
- Volume resuscitation
- Peripheral neurovascular assessment
- Plaster cast/splint limb immobilisation
- Joint relocation
- Secondary trauma survey (ADV.)
- Intercostal catheter insertion (ADV.)

• Reviewing positions, rosters and opportunities for teaching in hospitals, practices and other clinical settings in the context of the curriculum framework.

• Identifying valid and reliable assessment tools that can be used in the workplace without placing undue burdens on junior medical staff and their supervisors. In the first instance, this may be achieved through the development of standardised term assessment reports that refer to the major headings of the curriculum framework.

It is essential that junior doctors themselves are closely involved in this work, and that adequate resources are allocated by the federal, state and territory governments to support the implementation of the Australian Curriculum Framework for Junior Doctors.[12]

Website

The Australian Curriculum Framework for Junior Doctors is available at the CPMEC website (http://www.cpmec.org.au/curriculum).

Competing interests

All the authors were members of the writing group and had their travel and accommodation expenses for writing group meetings paid for by the New South Wales Institute of Medical Education and Training, Medical Training Review Panel National Core Curriculum Project. Ian Graham was contracted as a consultant to the project to facilitate the meetings and design the draft curriculum framework.

Author details

Ian S Graham, MB BS, MHP, FRACMA, Medical Director[1] and Director[2]
Andrew J Gleason, MB BS(Hons), BSc, Hospital Medical Officer[3]
Gregory W Keogh, MB BS, FRACS, Deputy Director[4] and Surgeon[5]
Deborah Paltridge, BApplSci(Phyt), MHSc(Ed), Director of Medical Education[6]
Ian R Rogers, MB BS, FACEM, Director of Postgraduate Medical Education and Research[7] and Associate Professor of Emergency Medicine[8]
Merrilyn Walton, BA, MSW, PhD, Chair Prevocational Training Council[4] and Associate Professor of Medical Education[9]
Caroline De Paola, PhD, Project Officer and Former Prevocational Stream Manager[4]
Jagdishwar Singh, PhD, National Manager[10]
Barry P McGrath, MB BS, MD, FRACP, Chair[10] and Professor of Medicine[11]

1 Postgraduate Medical Council of Victoria, Melbourne, VIC.
2 SED Health Consulting, Ballarat, VIC.
3 The Alfred Hospital, Melbourne, VIC.

4 NSW Institute of Medical Education and Training, Sydney, NSW.
5 Prince of Wales Hospital, Sydney, NSW.
6 St Vincent's Health, Melbourne, VIC.
7 Sir Charles Gairdner Hospital, Perth, WA.
8 University of Western Australia, Perth, WA.
9 University of Sydney, Sydney, NSW.
10 Confederation of Postgraduate Medical Education Councils, Melbourne, VIC.
11 Monash University, Melbourne, VIC.
Correspondence: grahyde@netconnect.com.au

References

1 McGrath BP, Graham IS, Crotty BJ, Jolly BC. Lack of integration of medical education in Australia: the need for change. *Med J Aust* 2006; 184: 346-348.
2 Medical Training Review Panel — ninth report. Canberra: Australian Government Department of Health and Ageing, November 2005: 87. http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-workforce-education-mtrp9thr.htm (accessed Feb 2007).
3 Postgraduate Medical Council of New South Wales. Core curriculum for PGY1s and PGY2s. Sydney: PMCNSW, 2004.
4 Postgraduate Medical Council of South Australia. Intern curriculum framework. Adelaide: PMCSA, 2005.
5 Postgraduate Medical Council of Western Australia. Western Australian junior doctor curriculum — guidelines for teaching and learning: post-graduate years 1 and 2. Perth: PMCWA, 2006.
6 Foundation Programme Committee of the Academy of Medical Royal Colleges, in co-operation with Modernising Medical Careers in the Departments of Health. Curriculum for the foundation years in postgraduate education and training. 2005. http://www.dh.gov.uk/assetRoot/04/10/76/96/04107696.pdf (accessed Feb 2007).
7 Frank JR, editor. The CanMEDS 2005 physician competency framework. Ottawa: The Royal College of Physicians and Surgeons of Canada, 2005. http://www.rcpsc.medical.org/canmeds/CanMEDS2005/CanMEDS2005_e.pdf (accessed Feb 2007).
8 Grayson H. Concept mapping and curriculum design. Chattanooga: The University of Tennessee at Chattanooga, 1998. http://www.utc.edu/Administration/WalkerTeachingResourceCenter/FacultyDevelopment/ConceptMapping/ (accessed Feb 2007).
9 Van Neste-Kenny J, Cragg CE, Foulds B. Using concept maps and visual representations for collaborative curriculum development. *Nurse Educator* 1998; 23: 21-25.
10 Australian Council for Safety and Quality in Health Care. The framework documents. National patient safety education framework, 2005. http://www.patientsafety.org.au/pdfdocs/national_patient_safety_education_framework.pdf (accessed Feb 2007).
11 Phillips G, on behalf of The Project Steering Committee. Committee of Deans of Australian Medical Schools. CDAMS Indigenous health curriculum framework. Melbourne: Onemda VicHealth Koori Health and Community Development Unit, University of Melbourne, 2004. http://www.medicaldeans.org.au/pdf/CDAMS%20Indigenous%20Health%20Curriculum%20Framework.pdf (accessed Feb 2007).
12 Gleason AJ, Daly JO, Blackham RE. Prevocational medical training and the Australian Curriculum Framework for Junior Doctors: a junior doctor perspective. *Med J Aust* 2007; 186: 114-116.

(Received 17 Dec 2006, accepted 11 Feb 2007) ❑