

Accreditation Standards for Primary Medical Education Providers and their Program of Study and Graduate Outcome Statements

Graduate Outcome Statements

Overview

A thematic framework has been used to organise the Australian Medical Council's Graduate Outcome Statements into four domains. These domains collectively provide the requirements that students must demonstrate at graduation. The outcomes contained in each domain are necessarily interlinked when students enter clinical practice.

The domain framework is a reference for medical education providers. A number of providers have similar frameworks and it is not envisaged that all providers will necessarily organise their curriculum themes in this way. Providers will need to demonstrate how their program enables their graduates to meet the outcomes, which specify what the Australian Medical Council expects the provider to achieve and the health service employer expects the graduate to deliver. Each provider in their own context may wish to enable their graduates to demonstrate additional outcomes to the ones specified.

The four domains are:

1. *Science and Scholarship: the medical graduate as scientist and scholar*
2. *Clinical Practice: the medical graduate as practitioner*
3. *Health and Society: the medical graduate as a health advocate*
4. *Professionalism and Leadership: the medical graduate as a professional and leader*

It is important that the Graduate Outcome Statements are interpreted according to the level of training and experience that will have been gained by an entry-level practitioner. Graduates will not possess the clinical experience, leadership skills or advocacy skills of an experienced practitioner; but they will need the foundation upon which to be thoroughly prepared for internship and for building and developing their expertise in all fields of the profession.

Clearly medical education is a continuum, and many of the outcomes specified will be reflected further in outcomes expected from early postgraduate training and throughout a medical career, as new graduates continue to develop their clinical abilities.

Domain 1

Science and Scholarship: the medical graduate as scientist and scholar

On entry to professional practice, Australian and New Zealand graduates are able to:

- 1.1 Demonstrate an understanding of established and evolving biological, clinical, epidemiological, social, and behavioural sciences.
- 1.2 Apply core medical and scientific knowledge to individual patients, populations and health systems.
- 1.3 Describe the aetiology, pathology, clinical features, natural history and prognosis of common and important presentations at all stages of life.
- 1.4 Access, critically appraise, interpret and apply evidence from the medical and scientific literature.
- 1.5 Apply knowledge of common scientific methods to formulate relevant research questions and select applicable study designs.
- 1.6 Demonstrate a commitment to excellence, evidence based practice and the generation of new scientific knowledge.

Domain 2

Clinical Practice: the medical graduate as practitioner

On entry to professional practice, Australian and New Zealand graduates are able to:

- 2.1 Demonstrate by listening, sharing and responding, the ability to communicate clearly, sensitively and effectively with patients, their family/carers, doctors and other health professionals.
- 2.2 Elicit an accurate, organised and problem-focussed medical history, including family and social occupational and lifestyle features, from the patient, and other sources.
- 2.3 Perform a full and accurate physical examination, including a mental state examination, or a problem-focused examination as indicated.
- 2.4 Integrate and interpret findings from the history and examination, to arrive at an initial assessment including a relevant differential diagnosis. Discriminate between possible differential diagnoses, justify the decisions taken and describe the processes for evaluating these.
- 2.5 Select and justify common investigations, with regard to the pathological basis of disease, utility, safety and cost effectiveness, and interpret their results.
- 2.6 Select and perform safely a range of common procedural skills.
- 2.7 Make clinical judgements and decisions based on the available evidence. Identify and justify relevant management options alone or in conjunction with colleagues, according to level of training and experience.
- 2.8 Elicit patients' questions and their views, concerns and preferences, promote rapport, and ensure patients' full understanding of their problem(s). Involve patients in decision-making and planning their treatment, including communicating risk and benefits of management options.

- 2.9 Provide information to patients, and family/carers where relevant, to enable them to make a fully informed choice among various diagnostic, therapeutic and management options.
- 2.10 Integrate prevention, early detection, health maintenance and chronic condition management where relevant into clinical practice.
- 2.11 Prescribe medications safely, effectively and economically using objective evidence. Safely administer other therapeutic agents including fluid, electrolytes, blood products and selected inhalational agents.
- 2.12 Recognise and assess deteriorating and critically unwell patients who require immediate care. Perform common emergency and life support procedures, including caring for the unconscious patient and performing CPR.
- 2.13 Describe the principles of care for patients at the end of their lives, avoiding unnecessary investigations or treatment, and ensuring physical comfort including pain relief, psychosocial support and other components of palliative care.
- 2.14 Place the needs and safety of patients at the centre of the care process. Demonstrate safety skills including infection control, graded assertiveness, adverse event reporting and effective clinical handover.
- 2.15 Retrieve, interpret and record information effectively in clinical data systems (both paper and electronic).

Domain 3

Health and Society: the medical graduate as a health advocate

On entry to professional practice, Australian and New Zealand graduates are able to:

- 3.1 Accept responsibility to protect and advance the health and wellbeing of individuals, communities and populations.
- 3.2 Explain factors that contribute to the health, illness, disease and success of treatment of populations, including issues relating to health inequities and inequalities, diversity of cultural, spiritual and community values, and socio-economic and physical environment factors.
- 3.3 Communicate effectively in wider roles including health advocacy, teaching, assessing and appraising.
- 3.4 Understand and describe the factors that contribute to the health and wellbeing of Aboriginal and Torres Strait Islander peoples and/or Māori, including history, spirituality and relationship to land, diversity of cultures and communities, epidemiology, social and political determinants of health and health experiences. Demonstrate effective and culturally competent communication and care for Aboriginal and Torres Strait Islander peoples and/or Māori.
- 3.5 Explain and evaluate common population health screening and prevention approaches, including the use of technology for surveillance and monitoring of the health status of populations. Explain environmental and lifestyle health risks and advocate for healthy lifestyle choices.
- 3.6 Describe a systems approach to improving the quality and safety of health care.

- 3.7 Understand and describe the roles and relationships between health agencies and services, and explain the principles of efficient and equitable allocation of finite resources, to meet individual, community and national health needs.
- 3.8 Describe the attributes of the national systems of health care including those that pertain to the health care of Aboriginal and Torres Strait Islander peoples and/or Maori.
- 3.9 Demonstrate an understanding of global health issues and determinants of health and disease including their relevance to health care delivery in Australia and New Zealand and the broader Western Pacific region.

Domain 4

Professionalism and Leadership: the medical graduate as a professional and leader

On entry to professional practice, Australian and New Zealand graduates are able to:

- 4.1 Provide care to all patients according to “*Good Medical Practice: A Code of Conduct for Doctors in Australia*” and “*Good Medical Practice: A Guide for Doctors*” in New Zealand.
- 4.2 Demonstrate professional values including commitment to high quality clinical standards, compassion, empathy and respect for all patients. Demonstrate the qualities of integrity, honesty, leadership and partnership to patients, the profession and society.
- 4.3 Describe the principles and practice of professionalism and leadership in health care.
- 4.4 Explain the main principles of ethical practice and apply these to learning scenarios in clinical practice. Communicate effectively about ethical issues with patients, family and other health care professionals.
- 4.5 Demonstrate awareness of factors that affect doctors’ health and wellbeing, including fatigue, stress management and infection control, to mitigate health risks of professional practice. Recognise their own health needs, when to consult and follow advice of a health professional and identify risks posed to patients by their own health.
- 4.6 Identify the boundaries that define professional and therapeutic relationships and demonstrate respect for these in clinical practice.
- 4.7 Demonstrate awareness of and explain the options available when personal values or beliefs may influence patient care, including the obligation to refer to another practitioner.
- 4.8 Describe and respect the roles and expertise of other health care professionals, and demonstrate ability to learn and work effectively as a member of an inter-professional team or other professional group.
- 4.9 Self-evaluate their own professional practice; demonstrate lifelong learning behaviours and fundamental skills in educating colleagues. Recognise the limits of their own expertise and involve other professionals as needed to contribute to patient care.
- 4.10 Describe and apply the fundamental legal responsibilities of health professionals especially those relating to ability to complete relevant certificates and documents, informed consent, duty of care to patients and colleagues, privacy, confidentiality, mandatory reporting and notification. Demonstrate awareness of financial and other conflicts of interest.

Accreditation Standards for Primary Medical Education Providers and their Program of Study

Standard 1: The Context of the Medical Program

1.1 Governance

- 1.1.1 The medical education provider's governance structures and functions are defined and understood by those delivering the medical program, as relevant to each position. The definition encompasses the provider's relationships with internal units such as campuses and clinical schools and with the higher education institution.
- 1.1.2 The governance structures set out, for each committee, the composition, terms of reference, powers and reporting relationships, and allow relevant groups to be represented in decision-making.
- 1.1.3 The medical education provider consults relevant groups on key issues relating to its purpose, the curriculum, graduate outcomes and governance.

1.2 Leadership and Autonomy

- 1.2.1 The medical education provider has autonomy to design and develop the medical program.
- 1.2.2 The responsibilities of the academic head of the medical school for the medical program are clearly stated.

1.3 Medical Program Management

- 1.3.1 The medical education provider has a committee or similar entity with the responsibility, authority and capacity to plan, implement and review the curriculum to achieve the objectives of the medical program.
- 1.3.2 The medical education provider assesses the level of qualification offered against any national standards.

1.4 Educational Expertise

- 1.4.1 The medical education provider uses educational expertise, including that of Indigenous peoples, in the development and management of the medical program.

1.5 Educational Budget & Resource Allocation

- 1.5.1 The medical education provider has an identified line of responsibility and authority for the medical program.
- 1.5.2 The medical education provider has autonomy to direct resources in order to achieve its purpose and the objectives of the medical program.
- 1.5.3 The medical education provider has the financial resources and financial management capacity to sustain its medical program.

1.6 Interaction with Health Sector and Society

1.6.1 The medical education provider has effective partnerships with health-related sectors of society and government, and relevant organisations and communities, to promote the education and training of medical graduates. These partnerships are underpinned by formal agreements.

1.6.2 The medical education provider has effective partnerships with relevant local communities, organisations and individuals in the Indigenous health sector to promote the education and training of medical graduates. These partnerships recognise the unique challenges faced by this sector.

1.7 Research and Scholarship

1.7.1 The medical education provider is active in research and scholarship, which informs learning and teaching in the medical program.

1.8 Staff Resources

1.8.1 The medical education provider has the staff necessary to deliver the medical program.

1.8.2 The medical education provider has an appropriate profile of administrative and technical staff to support the implementation of the medical program and other activities, and to manage and deploy its resources.

1.8.3 The medical education provider actively recruits, trains and supports Indigenous staff.

1.8.4 The medical education provider follows appropriate recruitment, support, and training processes for patients and community members formally engaged in planned learning and teaching activities.

1.8.5 The medical education provider ensures arrangements are in place for indemnification of staff with regard to their involvement in the development and delivery of the medical program.

1.9 Staff Appointment, Promotion & Development

1.9.1 The medical education provider's appointment and promotion policies for academic staff address a balance of capacity for teaching, research and service functions.

1.9.2 The medical education provider has processes for development and appraisal of administrative, technical and academic staff, including clinical title holders and those staff who hold a joint appointment with another body.

Standard 2: The Outcomes of the Medical Program

Graduate outcomes are overarching statements reflecting the desired abilities of graduates in a specific discipline at exit from the degree. These essential abilities are written as global educational statements and provide direction and clarity for the development of curriculum content, teaching and learning approaches and the assessment program. They also guide the relevant governance structures that provide appropriate oversight, resource and financial allocations.

The AMC acknowledges that each provider will have graduate attribute statements that are relevant to the vision and purpose of the medical program. The AMC provides graduate outcomes specific to entry to medicine in the first postgraduate year.

A thematic framework is used to organise the AMC graduate outcomes into four domains:

1. Science and Scholarship: the medical graduate as scientist and scholar
2. Clinical Practice: the medical graduate as practitioner
3. Health and Society: the medical graduate as a health advocate
4. Professionalism and Leadership: the medical graduate as a professional and leader

2.1 Purpose

- 2.1.1 The medical education provider has defined its purpose, which includes learning, teaching, research, societal and community responsibilities.
- 2.1.2 The medical education provider's purpose addresses Aboriginal and Torres Strait Islander peoples and/or Maori and their health.
- 2.1.3 The medical education provider has defined its purpose in consultation with stakeholders.
- 2.1.4 The medical education provider relates its teaching, service and research activities to the health care needs of the communities it serves.

2.2 Medical Program Outcomes

- 2.2.1 The medical education provider has defined graduate outcomes consistent with the AMC Graduate Outcome Statements and has related them to its purpose.
- 2.2.2 The medical program outcomes are consistent with the AMC's goal for medical education, to develop junior doctors who are competent to practise safely and effectively under supervision as interns in Australia or New Zealand, and who have an appropriate foundation for lifelong learning and for further training in any branch of medicine.
- 2.2.3 The medical program achieves comparable outcomes through comparable educational experiences and equivalent methods of assessment across all instructional sites within a given discipline.

Standard 3: The Medical Curriculum

3.1 Duration of the medical program

The medical program is of sufficient duration to ensure that the defined graduate outcomes can be achieved.

3.2 The content of the curriculum

The curriculum content ensures that graduates can demonstrate all of the specified AMC graduate outcomes.

3.2.1 Science and Scholarship: The medical graduate as scientist and scholar

The curriculum includes the scientific foundations of medicine to equip graduates for evidence-based practice and the scholarly development of medical knowledge.

3.2.2 Clinical Practice: The medical graduate as practitioner

The curriculum contains the foundation communication, clinical, diagnostic, management and procedural skills to enable graduates to assume responsibility for safe patient care at entry to the profession.

3.2.3 Health & Society: The medical graduate as a health advocate

The curriculum prepares graduates to protect and advance the health and wellbeing of individuals, communities and populations.

3.2.4 Professionalism and Leadership: The medical graduate as a professional and leader

The curriculum ensures graduates are effectively prepared for their roles as professionals and leaders.

3.3 Curriculum design

There is evidence of purposeful curriculum design which demonstrates horizontal and vertical integration and articulation with subsequent stages of training.

3.4 Curriculum description

The medical education provider has developed and effectively communicated specific learning outcomes or objectives describing what is expected of students at each stage of the medical program.

3.5 Indigenous Health

The medical program provides curriculum coverage of Indigenous Health (studies of the history, culture and health of the Indigenous peoples of Australia or New Zealand).

3.6 Opportunities for choice to promote breadth and diversity

There are opportunities for students to pursue studies of choice that promote breadth and diversity of experience.

Standard 4: Learning and Teaching

- 4.1 The medical education provider employs a range of learning and teaching methods to meet the outcomes of the medical program.
- 4.2 The medical program encourages students to evaluate and take responsibility for their own learning, and prepares them for lifelong learning.
- 4.3 The medical program enables students to develop core skills before they use these skills in a clinical setting.
- 4.4 Students have sufficient supervised involvement with patients to develop their clinical skills to the required level and with an increasing level of participation in clinical care as they proceed through the medical program.
- 4.5 The medical program promotes role modelling as a learning method, particularly in clinical practice and research.
- 4.6 Learning and teaching methods in the clinical environment promote the concepts of patient centred care and collaborative engagement.
- 4.7 The medical program ensures that students work with, and learn from and about other health professionals, including experience working and learning in interprofessional teams.

Standard 5: The Curriculum – Assessment of Student Learning

5.1 Assessment Approach

- 5.1.1 The medical education provider's assessment policy describes its assessment philosophy, principles, practices and rules. The assessment aligns with learning outcomes and is based on the principles of objectivity, fairness and transparency.
- 5.1.2 The medical education provider clearly documents its assessment and progression requirements. These documents are accessible to all staff and students.
- 5.1.3 The medical education provider ensures a balance of formative and summative assessments.

5.2 Assessment Methods

- 5.2.1 The medical education provider assesses students throughout the medical program, using fit for purpose assessment methods and formats to assess the intended learning outcomes.
- 5.2.2 The medical education provider has a blueprint to guide the assessment of students for each year or phase of the medical program.
- 5.2.3 The medical education provider uses validated methods of standard setting.

5.3 Assessment Feedback

- 5.3.1. The medical education provider has processes for timely identification of underperforming students and implementing remediation.
- 5.3.2 The medical education provider facilitates regular feedback to students following assessments to guide their learning.
- 5.3.3 The medical education provider gives feedback to supervisors and teachers on student cohort performance.

5.4 Assessment Quality

- 5.4.1 The medical education provider regularly reviews its program of assessment including assessment policies and practices such as blueprinting and standard setting, psychometric data, quality of data, and attrition rates.
- 5.4.2 The medical education provider ensures that the scope of the assessment practices, processes and standards is consistent across its teaching sites.

Standard 6: The Curriculum – Monitoring

6.1 Monitoring

- 6.1.1 The medical education provider regularly monitors and reviews its medical program including curriculum content, quality of teaching and supervision, assessment and student progress decisions. It manages quickly and effectively concerns about, or risks to, the quality of any aspect of medical program.
- 6.1.2 The medical education provider systematically seeks teacher and student feedback, and analyses and uses the results of this feedback for monitoring and program development.
- 6.1.3 The medical education provider collaborates with other education providers in monitoring its medical program outcomes, teaching and learning methods, and assessment.

6.2 Outcome Evaluation

- 6.2.1 The medical education provider analyses the performance of cohorts of students and graduates in relation to the outcomes of the medical program.
- 6.2.2 The medical education provider evaluates the outcomes of the medical program.
- 6.2.3 The medical education provider examines performance in relation to student characteristics and feeds this data back to the committees responsible for student selection, curriculum and student support.

6.3 Feedback & Reporting

- 6.3.1 The results of outcome evaluation are reported through the governance and administration of the medical education provider and to academic staff and students.
- 6.3.2 The medical education provider makes evaluation results available to stakeholders with an interest in graduate outcomes, and considers their views in continuous renewal of the medical program.

Standard 7: Implementing the Curriculum – Students

7.1 Student Intake

- 7.1.1 The medical education provider has defined the size of the student intake in relation to its capacity to adequately resource the medical program at all stages.
- 7.1.2 The medical education provider has defined the nature of the student cohort, including targets for Aboriginal and Torres Strait Islander peoples and/or Maori students, rural origin students and students from under-represented groups, and international students.
- 7.1.3 The medical education provider complements targeted access schemes with appropriate infrastructure and support.

7.2 Admission Policy and Selection

- 7.2.1 The medical education provider has clear selection policy and processes that can be implemented and sustained in practice, that are consistently applied and that prevent discrimination and bias, other than explicit affirmative action.
- 7.2.2 The medical education provider has policies on the admission of students with disabilities and students with infectious diseases, including blood-borne viruses.
- 7.2.3 The medical education provider has specific admission, recruitment and retention policies for Aboriginal and Torres Strait Islander peoples and/or Maori.
- 7.2.4 Information about the selection process, including the mechanism for appeals is publicly available.

7.3 Student Support

- 7.3.1 The medical education provider offers a range of student support services including counselling, health, and academic advisory services to address students' financial social, cultural, personal, physical and mental health needs.
- 7.3.2 The medical education provider has mechanisms to identify and support students who require health and academic advisory services, including:
 - students with disabilities and students with infectious diseases, including blood-borne viruses.
 - students with mental health needs
 - students at risk of not completing the medical program
- 7.3.3 The medical education provider offers appropriate learning support for students with special needs including those coming from under-represented groups or admitted through schemes for increasing diversity.
- 7.3.4 The medical education provider separates student support and academic progression decision making.

7.4 Professionalism and Fitness to Practise

7.4.1 The medical education provider has policies and procedures for managing medical students whose impairment raises concerns about their fitness to practise medicine.

7.4.2 The medical education provider has policies and procedures for identifying and supporting medical students whose professional behaviour raises concerns about their fitness to practise medicine or ability to interact with patients.

7.5 Student Representation

7.5.1 The medical education provider has formal processes and structures that facilitate and support student representation in the governance of their program.

7.6 Student Indemnification and insurance

7.6.1 The medical education provider ensures that medical students are adequately indemnified and insured for all education activities.

Standard 8: Implementing the Curriculum – Learning Environment

8.1 Physical Facilities

- 8.1.1 The medical education provider ensures students and staff have access to safe and well-maintained physical facilities in all its teaching and learning sites in order to achieve the outcomes of the medical program.

8.2 Information Resources and Library Services

- 8.2.1 The medical education provider has sufficient information communication technology infrastructure and support systems to achieve the learning objectives of the medical program.
- 8.2.2 The medical education provider ensures students have access to the information communication technology applications required to facilitate their learning in the clinical environment.
- 8.2.3 Library resources available to staff and students include access to computer-based reference systems, support staff and a reference collection adequate to meet curriculum and research needs.

8.3 Clinical Learning Environment

- 8.3.1 The medical education provider ensures that the clinical learning environment offers students sufficient patient contact, and is appropriate to achieve the outcomes of the medical program and to prepare students for clinical practice.
- 8.3.2 The medical education provider has sufficient clinical teaching facilities to provide clinical experiences in a range of models of care and across metropolitan and rural health settings.
- 8.3.3 The medical education provider ensures the clinical learning environment provides students with experience in the provision of culturally competent health care to Aboriginal and Torres Strait Islander peoples and/or Maori.
- 8.3.4 The medical education provider actively engages with other health professional education providers whose activities may impact on the delivery of the curriculum to ensure its medical program has adequate clinical facilities and teaching capacity.

8.4 Clinical Supervision

- 8.4.1 The medical education provider ensures that there is an effective system of clinical supervision to ensure safe involvement of students in clinical practice.
- 8.4.2 The medical education provider supports clinical supervisors through orientation and training, and monitors their performance.
- 8.4.3 The medical education provider works with health care facilities to ensure staff have time allocated for teaching within clinical service requirements.
- 8.4.4 The medical education provider has defined the responsibilities of hospital and community practitioners who contribute to the delivery of the medical program and the responsibilities of the medical education provider to these practitioners.