

Discussion paper

**Changes to primary qualifications for
admission to practise medicine in
Australia: implications for AMC
accreditation**

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1 Background

From the introduction of the first graduate entry medical program in Australia in 1996, there has been significant diversity in the educational qualifications and experience of students admitted to a primary medical program in Australia. Irrespective of whether the medical program principally admits school leavers or uses graduate entry pathways, completion of a primary medical program has traditionally resulted in the award of a Bachelor Degree.

In 2011, Australia's first primary medical qualification set at Masters Degree level was introduced and the Australian Medical Council anticipates more medical programs may change to this level.

The Australian Medical Council, the accreditation authority for medical programs, assesses all medical programs, irrespective of the qualification awarded, against one set of accreditation standards. These standards are used to assess whether the medical program produces graduates who are competent to practise safely and effectively 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.

The AMC intends to continue to use one set of accreditation standards for its assessment of medical programs. In the accreditation of a medical program, the AMC does not review or comment on the qualification level awarded by the provider, and it is not suggested that this will change in the future.¹ However, these impending changes in the Australian medical education landscape have implications for the AMC's process for assessing medical schools in Australia and New Zealand.

1.1. Scope

The paper will address the following areas:

- the accreditation role of the Australian Medical Council
- the current structure of medical education in Australia
- the quality assurance framework for higher education in Australia
- the introduction of Masters Degree programs as primary qualifications for medicine in Australia as relates to Australian Medical Council accreditation
- implications of changes to the primary medical qualification for medical education and training
- impact on the Australian Medical Council accreditation process.

While the AMC accredits medical programs in both Australia and New Zealand, the focus of this paper is on developments in Australia, recognising that any changes to accreditation requirements will affect programs in both countries.

1.2. Context

The Australian Medical Council is an independent national standards and assessment body for medical education and training. Its purpose is to ensure that standards of education, training and assessment of the medical profession promote and protect the health of the

¹ This determination is the purview of a university, based on the specifications for each qualification type as outlined in the national standards; in Australia, the Australian Qualifications Framework.

Australian community. By agreement with the Medical Council of New Zealand it assesses and accredits medical programs in New Zealand.

As the independent accreditation authority for medical education, the Australian Medical Council's primary interest is a medical program's ability to meet approved accreditation standards rather than the level of qualification awarded. Given its purpose, the AMC has a role in initiating and contributing to debates concerning standards of medical education.

Until 2011, the only model of primary medical education (often referred to as an entry level qualification) in Australia and New Zealand was a university-based program which resulted in a qualification at Bachelor Degree level.

These university-based programs were either school leaver entry or graduate entry, and varied in length from four to six years. While some school leaver entry programs accept students who have done some university study, the main distinction is that graduate entry programs require a degree to enter.

In 2011, the University of Melbourne introduced a primary medical qualification at Masters Degree level, which added a second type of degree to the entry level qualification for medicine. The AMC is aware of several other universities interested in changing from Bachelor Degree to Masters Degree qualifications. These developments are occurring at a time of significant change in the higher education quality assurance regime and in health workforce planning processes.

This is not the first significant change to medical education in Australia in recent times. Medical schools have responded to the challenge of the rapid expansion of knowledge and disciplines to be addressed in medical education through curriculum redesign, changes to student selection processes, and changes to models of clinical teaching.²

The 1990s witnessed major change in the medical courses of all the established medical schools in Australia. During the 1990s, evidence began to emerge from university course experience questionnaires that medical students in many traditional schools were not satisfied with several aspects of their education. There was a rapid expansion of the role of professional medical educators, and dissemination of ideas between schools and through the peer review process provided by AMC accreditation visits. Curricula were redesigned to incorporate key recommendations of the 1988 Doherty Committee report on undergraduate medical education. Specifically, this involved greater curriculum integration, with basic science and clinical experience being conducted more closely in parallel, and with problem-based learning (PBL) or a variant of small-group self-directed study being incorporated as a significant component of the educational approach.

A consortium of medical schools then decided to offer graduate entry medical programs. In 1996, Flinders University introduced the first graduate entry medical program in Australia, closely followed by the University of Sydney and the University of Queensland in 1997. These programs were at undergraduate level, although they were postgraduate in time. Four-year duration graduate entry programs were adopted increasingly in the following years. Some schools phased out their existing six-year program; others retained both pathways. The majority of medical programs in Australia are now graduate entry (see Appendix 1). Other major changes occurred as medical schools incorporated rural clinical schools, with Commonwealth funding.

² Australian Medical Council, Supplementary Submission, Medical Education Study, September 2006.

2 Accreditation role of the Australian Medical Council

Under the *Health Practitioner Regulation National Law Act 2009* (National Law), the AMC is the accreditation authority for medicine. The AMC has authority to accredit and refuse accreditation to programs of study; to monitor accredited programs of study; and to develop accreditation standards. The Medical Board of Australia makes decisions to approve or not approve accredited programs of study for the purposes of registration, and to approve or not approve accreditation standards.

The AMC assesses and accredits primary medical education programs that lead to a qualification that permits the holder to seek general registration as a medical practitioner. In collaboration with the Medical Council of New Zealand, the AMC assesses entry level medical education programs offered by New Zealand medical education providers. AMC accreditation of these providers, and Medical Board of Australia approval of the accredited programs of study as providing qualifications for registration, allows their graduates to apply for registration in Australia.

The purpose of AMC accreditation is to recognise medical programs that produce graduates who are competent to practise safely and effectively under supervision as interns in Australia and New Zealand and who have a strong foundation for lifelong learning and for further training in any branch of medicine.

Primary medical education programs provided by universities are assessed against accreditation standards developed by the AMC and approved by the Medical Board of Australia. The AMC develops the standards by consulting stakeholders, reviewing its own experience, and benchmarking against international standards and codes for medical education. The standards define the knowledge, skills and professional attributes expected by completion of primary medical training, and in broad terms how education providers should deliver the education and training.

The AMC respects the academic autonomy of the providers of medical programs and encourages innovation and diversity in medical education programs.

3 Current structure of medical education in Australia

The continuum of medical education in Australia includes primary, prevocational and specialist training and continuing professional development (Table 1). A variety of bodies are responsible for medical education programs at various points of the continuum.

Table 1: Medical education programs and providers, summary

	Primary medical education	Junior doctor years	Vocational or specialist training	Continuing professional development
Timeframe	4–6 years	1 year (PGY 1) required and a second year is common	3–7 years	Lifelong learning
Overseeing organisation	Medical schools (19 in Australia)	State/territory-based postgraduate medical councils	16 national/bi-national specialist colleges	Specialist colleges
Outcome	Degree Provisional registration to practise Need to undertake internship	General registration end of PGY 1 Progress to vocational training or await vocational position or become a hospital career medical officer	Fellowship of relevant specialty college Registration as a specialist	Continuing professional development (CPD) points Continuing registration

3.1. Primary medical education

Medical schools provide primary medical education. Upon successful completion of the medical program, graduates are provisionally registered to undertake a pre-registration (intern) year of supervised medical experience. Graduates from AMC accredited medical programs are eligible to seek general registration as a medical practitioner upon successful completion of their intern year.

3.2. Prevocational training

Postgraduate medical councils in each state and territory are responsible for the standards for training of interns, junior doctors in their first postgraduate year (PGY1). Some also set standards for resident medical officers in their second or third postgraduate year (PGY2 or PGY3). This training takes place in hospitals and community settings. Prevocational training forms the basis for future vocational training. In this time junior doctors undertake a series of rotations to gain broad clinical experience. The postgraduate councils have developed guidelines and standards for this period, but with national registration, this is now the responsibility of the Medical Board of Australia.

Junior doctors are able to apply for unrestricted general registration on successful completion of PGY1. They are, however, not able to enter into independent private practice.

Many junior doctors complete a second year of general prevocational training (PGY2) before gaining entrance into specialist or vocational training programs.

3.3. Specialist (vocational) training

To undertake specialist medical practice, doctors holding general registration must complete an accredited medical specialty training program. Specialist medical colleges set standards and requirements for this period of training and award a fellowship qualification on successful completion of training. AMC accreditation of specialist colleges is a requirement for specialist registration.

Training programs vary in length and structure depending on the specialty.

Prospective trainees apply for registrar positions in hospitals, laboratories, community settings, and general practices accredited by the relevant college.

Upon successful completion of a recognised specialist training program and required assessment processes, doctors can apply for specialist registration, which entitles them to independent medical practice in their chosen field in Australia.

3.4. Continuing professional development

Medical education continues after formal training is completed. All medical practitioners are required to participate in continuing professional development (CPD) if they are engaged in medical practice. Requirements for medical practitioner CPD vary depending on the type of registration held. CPD promotes lifelong learning, and maintenance and enhancement of knowledge and skills. Meeting the CPD standard is a requirement of the Medical Board of Australia and necessary for renewal of registration.

3.5. Primary medical qualifications

Undergraduate medical programs in Australia were traditionally of six, occasionally five, years duration. In 1996, Flinders University introduced the first graduate entry program, closely followed in 1997 by the University of Sydney and the University of Queensland. These programs were described as undergraduate in qualification level although they were postgraduate in time. Four-year duration graduate entry programs were adopted increasingly in the following years. Some schools phased out their six-year programs; others retained both pathways as noted above.

Prior to 2011, all the primary medical qualifications offered, either through school leaver entry or graduate entry, were at the Bachelor level.

Course titles awarded include Bachelor of Medicine, Bachelor of Surgery (MBBS, BMBS, MBChB) or Bachelor of Medicine (BMed). Graduates of the four-year graduate entry programs had completed two degrees such as a BA or BSc and an MBBS etc., because completion of a first degree before admission to the medical program was required.

There is considerable variety in program type, curricula, entrance requirements, and teaching methodology in the medical programs. However, all programs have very similar objectives that link to AMC requirements; namely, the production of graduates competent to practise safely and effectively under supervision as interns in Australia and New Zealand, and with an appropriate foundation for lifelong learning and for further training in any branch of medicine.

Clinical training arrangements are similarly various, but all involve periods of experience in hospital, clinic, community and/or private practice environments. All involve at least two years spent primarily in direct contact with patients.

3.6. Higher doctorate qualifications

The Doctor of Medicine (MD) qualification in Australia has, until recently, referred to a higher doctorate awarded for a significant contribution to knowledge. It is generally awarded through submission of a volume of published work (books, reviews, monographs, research papers etc.), and is considered to be the premier research degree awarded in medicine for distinguished researchers active in the international scene. The award of MD for distinguished researchers compares to the Doctor of Science award or the Doctor of Laws degree (higher doctorates include DSc, DLL, DLM and DD). Several university medical schools offer the MD award, but not all schools offer it at this time. Only a small number of MD awards are granted in any year.³

The research doctorates, or research higher degrees, also include the Doctor of Philosophy (PhD) award, which can be granted on examination of a single thesis that makes a contribution to knowledge in a specific area or by submission of a series of published papers.

The award of the title MD for the primary medical qualification completed as a Masters Degree program may cause some confusion in a system where MD has traditionally signified a higher doctorate awarded to distinguished researchers. This will primarily be an issue for those who have the higher degrees and perhaps the universities that grant them.

The University of Melbourne has sought to differentiate the MD titles between the two programs. The university has retained a higher doctorate qualification and renamed it Doctor of Medical Science. As stipulated in the Australian Qualifications Framework, the title of 'Master of...' is the title used for the Masters Degree. Exceptions are permitted in accordance with AQF policy where the title 'Doctor of ...' is permitted for a Masters Degree (Extended) for five professions: medical practice, physiotherapy, dentistry, optometry, and veterinary practice. The Masters (Extended) qualification may not be referred to as a 'Doctoral Degree'.

³ For example, the University of Queensland awarded between one and three higher doctorate MDs each year from 2005 to 2011.

4 Quality assurance framework for higher education

The AMC assesses and accredits medical programs that lead to a qualification that permits the holder to seek registration as a medical practitioner. The purpose of AMC accreditation is the recognition of medical programs that produce graduates competent to practise safely and effectively under supervision as interns in Australia and New Zealand, and with an appropriate foundation for lifelong learning and for further training in any branch of medicine.

Along with the accreditation function of the AMC, there are government-endorsed quality assurance mechanisms and agencies for higher education. These mechanisms have been recently reviewed and the powers and responsibilities enhanced.

4.1. Tertiary Education Quality and Standards Agency

From January 2012, the Tertiary Education Quality and Standards Agency (TEQSA) regulates and provides quality assurance of Australia's higher education sector. This new national regulatory body is part of higher education reforms that aim for a robust quality assurance and regulatory framework which places a renewed emphasis on student outcomes and the quality of the student experience.

Under the *Tertiary Education Quality and Standards Agency Act 2011*, a higher education provider must be registered by TEQSA in order to operate as a higher education provider in Australia. Each registered higher education provider that meets the requirements under section 45(1) of the TEQSA Act is authorised to self-accredit each course of study that leads to a higher education award that the provider offers or confers. This includes universities.

The TEQSA Act outlines three basic principles for regulation:

- the principle of regulatory necessity
- the principle of reflecting risk – TEQSA should have regard to a provider's history, including its history of compliance with state and federal laws relating to higher education
- the principle of proportionate regulation – TEQSA must exercise its powers in such a way that is proportionate to a provider's noncompliance with the Act and any risk of future noncompliance.

Together, these principles underpin TEQSA's risk-based regulatory approach, which will take into account the scale, mission and history of each provider. TEQSA's regulatory approaches, including application forms and guidelines, are being developed.

In addition to compliance audits associated with its regulatory responsibilities, TEQSA will also undertake thematic audits as part of its role as a quality assurance agency. Thematic audits focus on a particular area of interest or concern. TEQSA may look at one aspect of delivery across all providers, several aspects of delivery across all providers of a certain type, the entire operation of a handful of providers, or any combination therein.

TEQSA is developing its approach to conducting thematic reviews and will consult with the sector in the near future. It is unclear if the introduction of the Masters Degree programs in medicine will attract the attention of TEQSA.

4.2. Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is the national policy for regulated qualifications in Australian education and training. It incorporates the qualifications from each

education and training sector into a single national qualifications framework. New, updated framework guidelines were issued in 2011.

The AQF applies to all education and training sectors: schools, vocational education and training, and higher education. AQF stakeholders include industry and its representative bodies, unions, professional associations, licensing authorities and governments.

In Australia, education and training is a shared responsibility of the Commonwealth, state and territory governments. Education, training and employment ministers collectively are responsible for the AQF. The AQF provides the standards for Australian qualifications.

Universities have the power to approve through their own course approval mechanisms the level of qualification for a program of study, but all programs should still adhere to AQF guidelines. TEQSA has indicated that universities must comply with the AQF by January 2015 to retain registration as higher education providers.

Under the AQF, a Bachelor Degree is classified as a Level 7 qualification, a Masters Degree as a Level 9 qualification, and a Doctor of Philosophy award as a Level 10 qualification. The AQF applies to all university degree programs, including medicine, in that any program must provide evidence of the learning outcomes relevant to the qualification type.

4.2.1. Qualification descriptors

The information in Table 2 is extracted from the Australian Qualifications Framework (July 2011) and provides the qualification type descriptors for the Bachelor Degree and the Masters Degree (Extended).

Table 2: Qualification descriptors, Bachelor Degree and Masters (Extended) Degree

	Bachelor Degree: Level 7	Masters Degree (Extended): Level 9
Purpose	The Bachelor Degree qualifies individuals who apply a broad and coherent body of knowledge in a range of contexts to undertake professional work and as a pathway for further learning.	The Masters Degree (Extended) qualifies individuals who apply an advanced body of knowledge in a range of contexts for professional practice and as a pathway for further learning.
Knowledge	Graduates will have: <ul style="list-style-type: none"> a broad and coherent body of knowledge, with depth in the underlying principles and concepts in one or more disciplines as a basis for independent lifelong learning 	Graduates will have: <ul style="list-style-type: none"> a body of knowledge that includes the extended understanding of recent developments in a discipline and its professional practice. knowledge of research principles and methods applicable to the discipline and its professional practice.

	Bachelor Degree: Level 7	Masters Degree (Extended): Level 9
Skills	<p>Graduates will have:</p> <ul style="list-style-type: none"> • cognitive skills to critically review, analyse, consolidate and synthesise knowledge • cognitive and technical skills to demonstrate a broad understanding of knowledge with depth in some areas • cognitive and creative skills to exercise critical thinking and judgement in identifying and solving problems with intellectual independence • communication skills to present a clear, coherent and independent exposition of knowledge and ideas. 	<p>Graduates will have:</p> <ul style="list-style-type: none"> • cognitive skills to demonstrate mastery of theoretical knowledge and to reflect critically on theory and professional practice • cognitive, technical and creative skills to investigate, analyse and synthesise complex information, problems, concepts and theories and to apply established theories to different bodies of knowledge or practice • cognitive, technical and creative skills to generate and evaluate complex ideas and concepts at an abstract level • communication and technical research skills to justify and interpret theoretical propositions, methodologies, conclusions and professional decisions to specialist and non-specialist audiences • technical and communication skills to design, evaluate, implement, analyse and theorise about developments that contribute to professional practice.
Application of knowledge and skills	<p>Graduates will demonstrate the application of knowledge and skills:</p> <ul style="list-style-type: none"> • with initiative and judgement in planning, problem solving and decision making in professional practice and / or scholarship • to adapt knowledge and skills in diverse contexts • with responsibility and accountability for own learning and professional practice and in collaboration with others within broad parameters. 	<p>Graduates will demonstrate the application of knowledge and skills:</p> <ul style="list-style-type: none"> • with creativity and initiative to new situations in professional practice and/or further learning • with high level personal autonomy and accountability • to plan and execute a substantial research- based project, capstone experience and/or professionally focused project.
Volume of learning	<p>The volume of learning of a Bachelor Degree is typically 3–4 years.</p>	<p>The volume of learning of a Masters Degree (Extended) is typically 3–4 years following completion of a minimum of a 3-year level 7 qualification.</p>

Level 9 of the AQF usually requires one to two years of full-time study to complete. A completed Bachelor Degree, sometimes with honours, is a prerequisite for admission. Within the Masters Degree qualification type there are three main forms⁴:

- *Coursework*. Designed so that graduates will have undertaken a program of structured learning with some independent research and project work or practice-related learning.
- *Research*. Designed so that graduates will have undertaken supervised study and research of which two-thirds will be devoted to research, research training and independent study.
- *Extended*. Designed so that graduates will have undertaken a program of structured learning with some independent research and a significant proportion of practice-related learning. As this qualification is designed to prepare graduates in a profession, the practice-related learning must be developed in collaboration with a relevant professional, statutory or regulatory body.

4.2.2. Masters Degree (Extended)

In November 2010, the Ministerial Council for Tertiary Education and Training approved the inclusion of the Masters Degree (Extended) in the AQF and approved the optional use of alternative titles for Masters Degree (Extended). The use of the title 'Doctor of ...' is permitted for a Masters Degree (Extended) for five professions: medical practice, physiotherapy, dentistry, optometry, and veterinary practice. The use of the title 'Juris Doctor' is permitted for legal practice.⁵ The Masters Degree (Extended) is the qualification type under which the Melbourne MD program is classified.

The Masters Degree (Extended) differs from the other forms of Masters Degrees in its purpose and volume of learning (Table 3). This is a very important distinction. The 'volume of learning' is defined as a dimension of the complexity of the qualification type. It is used with the level criteria and qualification type descriptor to determine the depth and breadth of the learning outcomes of a qualification. The volume of learning identifies the notional duration of all activities required for the achievement of the learning outcomes specified for a particular AQF qualification type. It is expressed in equivalent full-time years.

⁴ Australian Qualifications Framework, July 2011.

⁵ The AQF Council has the authority to add or remove qualification types from the AQF in accordance with the policy for additional/removal of qualification types. The AQF also determines any addition of professions for which the title 'Doctor of' may be used for Masters Degree (Extended) qualifications. The use of the title 'Doctor of' is permitted if 'there is a clear industry, professional or community need and a sound educational rationale'. The AQF recently consulted on the criteria to determine the addition of a profession permitted to use the title 'Doctor of' for the Masters Degree (Extended). The AQF may expect applications from other health professions seeking to use the title of Doctor. The outcome on the consultation is not yet available.

Table 3: Volume of learning and purpose of the three forms of Masters Degree

	Masters (Research)	Masters (Coursework)	Masters (Extended)
Purpose	The degree qualifies individuals who apply an advanced body of knowledge in a range of contexts for research and scholarship and as a pathway for further learning	The degree qualifies individuals who apply an advanced body of knowledge in a range of contexts for professional practice or scholarship and as a pathway for further learning	The degree qualifies individuals who apply an advanced body of knowledge in a range of contexts for professional practice as a pathway for further learning
Volume of learning	Typically 1–2 years; in the same discipline 1.5 years following a Level 7 qualification or 1 year following a Level 8 qualification; in a different discipline 2 years following a Level 7 qualification or 1.5 years following a Level 8 qualification	Typically 1–2 years; in the same discipline 1.5 years following a Level 7 qualification or 1 year following a Level 8 qualification; in a different discipline 2 years following a Level 7 qualification or 1.5 years following a Level 8 qualification	Typically 3–4 years following completion of a minimum of a 3 years Level 7 qualification

4.3. Learning and Teaching Academic Standards

In 2010, the Australian Learning and Teaching Council established the Learning and Teaching Academic Standards (LTAS) project.⁶ The purpose of the project was to define academic standards in line with the new standards-based quality assurance framework which will be overseen by TEQSA. The project covered eight broad discipline areas, including the discipline group of health, medicine and veterinary science. Discipline scholars Associate Professor Maree O’Keefe and Professor Amanda Henderson developed threshold learning outcomes at the agreed AQF level for 25 health disciplines. In this case, the minimum professional entry level qualification is a Bachelor Degree.

A second phase of this project, ‘Harmonising higher education and professional quality assurance processes for the assessment of learning outcomes in health’ (the Harmonising Project) has received additional funding.

This project is working with higher education institutions and healthcare professional accreditation agencies to identify and match goals and expectations of educational, professional, and governmental institutions in relation to quality assurance activities, and in particular the new Australian Qualifications Framework.

The AQF contains two ways of determining levels of qualification:

- learning outcomes
- volume of learning

⁶ From 1 January 2012, the awards and grants functions of the Australian Learning and Teaching Council (ALTC) will be administered by the Department of Education, Employment and Workplace Relations.

The Harmonising Project will look at the learning outcomes of Level 7 (Bachelor) compared to Level 9 (Masters) qualifications.

The intent of this project is to strengthen the position of professional accreditation agencies such as the AMC with the higher education sector through a better alignment of quality assurance processes, and to maintain the integrity of the different professions and their respective accreditation agencies. This project will run through to the end of 2012.

5 MD programs as primary qualifications for medicine and AMC accreditation

5.1. The University of Melbourne MD program

The University of Melbourne is the first university in Australia to offer a Masters level program as the primary qualification for medicine. The Melbourne MD is designed as a graduate entry, Masters Degree, entry-to-practice program, delivered in four phases building on prerequisite knowledge. To be eligible, successful completion of prerequisite studies in anatomy, physiology, and biochemistry, each consisting of at least one subject at second-year level, is required. There is a strong emphasis on research and an annual medical conference provides students with opportunities to interact with leaders in research, policy and clinical healthcare.

In 2006, the University of Melbourne advised the AMC of the university's new strategic plan, the Melbourne Model, which would result in the professional qualifications, such as the MBBS, being offered as solely postgraduate courses. The AMC Medical School Accreditation Committee considered the progress report in October 2006, advised the faculty that this development, involving conversion to a fully graduate entry course with a shorter program, would be classed as a major change, and asked to be kept informed of future developments.

In March 2007, the university wrote to the AMC outlining the development and proposed structure for the Melbourne Model. The intention to implement the MD program as a primary medical qualification was discussed. In considering the proposal, the Medical School Accreditation Committee raised questions about the prerequisites for entry, and the structure of the program. The committee advised that the changes would likely constitute a new course and sought more information.

The university provided further information about the program in May 2007 and in its 2008 progress report advised the timeline for the changes and planned implementation for 2011.

The Medical School Accreditation Committee considered a formal university submission for assessment of the changed program in June 2009. The AMC directors accepted that the plans were a 'major change' due to changes in the length of the program and changes to the curriculum not because of the change to the level of qualification offered. An AMC team completed a full assessment of the program against the accreditation standards in July 2010.

In its accreditation report on the Melbourne MD program, the AMC indicated that it applies the one set of accreditation standards for programs of study that lead to eligibility to apply for medical registration. It recognised that there are additional academic expectations of programs at Masters Degree level, and that the university would structure its program to take account of these expectations. The AMC noted that separate processes exist to audit and assess whether the university's academic programs are in line with national qualification framework guidelines.

Following recommendations from the assessment team and the Medical School Accreditation Committee, the November 2010 meeting of AMC directors approved the major changes and granted the MD Program accreditation for six years until 31 December 2016 subject to conditions. The University of Melbourne commenced the MD program in 2011.

Since the AMC accredited the University of Melbourne MD program, debate has continued within the AMC regarding the implications of this development for medical education and AMC accreditation processes.

5.2. Medical Board of Australia

The AMC provides accreditation reports to the Medical Board of Australia so that the Board can make a decision to approve or refuse to approve the accredited program of study as providing a qualification for purposes of registration in the medical profession.

The Board may have a number of interests in the development of MD programs as primary medical programs:

- The Board approves accreditation standards developed by the AMC. Any changes to the standards resulting from the MD developments would require Board approval. In developing standards, the accreditation body must take account of the principles of the National Law and best practice principles for regulation.
- An increase in the accreditation load of the AMC potentially is a cost for the Board.
- The AMC will need to notify the Board of changes in qualifications awarded so the Board can consider changing its list of approved programs of study.

6 Changes to the primary medical qualification: implications for medical education and training

The AMC has identified several potential implications of changes to the primary medical qualification, and specifically the introduction of Masters Degree level programs that result in an MD degree. While some of the issues noted in the section below could have negative implications, there may also be positive outcomes associated with graduate outcomes of the MD students which are not yet quantifiable and will bear further investigation.

Potential implications:

- issues related to the ability of universities to offer fee-paying places to domestic students
- impact on Health Workforce Australia's National Training Plan and corresponding impact on clinical placements if there is increased student enrolment in medicine with a further pipeline effect into prevocational and vocational training
- potential increased student debt and student drop out in fee-paying programs and curtailed access for those from lower socioeconomic status groups to medical programs
- introduction of a dual qualification for professional entry in medicine.

6.1. Fee-paying places for domestic students

From January 2009, the Australian Government phased out fee-paying domestic undergraduate places.⁷ However, a university is permitted to include any number of domestic fee-paying students in a postgraduate program.

The Australian Government places a cap on the number of Commonwealth supported places for medicine. Medical programs that transition from an undergraduate to postgraduate program will likely request their Commonwealth supported places be transitioned to these new programs. There could be additional medical places created in excess of the current Commonwealth supported places as postgraduate degrees can offer domestic fee-paying places as well as international fee-paying places.

The medical program will make the decision concerning the number of domestic or international fee-paying students enrolled in the program.⁸

The Australian Medical Association (AMA) has issued policy statements indicating concerns with the introduction of Masters programs. Along with writing to the AMC, in April 2011 the AMA wrote to the University of Melbourne and the Minister for Tertiary Education, Skills,

⁷ With regard to medical programs, Bond University is a private university and does not offer any Commonwealth supported places. The University of Notre Dame Australia Sydney School of Medicine has fee-paying students in its medical program enrolled before the fee-paying positions were eliminated.

⁸ Base funding is only one source of revenue for Australian universities. Universities derive income from a wide range of other government and non-government sources. In 2010, base funding contributed approximately 35 per cent of universities' total revenue. Other important sources of revenue for universities include income from full fee-paying domestic and international students, income for research activity (from both government and non-government sources), contracts and consultancies, property and investment income, and donations and bequests. (Higher Education Base Funding Review 2011).

Science and Research, outlining what it believes are the unforeseen consequences of the reintroduction of fee-paying places for domestic students by the University of Melbourne for its Doctor of Medicine (MD). The AMA has a long-held position that domestic medical school places should be publicly funded to ensure equity of access to primary medical education. The AMA asserts that the reintroduction of fee-paying places for domestic students means that those who cannot afford to pay tuition are potentially excluded and is contrary to government policy that seeks to regulate domestic medical student numbers. However, the Commonwealth could make Commonwealth supported places available for domestic students in order to overcome equity issues.

6.2. Increasing cost of higher education

A number of submissions to the Higher Education Base Funding Review Panel in 2011 stated that there was little convincing evidence that increases in student contributions had deterred participation in higher education or that low socioeconomic status students are more debt averse than other groups. Nevertheless, some stakeholders expressed concern that an increase in fees could deter participation among prospective students.⁹

In its submission to the Base Funding Review, Medical Deans Australia and New Zealand expressed concern about the affordability of medical education with increasing student contributions and high levels of part-time employment incompatible with the demanding course load and study requirements of a medical education.

High levels of up-front payment are likely to require either parental support and/or participation in paid employment by university students. Data from the 2009 Australasian Survey of Student Engagement (AUSSE) report indicate very high levels of participation in, and intensity of, paid employment by students. Of students classified as 'full-time on campus' (i.e. not distance learning), just over two-thirds (69%) were employed in paid work. This comprised 13.1 hours of paid work off campus and 1.3 hours of paid work on campus (the equivalent of two days a week in paid employment). Medical Deans does not believe that this level of part-time employment is compatible with the course load and study requirements of medical students.

Medical Deans notes increasing debt levels associated with continued growth in student contributions may also create pressure driving medical graduates towards 'high income' specialties. Such a shift is not consistent with the policy objectives of the Australian Government to create a health system centred on primary health care.¹⁰ However, these concerns would be reduced in the debate concerning high fees in the postgraduate MD program if the Masters program were able to offer Commonwealth supported places. In addition, effective 2012, students undertaking a Masters by coursework, which would cover the MD programs, are also eligible to receive the Austudy living allowance.

Higher fees may affect progression through a medical program if students reach a cap on financial assistance before completion of their program. The AMC has not needed to have accreditation standards to do with student debt and fees because this has been a relatively rare situation to date; however, this may need to be considered. Accreditation bodies in

⁹ Higher Education Base Funding Review Panel, *Higher Education Base Funding Review: Final Report*, October 2011, p. 127.

¹⁰ Medical Deans Australia and New Zealand, Submission to the Australian Government's Base Funding Review of Higher Education, March 2011, p. 19.

North America do have standards concerning effective financial aid and debt management counselling offered to students.¹¹

6.3. Shortages of clinical and intern training positions

At the Australian Health Ministers' Conference meeting on 12 February 2010, state and territory governments reconfirmed their guarantee to provide clinical placements and intern training positions for Commonwealth-funded students. However, this guarantee does not apply to fee-paying medical students (either international or domestic). This is an issue which will restrict intake into postgraduate courses only if they are unable to access Commonwealth supported places.

The existing challenges in relation to clinical and postgraduate training capacity are well documented. The consensus statement released on 29 September 2010 by the Australian Medical Association (AMA), the Australian Medical Students' Association (AMSA), Medical Deans Australia and New Zealand and the Confederation of Postgraduate Medical Education Councils provided a view on the key steps that were required to ensure medical students have adequate training and clinical experience.¹²

While the number of medical students graduating from Australian medical schools is increasing significantly each year, the joint statement points to the need for a coordinated effort by the Commonwealth and state and territory governments to provide a corresponding increase in prevocational and specialist training places. In 2005, there were 1587 graduates from medical schools in Australia, including domestic and international students. This number rose to 2776 graduates in 2010 and this number will jump by one third in 2015, when 3794 graduates are expected to leave medical school (Table 4).¹³

Table 4: Australian medical schools, number of graduates, 2005, 2010, 2015

Year	Domestic students	International students	Total number of medical graduates
2005	1320	267	1587
2010	2264	512	2776
2015	3227	567	3794

The joint statement asserted that increasing the number of medical school places will be ineffective in addressing medical workforce shortages unless there is a corresponding increase in:

- clinical training places for medical students
- intern and prevocational training places
- vocational (specialist) training places.

¹¹ International students currently enrolled in medical programs confront similar issues of debt management and financial aid due to the higher tuition fees.

¹² AMA Medical Training Summit Joint Statement, 29 September 2010.

¹³ Medical Training Review Panel, 14th Report, March 2011, Commonwealth of Australia.

This situation applies regardless of the qualification type of the medical program but to any growth in the sector.

6.4. Health workforce

Government has a clear need for the number of medical places to be linked to robust workforce modelling. This is fundamental to effective medical workforce planning, particularly in the context of escalating graduate numbers.

Health Workforce Australia (HWA), an initiative of the Council of Australian Governments (COAG), is developing a National Training Plan to assist Australia in achieving a goal of self-sufficiency in the supply of doctors, nurses and midwives by 2025. HWA is taking a national lead on developing policy and programs concerning national health workforce planning to improve decision-making around the supply and distribution of medical practitioners, and forecast adequate pre-vocational and vocational medical training positions.

HWA indicates the development of the National Training Plan is a significant first step towards the improvement of health workforce planning in Australia. The establishment of this training plan will be jeopardised if there is no means to forecast accurately the number of medical students and graduates produced by medical schools.

6.5. Creation of a dual system of entry-to-practice degrees

Countries with similar medical education systems to Australia have only a single level of medical qualification for entry to practice. Managing the dual qualification pathway could pose an issue for accreditation processes, and the profession's and the community's perceptions of differences in the skills and knowledge of the graduate.

Under the AQF, the different qualification level should relate to different academic expectations. Although there is no evidence to support this, there may also be perceptions that graduates of a Masters Degree program are better or differently qualified for professional practice and entry to the medical profession than other graduates.

The University of Melbourne program, for example, requires a semester devoted to a research project after preparatory work, including ethics approval in the previous year. At the vocational level, specialist college selection processes may favour medical graduates who hold a postgraduate qualification, including graduates of a new MD program. A specialist college may give applicants bonus points for a higher degree, peer-reviewed publications and years of experience. Specialist colleges may perceive that the MD graduate is better prepared for specialist training, giving an MD applicant an advantage in applying for training positions.

The Australian Medical Students Association has also issued a policy statement¹⁴ indicating that the existence of two tiers of primary medical qualification in Australia threatens to create misunderstanding among prospective students, clinicians and the general public around the qualifications of doctors in Australia. It has concerns that this may affect selection into competitive specialist training programs. The AMC considers that this latter concern could be addressed by discussion between the colleges and the AMC.

¹⁴ AMSA Policy Document, Classification of Medical Programs, http://www.amsa.org.au/sites/default/files/AMSA%20Classification%20of%20Medical%20Programs%20Policy_0.pdf

6.6. Meeting the research requirements of a Masters Degree (Extended)

There are two specific accreditation standards concerning the appropriate level of research within medical schools:

Standard 1: Context of the Medical School

- 1.7 The research context of the school: The medical course is set in the context of an active research program within the school.

Standard 3: The Medical Curriculum

- 3.4 Research in the curriculum: The medical course emphasises the importance of research in advancing knowledge of health and illness and encourages, prepares and supports student engagement in medical research.

Based on the findings of past accreditation reports, some medical schools have experienced challenges meeting these two research standards. The research requirements for a Masters Degree (Extended) are more stringent than those of a Bachelor Degree, and are documented in the AQF. While the AMC would not assess if a medical program met the requirements of the AQF, it does consider whether the medical program as delivered meets the goals and objectives articulated by the medical education provider. If the learning outcomes of the medical program include research requirements that are appropriate for a Masters Degree, the AMC would consider this in its assessment of the program. It is not evident that all the accredited medical schools would have the capacity to provide programs at this level. This may not be an issue if some schools retain the Bachelor qualification.

6.7. Potential benefits of the MD degree

While the above issues require considered responses, there may also be positive outcomes resulting from the introduction of the MD programs.

If a medical program receives approval to offer Commonwealth supported places for a postgraduate course, there will be no increase in cost to the student. Fee-paying places assist in offsetting the costs of providing medical courses. Some medical schools may link a change in the level of the award to curriculum review and changes in graduate outcomes, resulting in program improvement.

It has not been claimed that a change in the academic qualification level of the primary medical program would result in graduates better prepared professionally for internship or postgraduate medical training. However, an MD degree may aim to prepare graduates with additional skills and knowledge, which could be viewed as a positive shift.

As an example, the Melbourne MD offering is part of a larger University of Melbourne initiative which aims to align the University of Melbourne to the European Bologna Process¹⁵ and North American models of tertiary education with broad undergraduate degrees leading either to the workplace or on to focused professional and research qualifications at a Masters or Doctoral level.

¹⁵ The Bologna Process is a series of reforms currently underway in Europe in order to achieve an integrated European Higher Education Area (EHEA) by 2010. Forty-six European countries have committed to the process, which aims to achieve greater consistency in areas such as degree structures, credit transfer and quality assurance systems enabling portability across higher education systems.

In reports provided to the AMC, the University of Melbourne notes that that the MD program will equip graduates with a broad range of skills while meeting the usual requirements for competencies and measurable outcomes with a major focus on research and international health. Graduates will deal with complexity and uncertainty, and there will be a strong emphasis on professionalism, including the way that doctors can and should contribute to society.

7 Changes to the primary medical qualification: implications for the AMC accreditation process

The extent of the change to the medical program entailed in transitioning from a MBBS degree to a Masters Degree will vary greatly depending on the current degree offered and the other considerations, such as curriculum changes. Four-year graduate entry medical programs may require only minor changes, or potentially no changes, to their curriculum to meet the Masters Degree learning outcomes, although schools may wish to combine this change with other more significant change. A six-year undergraduate entry course will entail a greater change, since the program will be made shorter and the entry requirements will change, and concurrently the AMC assessment of the new course offering will likely require more detail and complexity.

The University of Melbourne's proposed Masters Degree program was determined to be a 'major change' in an established medical program, as defined by the AMC's *Procedures for Assessment and Accreditation of Medical Schools*. This was not due to the change in the qualification offered, but to changes in program length, curriculum structure, and other critical factors related to accreditation standards. In assessing future program proposals, the AMC Medical School Accreditation Committee must receive enough information from the medical program to make a determination regarding the nature of change in the program, particularly if the change will meet the definition of a major change.

7.1. Types of AMC assessments

The AMC undertakes assessments in the following circumstances:

- assessment of new developments including
 - proposed new medical programs
 - proposals for major change in established providers and programs of study
- assessment for the purpose of reaccreditation of established medical programs and their education providers.

In cases where conditions on accreditation or reaccreditation require it, the AMC also conducts follow-up accreditation assessments.

It is most likely that the key decision point concerning the assessment of any Masters Degree proposals will be to determine if the proposed change meets the definition of a 'major change'.

7.2. AMC definition of major change

The AMC defines a major change in an accredited program of study or education provider as a change in the length or format of the program, including the introduction of new distinct streams; a significant change in objectives; a substantial change in educational philosophy, emphasis or institutional setting; and/or a substantial change in student numbers relative to resources. Significant changes forced by a major reduction in resources leading to an inability to achieve the objectives of the existing program are also major changes. The

gradual evolution of a medical program in response to initiatives and review would not be considered a major change.¹⁶

7.3. AMC accreditation

Based on current information, several of the 19 accredited medical schools in Australia are contemplating an MD offering. Depending on the degree of change involved in each medical program's new offering, this could represent a significant impact on the existing work program of the Medical School Accreditation Committee, potential assessment teams, and the AMC Secretariat.

As a way of managing this increase in activity in medical programs, there may be parallels drawn and lessons learned from the period of time when a number of schools added a graduate entry stream to their undergraduate medical program.

Schools in this category include those at the University of Melbourne, the University of New South Wales, the University of Western Australia, and Monash University. The focus of each of these accreditation assessments varied based on the content of the medical program's submission in relation to the extent of changes proposed against the accreditation standards, and the AMC's assessment of the implications for meeting the accreditation standards.

The degree of scrutiny required of each medical program that transitions from a Bachelor Degree to a Masters Degree qualification will vary based on the current structure and strengths of the program, the medical school's assessment of the degree of change required to meet the Level 9 Australian Qualifications Framework outcomes, and the other changes the school intends to make.

7.4. Important considerations for the AMC accreditation process

The following are some of the questions that the Medical School Accreditation Committee will need to consider when considering a proposal for a Masters Degree and determining if a proposal meets the definition of a major change:

- Within the Australian Qualifications Framework policies, quality assurance arrangements for each qualification type and compliance are monitored by the university as a self-accrediting authority. The AMC will need assurance of internal academic approval of the change as evidence that the university has considered the requirements of the national standards such as the AQF.
- Student intake numbers. Does the program intend to increase the size of the medical student intake and, if so, in what admission categories?
- Year 12 entry pathways (if applicable). What changes, if any, will be made to existing pathways? The Australian Qualifications Framework requires that some undergraduate study precede the postgraduate study.
- Research capabilities.
- What are the implications for students in the teach-out phase of the Bachelor program, including those students who defer or are delayed in completing the Bachelor program? This information will typically be included in the application made by a faculty or school to their university academic committees to support the reclassification of a program from a Bachelor level to a Masters level program.

¹⁶ *Procedures for the Assessment and Accreditation of Medical Schools by the Australian Medical Council 2011*, p. 11.

The AMC applied the same set of accreditation standards to the assessment of the Melbourne MD as it applies to all other accreditation assessments. However, the accreditation standards may require some updates to accommodate the range of issues that may emerge in relation to the implementation of MD programs. The accreditation standards are currently being reviewed, making this an optimal time to consider any necessary revisions.

7.5. Potential revisions to accreditation standards

The AMC is reviewing the approved accreditation standards for primary medical education. The following areas have been identified for consideration in light of the implementation of MD programs.

7.5.1. A new standard concerning internal university approval of program change

A new standard is being considered which would require the education provider to have an internal quality assurance mechanism to assess the level of qualification type offered against any national standards, and provide the evidence that internal approval has been granted.

This will allow the AMC to be assured that the education provider has taken account of national requirements, such as the Australian Qualifications Framework, in setting the academic level of the qualification. The AMC accredits the program and provider to provide a qualification for professional practice. It does not assess academic qualification levels, and this standard will ensure that the providers that use the Masters (Extended) specifications have met the requirements of that level of study.

7.5.2. Revision to the standards concerning research

Accreditation Standard 1 includes requirements concerning research and scholarship in the medical school and Standard 3 includes requirements concerning research in the medical program. It is unclear what the impact of the additional research requirement at the Masters (Extended) level will be on existing curricula. If medical schools augment the research component of the medical program, will this be at the expense of other essential curriculum elements and/or clinical teaching time?

It will be the unique way that each school arranges its prerequisite requirements, program curriculum and the research component requirement that will need to be considered by the AMC. For example, the Doctor of Medicine program at the University of Melbourne requires prerequisite subjects in anatomy, biochemistry and physiology taught at the second-year level or equivalent. This allowed a reduction in basic sciences training time during the medical program, which may be devoted to extra clinical time, extra research time or elective time for example.

7.5.3. Revision to standards and notes concerning length of study

The existing accreditation standards make reference to the recommended length of study of a medical program.

Accreditation Standard 3.2 Curriculum structure, composition and duration

3.2.1 Structure and duration

The medical school has developed descriptions of the content, extent and sequencing of the curriculum that guide staff and students on the level of knowledge and understanding, skills and attitudes expected at each stage of the course.

Notes

... Based on international reference standards, a minimum course length of five calendar years for an undergraduate-entry course, and four years for a graduate-entry course would normally be expected. In the light of experience, the AMC would need to see justification for a course of shorter or longer duration.

The AMC continues to support these statements.

The United States of America's Liaison Committee on Medical Education (LCME) Standard states:

MS-1. Through its requirements for admission, a medical education program should encourage potential applicants to acquire a broad undergraduate education, including study of the humanities, the natural sciences, and the social sciences.

Ordinarily, four years of undergraduate education are necessary to prepare for entrance into an M.D. degree program. However, some special programs (e.g., combined baccalaureate-M.D. programs) may permit a reduction in this time period. A broad-based undergraduate education is increasingly important for the development of physician competencies outside of the scientific knowledge domain.

As the summary table (Appendix A) shows, a number of medical schools provide articulated entry pathways into their graduate medical programs, combining entry to a first degree in the university, followed by entry to the medical program. Depending on the way in which the two programs articulate, the AMC considers the first program as part of its assessment of the medical program.

This will continue, and may require greater scrutiny in future.

The AQF states the volume of learning of a Masters (Extended) as

The volume of learning of a Masters Degree (Extended) is typically 3–4 years following completion of a minimum of a 3-year level 7 qualification.

The impact of this in terms of accreditation standards may be that the AMC requires internal university approval that any articulated programs meet the AQF volume of learning requirement.

7.5.4. Impact on clinical component of the medical program

In its explanatory notes to the accreditation standards (3.2.4 Clinical Sciences), the AMC indicates that the curriculum should include a significant period of time devoted to students' personal contact with patients, which would entail the equivalent of at least two years spent primarily in direct contact with patients, as well as personal contact with patients during other parts of the course.

Should the AMC have an accreditation standard concerning adequate amount of clinical contact time?

The LCME standards stipulate the following:

ED-38. The committee responsible for the curriculum at a medical education program, along with the program's administration and leadership, must develop and implement policies regarding the amount of time medical students spend in required activities, including the total number of hours medical students are required to spend in clinical and educational activities during clinical clerkships (or, in Canada, clerkship rotations)

The United Kingdom's General Medical Council's requirements state:

The curriculum will include practical experience of working with patients throughout all years, increasing in duration and responsibility so that graduates are prepared for their responsibilities as provisionally registered doctors. It will provide enough structured clinical placements to enable students to demonstrate the 'outcomes for graduates' across a range of clinical specialties, including at least one Student Assistantship period.

7.5.5. Impact on the medical education provider mission and graduate outcomes

The AMC recognises that the mission and purpose of the medical schools vary depending on their strengths and the communities they serve. Some medical schools have a stronger focus on serving rural or outer metropolitan areas. Others build on strengths in research.

However, the accreditation standards relate to preparation of medical students for registration as beginning doctors who possess attributes that will ensure that they are competent to practise safely and effectively under supervision as interns in Australia or New Zealand, and that they have an appropriate foundation for lifelong learning and for further training in any branch of medicine. All programs must meet the graduate outcome requirements of the AMC.

Under the standards relating to program evaluation, the AMC will expect the schools that change to a Masters Degree program to evaluate the outcomes of the program in terms of postgraduate performance and career choice.

7.5.6. Need for a standard concerning financial counselling

The relatively low number of fee-paying medical students in Australia¹⁷ and the prevalence of student financial assistance programs contribute to very low student attrition rates due to financial hardship. There are currently no AMC standards that require medical programs to implement financial counselling for students; however, if the increasing prevalence of MD programs results in an increase in the number of fee-paying positions, the AMC may wish to consider introducing such standards. The LCME makes reference to a student's financial circumstance in two areas related to the admissions policy of students and financial counselling:

MS-7. At a medical education program, the selection of individual medical students for admission must not be influenced by any political or financial factors.

MS-23. A medical education program must provide its medical students with effective financial aid and debt management counselling. In providing financial aid services and debt management counselling, the medical education program should alert medical students to the impact of non-educational debt on students' cumulative indebtedness.

7.5.7. Accreditation standards for specialist medical programs

The approved accreditation standards for specialist medical training in Australia and New Zealand include a standard concerning recognition of prior learning (RPL) that requires RPL policies to recognise demonstrated competencies achieved in other relevant training

¹⁷ Due to government policy which disallowed domestic fee-paying positions in undergraduate programs.

programs based in Australia/New Zealand and overseas, and to give trainees appropriate credit towards the requirements of the training program. They also include standards relating to research in the training program. There may need to be discussion about the implications of primary medical programs which include extended research for college recognition of prior learning policies.

7.5.8. AMC accreditation: relationship with New Zealand

The Accreditation Standards are bi-national, used to assess and accredit primary medical education in Australia and New Zealand. It will be important to understand the New Zealand perspectives on the issues raised in the paper and these will be canvassed during the stakeholder consultation phase.

Conclusion

This discussion paper provides an overview of the issues related to the introduction of MD programs in Australia. Some of these issues relate to the overall medical education system:

- issues related to the ability of universities to offer fee-paying places to domestic students
- changes to the numbers of student places offered
- increasing cost of higher education leading to an entry level qualification
- impact on Health Workforce Australia's National Training Plan and corresponding impact on clinical placements and training positions if there is increased student enrolment in medicine with a further pipeline effect into prevocational and vocational training
- potential increased student debt and student dropout in fee-paying programs; and curtailed access for those from lower socioeconomic status groups to medical programs.

There will also be specific concerns for standards setting and regulatory bodies such as the Australian Medical Council and Medical Board of Australia about:

- differences in graduate outcomes at entry level
- differences in curriculum, clinical training time and research time. While students accepted in a medical program may have achieved prerequisites in basic science teaching, learning outside the context of a medical program may result in a lack of integration of basic science knowledge with a medical education context
- the creation of a two-tiered system of professional entry degrees. The two levels of qualifications may cause some confusion to consumers who may perceive differences in the degrees. The perspective of consumer groups will be important to understand in this discussion.

These developments will have flow-on effects to the specialist colleges.

In addition to the issues noted above, the paper also itemises potential impacts that the AMC should consider in its current review of the accreditation standards for primary medical education.

Australian Medical Council
October 2012

Appendix 1: Primary medical education programs – program type and entry level

In the following table, the caret (^) indicates that the school offers a graduate entry program.

School	Detail
1. The University of Adelaide	Six-year undergraduate program Primarily undergraduate entry, alternative pathway for University of Adelaide students only, who have no more than two years of study
2. The Australian National University[^]	Four-year graduate entry program Provisional entry stream if in final year of Bachelor Provisional school leaver – do a degree at ANU with GPA and GAMSAT
3. Bond University	Four years eight months program Dual entry – same length of program 80% undergraduate entry 20% postgraduate entry
4. Deakin University[^]	Four-year graduate entry program
5. Flinders University[^]	Four-year graduate entry program Six-year double degree for school leavers, a Bachelor of Clinical Sciences/BMBS. Students in Flinders Darwin double degree are awarded Bachelor of Clinical Sciences at the end of Year 1 of the medical course, which counts as both last year of BClinSci and first year of BMBS. Students who fail to meet academic performance requirements (GPA of 5 and passing all subjects) are excluded.
6. Griffith University[^]	Four-year graduate entry program 2009 change: BMedSci at Griffith conditional entry prior to BMedSci degree with UMAT, GPA, interview
7. James Cook University	Undergraduate six-year program
8. The Universities of Newcastle and New England – Joint Medical Program	Undergraduate five-year program
9. The University of Melbourne[^] <i>MBBS and Masters Degree</i>	2008: Final Intake of six-year undergraduate entry program 2009: Final Intake of 4.5 year graduate entry program 2011: First cohort four-year MD program

School	Detail
10. Monash University	Five-year undergraduate program Four-year graduate entry at Gippsland Campus AMC decided this was a major change – accreditation assessment reviewed the change and the implications of offering the Monash program in a new location
11. University of New South Wales	Six-year undergraduate program 2006 specific lateral entry stream for graduates of the UNSW BSc program, articulation with BSc – join MBBS at Year 4 of six-year program with an extra clinical term in Year 4 AMC decided this was a major change, but accreditation assessment reviewed only the change
12. University of Notre Dame Australia – Fremantle[^]	Four-year graduate-entry program
13. University of Notre Dame Australia – Sydney[^]	Four-year graduate-entry program
14. University of Queensland[^]	Four-year graduate entry program but allows entry for school leavers through Year 12 provisional entry program with UMAT; complete undergraduate degree at UQ with GPA 5 Six-year dual degree with BSc or BA
15. University of Sydney[^]	Four-year graduate entry program
16. University of Tasmania	Five-year undergraduate program introduced in 2006 Alternative entry for 10 students from a selected number of UTAS Bachelor programs with one year of study
17. University of Western Australia[^]	Graduate entry stream introduced a four-year option with a 26-week bridging program (4.5 years) added for graduate students. 2003 Medical School Accreditation Committee accredited as a major change but reviewed only the change (not the entire curriculum)
18. University of Western Sydney	Five-year program open to school leavers and graduates MBBS/BA seven-year option for three local students with 99.85 ATAR
19. University of Wollongong[^]	Four-year graduate entry program