

Consultation: Draft medical radiation practice accreditation standard

Contents

Background	3
Introduction	3
The medical radiation practice accreditation standards	4
Pre-requisites for assessment by the Medical Radiation Practice Accreditation Committee	4
Field 1: Governance, management and resourcing standards	5
Standard 1.1 Education provider standing.....	5
Standard 1.2 Financial viability and safeguards.....	5
Standard 1.3 Corporate and academic governance.....	6
Standard 1.4 Primacy of academic quality and integrity.....	6
Standard 1.5 Management and human resources.....	7
Standard 1.6 Responsibilities to students.....	8
Standard 1.7 Physical and electronic resources and infrastructure.....	9
Standard 1.8 Clinical education.....	10
Field 2: Education provider attributes	10
Standard 2.1 Education provider standards.....	10
Field 3: Program attributes	11
Standard 3.1 Program design.....	11
Standard 3.2 Program resourcing and information is adequate.....	12
Standard 3.3 Admission criteria are appropriate.....	12
Standard 3.4 Teaching and learning are of high quality.....	13
Standard 3.5 Assessment is effective and expected student learning outcomes are achieved.....	13
Standard 3.6 Program monitoring, review, updating and termination are appropriately managed.....	14
Field 4: Qualification attributes	14
Standard 4.1 Medical radiation practice qualifications delivered meet the appropriate criteria.....	14
Standard 4.2 Certification documentation issued is accurate and protects against fraudulent use.....	14
Standard 4.3 Articulation, recognition of prior learning and credit arrangements meet the appropriate criteria.....	15
Field 5: Professional capabilities of medical radiation practice program graduates	16
Standard 5.1 Professional and ethical conduct.....	16
Standard 5.2 Professional communication and collaboration.....	17

Standard 5.3	Reflective practice and professional learning	17
Standard 5.4	Radiation safety, quality and risk management	17
Standard 5.5	Practice in medical radiation sciences	18
Standard 5.6	Medical radiation practice in diagnostic radiography	19
Standard 5.7	Medical radiation practice in nuclear medicine technology.....	19
Standard 5.8	Medical radiation practice in radiation therapy.....	20
Glossary	22
List of acronyms	23

DRAFT

Background

The Health Practitioner Regulation National Law, as in force in each State and Territory (National Law) empowers the relevant national board to decide whether accreditation functions will be carried out by an external accreditation entity, or a committee established by the relevant board (section 43).

The Medical Radiation Practice Board of Australia (National Board) decided to establish a committee to carry out the accreditation functions for the medical radiation practice profession - the Medical radiation Practice Accreditation Committee (Accreditation Committee).

The role of the Accreditation Committee is to develop and propose accreditation standards to the National Board for approval and to assess and monitor education providers and their programs of study against those approved standards.

The Accreditation Committee is developing draft accreditation standards in accordance with the requirements under the National Law, set out in the *Procedures for development of accreditation standards (Procedures)*¹. The Committee's statement of assessment against these requirements is included with these draft accreditation standards.

Under section 46 of the National Law, an accreditation committee is required to develop accreditation standards for the purpose of assessing education providers and programs of study.

The National Law provides this definition of an accreditation standard:

accreditation standard, for a health profession, means a standard used to assess whether a program of study, and the education provider that provides the program of study, provide persons who complete the program with the knowledge, skills and professional attributes necessary to practise the profession in Australia.

It is a requirement of the National Law that, in developing the accreditation standards, the Accreditation Committee undertakes wide-ranging consultation on the content of the draft accreditation standard. After the public consultation is finished, the Accreditation Committee will propose final accreditation standards to the National Board for approval.

Introduction

Medical radiation practice education began in Australia in the 1950s at technical colleges. In the 1970s programs were offered through higher education tertiary institution when the government introduced Colleges of Advanced Education. Later, education was delivered at institutions of technology until the Commonwealth abolished this sector in 1991 and delivery of programs was transferred to universities. During this period medical radiation practice education changed from certificate level program through associate diploma, diploma to bachelor degree level.

On 1 July 2012, the medical radiation practice profession joined the National Registration and Accreditation Scheme established by the National Law as in force in each State and Territory.

The Accreditation Committee was established by the National Board under the National Law. The Accreditation Committee is responsible for developing the accreditation standards against which education providers and their medical radiation practice programs will be assessed when applying for accreditation under the National Law.

The *Draft medical radiation practice accreditation standard* draws on the threshold standards from the *Higher Education Standards Framework (Threshold Standards) 2011* (HES). This approach recognises the role of the Higher Education Standards Panel and the Tertiary Education Quality and Standards Agency (TEQSA) in regulation and quality assurance of higher education in Australia in the context of medical radiation practice programs of study. Information about the Higher Education Standards Panel, TEQSA and the HES Framework is available at www.hestandards.gov.au and www.teqsa.gov.au

¹ The *Procedures* are available at www.ahpra.gov.au/Legislation-and-Publications/AHPRA-Publications.aspx

This approach fosters consistency and efficiency by enabling education providers to use evidence gathered to address the threshold HES, as part of their application to the Accreditation Committee.

The Accreditation Committee notes that whilst the Higher Education Standards Panel² may recommend amendments to the HES Framework, the medical radiation practice accreditation standard and the HES Framework are not directly linked. This means changes in the HES framework will not have an immediate effect on the medical radiation practice accreditation standard.

The medical radiation practice accreditation standards

The medical radiation practice accreditation standards are categorised under five overarching fields:

- Fields 1 to 4 contain standards that contextualise the threshold HES for assessment of medical radiation practice programs of study and the education providers offering those programs, and
- Field 5 contains standards that reflect the *Professional capabilities for medical radiation practice* developed by the Medical Radiation Practice Board of Australia (MRPBA).

The education provider must provide evidence that the medical radiation practice program learning outcomes and assessment cover the scope of the professional capabilities and criteria and that students achieve these professional capabilities during the program.

Please note:

Because the MRPBA had not finalised its *Professional capabilities for medical radiation practice* when the Accreditation Committee released this document for public consultation, the draft accreditation standards for this Field 5 are based on the draft version of the *Professional capabilities for medical radiation practice*. The criteria for each draft accreditation standard are expressed in the context of medical radiation practice program learning outcomes and assessment.

Details of the MRPBA public consultation on the *Draft capabilities for medical radiation practice* can be viewed on the Board's website www.medicalradiationpracticeboard.gov.au/News/Consultations.aspx. The MRPBA completed its public consultation on 22 July 2013 and the submissions to the public consultation will be published at www.medicalradiationpracticeboard.gov.au/News/Past-Consultations.aspx

Following public consultation on this document, the Accreditation Committee will change the accreditation standards and criteria for this Field 5 to ensure alignment with the final version of the MRPBA *Professional capabilities for medical radiation practice* and may take into account submissions to the Committee about the draft accreditation standards and criteria for this Field 5.

Pre-requisites for assessment by the Medical Radiation Practice Accreditation Committee

The Accreditation Committee will assess only education providers registered with the TEQSA in the 'Higher Education Provider' category.

This means an education provider must hold current TEQSA registration as a Higher Education Provider before applying to the Accreditation Committee.

The Accreditation Committee will only assess programs that:

- lead to a minimum of Level 7 qualification on the Australian Qualifications Framework (www.aqf.edu.au), and
- are accredited by TEQSA unless the provider has evidence that it is authorised under the TEQSA Act to self-accredit the program.

Information about TEQSA and authorisation to self-accredit courses is available at www.teqsa.gov.au

² The Higher Education Standards Panel is responsible for providing independent advice to the Minister for Tertiary Education, Skills, Science and Research on making and varying the standards in the Higher Education Standards Framework.

Field 1: Governance, management and resourcing standards

Standard 1.1 Education provider standing

The education provider is reputable and accountable for the higher education it offers.

To meet this standard, the education provider must provide evidence that:

- 1.1.1 It has education as a principal purpose, with governance and management of its Australian higher education operations located in Australia.
- 1.1.2 All members of its corporate governing body and its key personnel have been assessed by TEQSA as “fit and proper” persons.
- 1.1.3 It takes responsibility for the quality of every medical radiation practice program of study that it offers.
- 1.1.4 It has disclosed to the Accreditation Committee all the information and documents it requires, including:
 - (a) details of the education provider, its parent entities, its predecessors and related entities, and the history of these entities and their prior applications for approval to provide education or related services in Australia and overseas
 - (b) any conditions or sanctions placed on approvals by TEQSA, including deregistration
 - (c) when relevant, details of its arrangements with other entities for the delivery of the medical radiation practice program, the history of prior applications by those entities to TEQSA for approval to provide education or related services, and of any conditions or sanctions placed on their approval by TEQSA including deregistration
 - (d) details of the education provider’s agents, and
 - (e) details of the education provider’s operations, including information which may be classed as commercial-in-confidence information.
- 1.1.5 Its history, and the history of its parent entities, its predecessors and related entities, shows a sound track record in managing business operations and providing education or related services at an acceptable level of quality and in accordance with any applicable regulatory or accreditation requirements.
- 1.1.6 It complies with applicable State/Territory and Commonwealth laws and regulatory requirements.

Standard 1.2 Financial viability and safeguards

The education provider has the financial resources and financial management capacity to sustain higher education operations consistent with the requirements for registration as a higher education provider with TEQSA.

To meet this standard, the education provider must provide evidence that it:

- 1.2.1 is financially viable and has the capacity to sustain quality in its current and planned higher education operations, using realistic projections of student demand and income from all sources
- 1.2.2 applies, and demonstrates the capacity to continue to apply, sufficient financial resources to ensure the achievement of its higher education objectives
- 1.2.3 has business continuity plans and financial, insurance and tuition safeguards in place for medical radiation practice students should the education provider cease to provide the medical radiation practice program of study, cease to operate as a education provider or suffer a major incident affecting its operations
- 1.2.4 manages the financial aspects of its higher education operations in accordance with legal requirements and Australian accounting standards and it has effective arrangements for the detection and prevention of fraud and mismanagement, and
- 1.2.5 maintains accurate financial records that are independently audited on an annual basis by an appropriately qualified auditor.

Standard 1.3 Corporate and academic governance

The education provider shows sound corporate and academic governance of its higher education operations.

To meet this standard, the education provider must provide evidence that it:

- 1.3.1 has a corporate governing body that:
 - (a) has responsibility for oversight of all of the education provider's higher education operations, including conferral of its higher education awards, and to which management is accountable
 - (b) has a majority of external members and uses a full range of expertise required for effective governance of the education provider, including higher education expertise and independent financial expertise, through its membership and/or through external advisors
 - (c) regularly monitors potential risks to the education provider's higher education operations and ensures the education provider has strategies to mitigate risks that may eventuate, and
 - (d) ensures that all delegations (including financial, academic and managerial) are appropriate, documented, observed and regularly reviewed
- 1.3.2 has approved a current strategic plan that:
 - (a) shows the education provider has clarity about its future directions for higher education
 - (b) identifies key performance indicators
 - (c) is adequately communicated to internal and external stakeholders, and
 - (d) guides management decision-making
- 1.3.3 has in place governance arrangements that demonstrate:
 - (a) a clear and discernible separation between corporate and academic governance, including a properly constituted academic board and program advisory committees
 - (b) a clear distinction between governance and management responsibilities
 - (c) the effective development, implementation and review of policies for all aspects of the education provider's academic activities including delivery of the medical radiation practice programs of study by other entities
 - (d) the maintenance of academic standards, with appropriate mechanisms for external input, in accordance with international conventions for good academic practice, and
 - (e) effective quality assurance arrangements for all the education provider's higher education operations, encompassing systematic monitoring, review and improvement.

Standard 1.4 Primacy of academic quality and integrity

The education provider maintains academic quality and integrity in its higher education operations.

To meet this standard, the education provider must provide evidence that it:

- 1.4.1 has in place academic governance arrangements that protect the academic integrity and quality of its higher education operations
- 1.4.2 encourages students to engage in critical and independent thought
- 1.4.3 ensures students demonstrate the capacity to continue their professional development and learning throughout their careers
- 1.4.4 promotes and protects free intellectual inquiry and expression in its higher education learning and teaching activities
- 1.4.5 protects academic integrity in higher education through effective policies and measures to:
 - (a) ensure the integrity of student assessment
 - (b) ensure academic progression is supported by outcomes of each student's assessment

- (c) prevent, detect and address academic misconduct by students or staff, including cheating and plagiarism, and
 - (d) ensure that academic staff are free to make public comment on issues that lie within their area of expertise
- 1.4.6 ensures any research carried out under its auspices meets appropriate codes of conduct, safety, and ethics clearance requirements, and is consistent with legislative or other regulatory requirements and any applicable national guidelines
- 1.4.7 has effective mechanisms to manage and quality assure all aspects of any arrangement with another entity to manage or deliver some or all of the medical radiation practice program of study on its behalf, including admission and support of students and delivery of the medical radiation practice program of study to ensure student learning outcomes at least equivalent to those for the same or a cognate program when delivered by the education provider
- 1.4.8 compares its performance on teaching, student learning outcomes and graduate outcomes for its medical radiation practice program with other education providers, and uses regular, valid and reliable feedback from internal and external stakeholders to improve its higher education operations, and
- 1.4.9 has mechanisms in place to support accurate and timely completion and submission of monitoring reports to the Accreditation Committee including notifying the Committee of changes or events that are likely to impact on the ability of the education provider and/or program to continue to meet these accreditation standards.

Standard 1.5 Management and human resources

The education provider's higher education operations are well-managed and human resources are appropriate.

To meet this standard, the education provider must provide evidence that it:

- 1.5.1 has sufficient appropriately qualified personnel to manage and provide academic leadership for the medical radiation practice program
- 1.5.2 has the necessary staff positions, filled by appropriately qualified and experienced personnel, and access to other human resources, to achieve its higher education objectives, which include the achievement of expected medical radiation practice student learning outcomes
- 1.5.3 manages its human resources to ensure effective:
 - (a) workload management
 - (b) merit-based selection and promotion processes
 - (c) induction
 - (d) performance review
 - (e) grievance procedures, and
 - (f) professional development of its personnel
- 1.5.4 has administrative systems, policies, procedures and practices that ensure the effective management of its medical radiation practice program, and
- 1.5.5 maintains adequate records for all its higher education operations, with appropriate confidentiality and security.

Standard 1.6 Responsibilities to students

The education provider documents its responsibilities to students and meets its responsibilities to students, including through the provision of information, support and equitable treatment.

To meet this standard, the education provider must provide evidence that:

- 1.6.1 Prior to enrolment and during their studies, all medical radiation practice students are informed about:
 - (a) the requirements for student registration with the Medical Radiation Practice Board of Australia
 - (b) the education provider's obligation to notify the Australian Health Practitioner Regulation Agency about student impairments, and
 - (c) the requirement for practitioners to register with the Medical Radiation Practice Board of Australia (MRPBA) and the requirements for registration to practise medical radiation practice in Australia, including any period of postgraduate supervised practice required by the MRPBA.
- 1.6.2 Prior to enrolment and during their studies, all medical radiation practice students are informed about their relationship with the education provider, which includes:
 - (a) any contractual arrangements
 - (b) the obligations of the education provider, and
 - (c) the rights and obligations of the student.
- 1.6.3 All medical radiation practice students are informed about the charges, conditions, refunds, and costs involved in studying with the education provider, including program-specific costs and tuition assurance arrangements.
- 1.6.4 The education provider, its agents and other entities with which it has arrangements for the delivery of its medical radiation practice program, provide current, accurate, adequate, and openly accessible information for prospective and enrolled students on all matters relating to their studies, including details regarding:
 - (a) the education provider and its TEQSA registration status
 - (d) the TEQSA accreditation status of the medical radiation practice program
 - (e) the AQF qualification type awarded to graduates of the medical radiation practice program
 - (f) accreditation and approval of the medical radiation practice program under the National Law
 - (g) structure, credit points and duration or volume of learning for the medical radiation practice program
 - (h) admission criteria, recognition of prior learning and credit and articulation to and from other studies
 - (i) content and assessment for each unit in the medical radiation practice program
 - (j) when and where the medical radiation practice program will be offered, including the units that will be offered in any teaching period, and
 - (k) availability of student support.
- 1.6.5 All medical radiation practice students are informed about, and have access to, effective grievance processes, which enable students to make complaints about any aspect of the education provider's higher education operations, including operations provided by other entities on behalf of the education provider, without fear of reprisal, and which provide for review by an appropriate independent third party if internal processes fail to resolve a grievance.
- 1.6.6 The education provider identifies and adequately meets the varying learning needs of all its students, including:
 - (a) the provision of orientation programs and transition support, and
 - (b) ongoing academic language and learning support.

- 1.6.7 Students are informed of and have appropriate access to:
- (a) advocacy support, for example in relation to the education provider's academic and procedural rules, and
 - (b) a range of personal support services adequate to meet the needs of the student body, such as counselling, health, welfare, accommodation and career services, provided by appropriately qualified personnel.
- 1.6.8 Students are informed of the risks associated with medical radiation practice and develop skills they can employ to ensure their safety including adequate preparation for clinical education.
- 1.6.9 The education provider promotes an inclusive and safe culture, ensures there are appropriate security arrangements for all its locations, and advises students of actions they can take to enhance their safety and security both on and off campus.
- 1.6.10 As appropriate to its scale and scope, the education provider has student representation within its deliberative and decision-making processes and encourages students to participate in these processes.

Standard 1.7 Physical and electronic resources and infrastructure

The education provider ensures there are safe, well-maintained physical and electronic resources and infrastructure sufficient to enable the achievement of the medical radiation practice program objectives, across all its locations in Australia and overseas.

To meet this standard, the education provider must provide evidence that:

- 1.7.1 It ensures that there are safe, well-maintained and appropriately licensed facilities and infrastructure sufficient to achieve expected student learning outcomes, as appropriate to the scale, scope, location, mode of delivery and nature of its medical radiation practice program, including:
- (a) classrooms and other teaching and learning spaces
 - (b) library and/or learning resource centre spaces and collections, and electronic learning resources
 - (c) laboratories and clinical education facilities
 - (d) appropriate work environments for personnel who are on site
 - (e) facilities for student support services, and
 - (f) student meeting and recreation areas.
- 1.7.2 It has adequate IT infrastructure and software to support student learning in its medical radiation practice program, including a website with current content, and ensures that students and personnel have ready access to online information and resources.
- 1.7.3 It ensures that all medical radiation practice students, regardless of mode of study, have access to one or more contact people who can respond to queries in a timely manner and has effective arrangements to actively maintain contact with and support students who are remote from or away from its locations.
- 1.7.4 It maintains the adequacy and security of facilities and resources through effective capital and IT planning and project management, adequate for its scale and scope.
- 1.7.5 It provides teaching and learning equipment and tools to allow for the development of a range of clinical skills aligned to the medical radiation practice program learning outcomes, this includes simulation equipment relevant to the respective division of clinical practice.
- 1.7.6 It ensures students have exposure to contemporary technologies and equipment relevant to the medical radiation practice profession.

Standard 1.8 Clinical education

The education provider has effective arrangements to assure the quality of student clinical placements in the medical radiation practice program, including assuring the quality of clinical education facilities

To meet this standard, the education provider must provide evidence that it:

- 1.8.1 utilises documented selection criteria for selecting appropriate clinical education facilities for the medical radiation practice program, including a requirement that each facility meets all applicable regulatory requirements
- 1.8.2 ensures that, when external clinical education facilities are used, a formal agreement is in place with the facility or relevant external agency
- 1.8.3 has a risk management process in place that includes strategies to deal with workplace incidents that could occur in clinical education facilities for the medical radiation practice program
- 1.8.4 has appropriate insurance that indemnifies all academic and clinical staff, students and clinical supervisors when undertaking activities related to the medical radiation practice program, including when undertaking activities off-shore
- 1.8.5 ensures the volume of clinical education is adequate for effective delivery of the medical radiation practice program learning outcomes
- 1.8.6 ensures clinical supervisors for the medical radiation practice program have had a period of relevant clinical and supervision experience and are registered in the relevant division of medical radiation practice by the Medical Radiation Practice Board of Australia.
- 1.8.7 provides clinical supervisors and students in the medical radiation practice program with detailed information on their roles and responsibilities
- 1.8.8 ensures the ratio of clinical staff to students is adequate for effective delivery of the medical radiation practice program learning outcomes
- 1.8.9 ensures there is ongoing evaluation of clinical education facilities used, and clinical supervisors engaged, in the medical radiation practice program
- 1.8.10 ensures each medical radiation practice student's clinical education includes:
 - (a) experience providing culturally competent health care, and
 - (b) exposure to a range of clinical settings including rural and regional settings
- 1.8.11 ensures clinical education provides medical radiation practice students with the opportunity to reflect on observations of practice, and
- 1.8.12 ensures there are sufficient clinical placements available for all students in the program of study to demonstrate achievement of the program learning outcomes.

Field 2: Education provider attributes

Standard 2.1 Education provider standards

The education provider has a clearly articulated higher education purpose that includes a commitment to and support for free intellectual inquiry in its academic endeavours.

To meet this standard, the education provider must provide evidence that it:

- 2.1.1 delivers teaching and learning that engages with advanced knowledge and inquiry in medical radiation practice
- 2.1.2 demonstrates the commitment of teachers, program designers and assessors to the systematic advancement and dissemination of knowledge underpinning medical radiation practice
- 2.1.3 demonstrates sustained scholarship that informs teaching and learning in its medical radiation practice program and ensures academic staff teaching on its medical radiation practice program are active in scholarship that informs their teaching
- 2.1.4 identifies and implements evidence-based practices in student teaching and learning, including those that have the potential for wider dissemination nationally

- 2.1.5 demonstrates engagement with its local and regional communities and demonstrates a commitment to social responsibility in its activities
- 2.1.6 actively establishes and maintains partnerships with relevant organisations in the health sector, to enhance education, including clinical education, of medical radiation practice students, and
- 2.1.7 actively seeks stakeholder participation to maintain the currency and relevance of the medical radiation practice program of study to the health sector and the community, and to promote the education of students within the medical radiation practice program.

Field 3: Program attributes

Standard 3.1 Program design

The medical radiation practice program is designed to develop the knowledge, skills and professional capabilities required for graduate readiness to engage in safe and effective practice of the medical radiation practice profession.

To meet this standard, the education provider must provide evidence that it meets the following criteria:

- 3.1.1 The design of the medical radiation practice program meets the AQF requirements for a qualification at level 7 or higher (www.aqf.com.au).
- 3.1.2 There are robust internal processes for design, approval and monitoring of quality of the medical radiation practice program, which:
 - (a) provide realistic projections of the demand and resources required for the program
 - (b) take account of external standards and requirements, e.g. registration standards, radiation safety standards and infection control standards and guidelines
 - (c) ensure medical radiation practice students are safe and competent medical radiation practice practitioners prior to confirming their completion of the program
 - (d) provide for appropriate development of key graduate capabilities in students including English language proficiency, and
 - (e) ensure input from relevant external stakeholders is taken into account.
- 3.1.3 The content of the medical radiation practice program:
 - (a) is evidence-based and drawn from, and relates to, the established, coherent and current body of medical radiation practice knowledge, clinical practice and research/scholarship, and
 - (b) integrates theoretical knowledge and clinical practice of medical radiation practice throughout the program.
- 3.1.4 The design of the medical radiation practice program shows appropriate consideration of entry and exit pathways, including articulation from other studies and to further studies.
- 3.1.5 The medical radiation practice program documentation clearly presents the rationale, objectives, structure, delivery methods, assessment approaches and student workload requirements for the program, and includes any compulsory requirements for completion of the program.
- 3.1.6 Program documentation shows that the medical radiation practice program has an overall coherence and is designed to provide appropriate engagement by students in intellectual inquiry consistent with the nature and level of the units being taught and the expected medical radiation practice program learning outcomes.
- 3.1.7 The medical radiation practice program learning outcomes are consistent with the practice of the profession in the Australian healthcare context.

- 3.1.8 The design of the medical radiation practice program includes an integrated, structured clinical education program that provides each student with:
- (a) experiences (including simulated learning and opportunities for inter-professional learning) across the scope of practice expected of entry level medical radiation practice practitioners, and
 - (b) exposure to a range of clinical settings including rural and regional settings where they are available.
- 3.1.9 The medical radiation practice program is designed to ensure equivalent student learning outcomes regardless of a student's place or mode of study.
- 3.1.10 If the medical radiation practice program is to be offered through arrangements with another entity whether in Australia or overseas, the program documentation specifies the detailed quality assurance arrangements that have been made with the other entity to ensure the student learning outcomes are equivalent to those when the program of study is offered directly by the education provider.

Standard 3.2 Program resourcing and information is adequate

The education provider ensures resourcing for the medical radiation practice program is adequate to meet its projected enrolments for the program and for students to achieve the expected medical radiation practice learning outcomes.

To meet this standard, the education provider must provide evidence that it:

- 3.2.1 ensures all students readily have access to electronic and/or physical library and information resources required to achieve the learning outcomes of the medical radiation practice program
- 3.2.2 ensures there are adequate IT resources to facilitate student learning consistent with medical radiation practice program requirements, as well as necessary access to specialised teaching facilities required specifically for the medical radiation practice program, such as laboratories and practical teaching facilities, and
- 3.2.3 provides accurate and current information and advice about the medical radiation practice program to prospective and current students.

Standard 3.3 Admission criteria are appropriate

Admission criteria for the medical radiation practice program are appropriate for the AQF level of the program (which must be a minimum of a level 7 Bachelor degree qualification type) and the required learning outcomes

To meet this standard, the education provider must provide evidence that it meets the following criteria:

- 3.3.1 Admission criteria for the medical radiation practice program:
 - (a) take account of external benchmarks, and
 - (b) ensure that students have adequate prior knowledge and skills to successfully undertake the medical radiation practice program.
- 3.3.2 The education provider ensures students enrolled in the medical radiation practice program are sufficiently competent in the English language to participate effectively in the program and achieve its expected learning outcomes, and sets English language entry requirements that reflect the *Medical Radiation Practice English language skills registration standard* established by the Medical Radiation Practice Board of Australia.
- 3.3.3 Credit for previous studies or skills (including articulation, recognition of prior learning and credit arrangements) is consistent with the AQF and preserves the integrity of the medical radiation practice program.
- 3.3.4 Decisions on the admission of medical radiation practice students are made by appropriately qualified personnel under delegated authority.

Standard 3.4 Teaching and learning are of high quality

The education provider has appointed academic leaders and the numbers, qualifications, experience, expertise and sessional/full-time mix of the academic staff who teach or tutor on the medical radiation practice program, and support staff, are appropriate to the nature, level, and mode of delivery of the medical radiation practice program and the attainment of expected student learning outcomes.

To meet this standard, the education provider must provide evidence that it:

- 3.4.1 has appointed academic and research leadership staff at an associate professor level or higher to provide guidance to the medical radiation practice program and its staff
- 3.4.2 ensures that staff who teach students in the medical radiation practice program:
 - (a) are appropriately qualified in the relevant discipline for their level of teaching (qualified to at least one AQF (www.aqf.com.au) level higher than the program of study being taught or with equivalent medical radiation practice professional experience)
 - (b) have a sound understanding of current scholarship and/or professional practice in the division of medical radiation practice that they teach
 - (c) have an understanding of pedagogical and/or adult learning principles relevant to the student cohort being taught
 - (d) engage students in intellectual inquiry appropriate to the level of the medical radiation practice program and unit being taught, and
 - (e) are advised of student and other feedback on the quality of their teaching and have opportunities to improve their teaching.
- 3.4.3 employs mechanisms to ensure that the quality of the clinical supervision is attained and maintained in the medical radiation practice program
- 3.4.4 ensures that academic staff who teach on the medical radiation practice program are reasonably available for students seeking academic assistance for units within the program, and
- 3.4.5 has effective mechanisms to identify and support students who are at risk of not progressing academically.

Standard 3.5 Assessment is effective and expected student learning outcomes are achieved

Assessment tasks for the medical radiation practice program and its units provide opportunities for students to demonstrate achievement of the expected student learning outcomes for the program

To meet this standard, the education provider must provide evidence that it meets the following criteria:

- 3.5.1 Assessment of learning outcomes in the medical radiation practice program is undertaken by appropriately qualified staff, and timely, adequate feedback is provided to students on their assessed work.
- 3.5.2 The education provider employs a range of assessment methods in the medical radiation practice program including cognitive and practical assessment tasks.
- 3.5.3 The education provider monitors and analyses assessment data to support and quality assure the continued reliability and validity of the assessment methods employed in the medical radiation practice program.
- 3.5.4 The education provider employs an appropriate balance between formative and summative assessment in the medical radiation practice program.
- 3.5.5 Management and coordination of the medical radiation practice program, including assessment moderation procedures, ensure consistent and appropriate assessment.
- 3.5.6 The education provider maintains, monitors and acts on comparative data on the performance of students in the medical radiation practice program, including information on the performance of student cohorts by entry pathway, mode of study and place of study, such data to include: student attrition; student progress; program completions; and grade distributions.

- 3.5.7 The academic standards intended to be achieved by students and the standards actually achieved by students in the medical radiation practice program are benchmarked against similar accredited programs offered by other education providers.
- 3.5.8 The education provider is able to demonstrate appropriate progression and completion rates.
- 3.5.9 The education provider is able to demonstrate that graduates who complete the medical radiation practice program have attained key attributes including a level of English language proficiency that meets the *Medical Radiation Practice English language skills registration standard* established by the Medical Radiation Practice Board of Australia.

Standard 3.6 Program monitoring, review, updating and termination are appropriately managed

To meet this standard, the education provider must provide evidence that it:

- 3.6.1 ensures the medical radiation practice program is systematically updated, through internal revision and external reviews, and that its coherence is maintained
- 3.6.2 undertakes regular review of the clinical education in the medical radiation practice program including evaluating the students' experiences whilst on placements and considering feedback from clinical supervisors and facilities
- 3.6.3 ensures there is ongoing evaluation of the quality of clinical education facilities and clinical supervision for the medical radiation practice program, and
- 3.6.4 has in place effective teach out mechanisms or program transition plans for all students enrolled in the medical radiation practice program to ensure that these students are not disadvantaged should the education provider discontinue that program.

Field 4: Qualification attributes

Standard 4.1 Medical radiation practice qualifications delivered meet the appropriate criteria

The education provider ensures that its medical radiation practice program is located at level 7 or higher of the Australian Qualifications Framework (AQF) and complies with all corresponding AQF requirements.

To meet this standard, the education provider must provide evidence that:

- 4.1.1 Its medical radiation practice qualification:
 - (a) is located at level 7 or higher of the Australian Qualifications Framework, and
 - (b) meets the corresponding specifications (including the levels criteria and qualification type descriptors) described in the AQF (www.aqf.edu.au).
- 4.1.2 The title of the Medical Radiation Practice award is consistent with the AQF Qualifications Issuance Policy (www.aqf.edu.au).

Standard 4.2 Certification documentation issued is accurate and protects against fraudulent use

The education provider ensures that it issues appropriate certification documentation and maintains processes to authenticate awards and protect against fraudulent use.

To meet this standard, the education provider must provide evidence that it:

- 4.2.1 issues graduates who complete the medical radiation practice program:
 - (a) a testamur, and
 - (b) a record of results

- 4.2.2 ensures that it identifies the medical radiation practice qualification awarded as an award recognised by the AQF on the testamur by either:
 - (a) the words, 'The award is recognised within the Australian Qualifications Framework', or
 - (b) the AQF logo, as authorised by the AQF Council
- 4.2.3 identifies any part of the medical radiation practice program that has been delivered and/or assessed in a language other than English on the testamur and record of results
- 4.2.4 ensures the testamur and record of results contain sufficient information to authenticate the document for the purposes of preventing fraudulent use
- 4.2.5 ensures information included on the testamur correctly identifies:
 - (c) the education provider
 - (d) the graduate receiving the award
 - (e) the award by its full title
 - (f) the date of issue
 - (g) the person/s authorised to issue the award, and
 - (h) the authenticity of the documents in a form to reduce fraud such as the education provider's seal, corporate identifier and/or unique watermark.
- 4.2.6 where relevant, ensures information included on the Graduation Statement is consistent with the *Guidelines for the Presentation of the Australian Higher Education Graduation Statement* (<http://deewr.gov.au/>)
- 4.2.7 ensures students have access to a statement of attainment or record of results
- 4.2.8 ensures the statement of attainment or record of results identifies the student, the full title of each unit, the period of study in which each unit was completed and the date issued
- 4.2.9 ensures that the statement of attainment or record of results is in a form which cannot be mistaken for a testamur or Graduation Statement for a completed medical radiation practice program
- 4.2.10 ensures that if it issues a statement of attainment, it is identified with the words, 'A statement of attainment is issued when an individual has completed one or more accredited units'
- 4.2.11 identifies in any statement of attainment or record of results whether any units have been delivered and/or assessed in a language other than English on the statement of attainment
- 4.2.12 maintains appropriate mechanisms to prevent fraudulent reproduction of certification documentation and statement of attainment documentation, and
- 4.2.13 permits the replacement of certification documentation and statement of attainment documentation and maintains processes to authenticate and verify replacement documentation.

Standard 4.3 Articulation, recognition of prior learning and credit arrangements meet the appropriate criteria

The education provider ensures that it maintains processes to provide for the recognition of prior learning, credit transfer and articulation of awards. These processes are designed to maximise the credit students may gain for learning already undertaken, subject to preserving the integrity of learning outcomes and/or discipline requirements of the award to which it applies.

To meet this standard, the education provider must provide evidence that it:

- 4.3.1 has clear, accessible and transparent policies and processes to provide award pathways and credit arrangements for students
- 4.3.2 can demonstrate that its decision to give credit into or towards the medical radiation practice qualification is information based, equitable, transparent, timely and academically defensible
- 4.3.3 can give credit in the form of block, specified or unspecified credit
- 4.3.4 ensures that where it formalises credit agreements with other providers for any award, it maximises the credit available to eligible students for both entry into and credit towards the award, subject to preserving the integrity of learning outcomes and/or discipline requirements of the award to which credit applies

- 4.3.5 in determining credit towards the medical radiation practice qualification, ensures it takes into account the comparability and equivalence of the learning outcomes, volume of learning, program of study including content, and learning and assessment approaches, and
- 4.3.6 ensures it maintains publicly available registers of their formalised agreements and common credit transfer articulation arrangements.

Field 5: Professional capabilities of medical radiation practice program graduates

This field covers standards that reflect the *Professional capabilities for medical radiation practice* developed by the Medical Radiation Practice Board of Australia (MRPBA).

The education provider must provide evidence that the medical radiation practice program learning outcomes and assessment cover the scope of the professional capabilities and criteria and that students achieve these professional capabilities during the program.

Please note: The accreditation standards and criteria for this Field 5 will reflect the *Professional capabilities for medical radiation practice* developed by the Medical Radiation Practice Board of Australia (MRPBA).

Details of the MRPBA public consultation on the *Draft capabilities for medical radiation practice* can be viewed on the Board's website www.medicalradiationpracticeboard.gov.au/News/Consultations.aspx. The MRPBA completed its public consultation on 22 July 2013 and the submissions to the public consultation will be published at www.medicalradiationpracticeboard.gov.au/News/Past-Consultations.aspx.

Because the MRPBA had not finalised its *Professional capabilities for medical radiation practice* when the Accreditation Committee released this document for public consultation, the draft accreditation standards for this Field 5 are based on the draft version of the *Professional capabilities for medical radiation practice*. The criteria for each draft accreditation standard are expressed in the context of medical radiation practice program learning outcomes and assessment.

Following public consultation on this document, the Accreditation Committee will change the accreditation standards and criteria for this Field 5 to ensure alignment with the final version of the MRPBA *Professional capabilities for medical radiation practice* and may take into account submissions to the Committee about the draft accreditation standards and criteria for this Field 5.

Standard 5.1 Professional and ethical conduct

Medical radiation practitioners have a responsibility to be professional and ethical, practise within the current medico-legal framework, to maintain patient/client confidentiality and privacy at all times whilst recognising the need to be aware of their potential role as a patient/client or client advocate.

To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students demonstrate the ability to:

- 5.1.1 explain the fundamental legal responsibilities of registered medical radiation practitioners including confidentiality, informed consent, duty of care to patients/clients and colleagues, privacy, confidentiality, reporting of notifiable conduct, reporting on adverse events, and licensing requirements within their particular division of registration
- 5.1.2 responsibly determine their own ongoing fitness to practise and to notify their own impairments to the Medical Radiation Practice Board of Australia when required to do so under the *Health Practitioner Regulation National Law Act*
- 5.1.3 explain their statutory obligations regarding ownership, storage, retention and destruction of patient records and other practice documentation
- 5.1.4 practise in a professional manner characterised by integrity, honesty and respect and apply the Medical Radiation Practice Board of Australia's *Code of Conduct*, policies, codes and guidelines to their practice
- 5.1.5 respect professional boundaries in their relationships with patients and with other members of the community

- 5.1.6 identify and effectively manage their own conflicts of interest including personal, professional and financial interests
- 5.1.7 understand and practise within their own scope of practice and assume responsibility and accept accountability for their own professional decisions
- 5.1.8 advocate on behalf of their patient/client where appropriate within their particular division of registration, and
- 5.1.9 provide their patients/clients with an appropriate level of dignity and care which is empathetic, culturally safe, culturally sensitive and inclusive.

Standard 5.2 Professional communication and collaboration

Medical radiation practitioners have a responsibility to always use appropriate, clear and effective communication and to work effectively with other health practitioners.

To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students demonstrate the ability to:

- 5.2.1 communicate clearly, sensitively and effectively with their patients/clients, carers/families and when engaging in leadership, advocacy, teaching, assessment and appraisal
- 5.2.2 communicate clearly and effectively with other health practitioners
- 5.2.3 engage in inter-professional practice and work collaboratively with other health care practitioners for the benefit of their patients/clients, and
- 5.2.4 recognise when it is appropriate to provide advice about the suitability and application of the proposed medical radiation procedure to a member of the health care team and when it is appropriate to refer them to the specialist medical practitioner.

Standard 5.3 Reflective practice and professional learning

Medical radiation practitioners have a responsibility to engage in evidence based practice, to critically monitor their actions through a range of reflective processes, and to identify and address their professional learning needs throughout their career

To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students demonstrate the ability to:

- 5.3.1 effectively apply skills in questioning, analysing, synthesising and interpreting information and clinical decision making to resolve clinical challenges and problems within their particular division of registration
- 5.3.2 improve and adapt professional practice by engaging in critical self-reflection and integrating new experience and knowledge into their practice
- 5.3.3 access, critically appraise, interpret and apply evidence from contemporary research and clinical literature to ensure their practice is guided by relevant and appropriate evidence and to ensure that the patient/client receives the best possible diagnostic/therapeutic outcomes, and
- 5.3.4 identify their ongoing professional learning needs and engage in learning which enhances their professional competence.

Standard 5.4 Radiation safety, quality and risk management

Medical radiation practitioners are responsible for the application and safe use of radiation, and must protect patients/clients from harm by managing and responding to the risks inherent in health care and medical radiation practice, and ensure the quality of professional services is maintained and improved for the benefit of patients/clients and other service users.

To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students are required to:

- 5.4.1 apply principles of quality assurance, quality improvement and risk management to their practice
- 5.4.2 protect and enhance their patient's/client's safety and uphold their patient's/client's right to quality medical radiation practice

- 5.4.3 recognise when equipment is not performing properly within prescribed radiation limits
- 5.4.4 store and dispose of radiation sources safely
- 5.4.5 adhere to best practice patient/client identification, the verification of the correct procedure and observe any precautions or contraindications to the proposed medical radiation procedure
- 5.4.6 respond appropriately to serious and/or unforeseen results of, or reactions to, implementation of the medical radiation procedure including alerting the appropriate practitioner
- 5.4.7 ensure their patient/client is referred to the appropriate practitioner when a serious diagnosis has been identified during an examination, treatment or procedure
- 5.4.8 apply knowledge of pharmaceuticals relevant to their particular division of registration
- 5.4.9 apply the current National Health and Medical Research Council infection prevention and control guidelines to their practice
- 5.4.10 identify when emergency care is required and perform safely common emergency and life support procedures, including caring for the unconscious patient and performing cardiopulmonary resuscitation to an accepted standard
- 5.4.11 explain how mistakes, adverse events and near misses may occur and implement strategies to avoid them
- 5.4.12 explain when to report and how to appropriately deal with a radiation hazard/spill, and
- 5.4.13 identify and respond appropriately to near misses, adverse events, mistakes, unsafe practice and unprofessional practice.

Standard 5.5 Practice in medical radiation sciences

Medical radiation practitioners must be able to integrate their professional and health care knowledge, skills and attitudes acquired through education and practice to safely and effectively practise within their division of registration

All programs of study leading to a qualification in any division of medical radiation practice registration must meet this standard. To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students are required to:

- 5.5.1 demonstrate knowledge of the biomedical sciences of cell biology, anatomy, physiology, pathology, and the behavioural sciences including psychology, sociology and public health as they relate to their particular division of registration
- 5.5.2 apply knowledge of radiation biology and radiation dose by following the correct procedures for their particular division of registration
- 5.5.3 perform procedures in accordance with the “as low as reasonably achievable” (ALARA) principle
- 5.5.4 estimate radiation doses and exposure as required within their particular division of registration
- 5.5.5 apply knowledge of clinical centre procedures, state and federal radiation safety legislation and national and international clinical protocols
- 5.5.6 analyse each procedure to ensure justification, optimisation and protection
- 5.5.7 interpret their patient’s referral and match the selection of procedure to the clinical indicators
- 5.5.8 recognise, and practise within, the limits of their own expertise and any professional or organisational limits
- 5.5.9 explain computed tomography (CT) as it relates to their particular division of registration
- 5.5.10 accurately record, store and retrieve information using information management systems commonly used within medical radiation science, and
- 5.5.11 explain the role that radiation therapy, radiography and nuclear medicine may assume within their particular division of registration.

Standard 5.6 Medical radiation practice in diagnostic radiography

Medical radiation practitioners registered in the diagnostic radiography division must be able to integrate and apply the professional knowledge, technical and clinical knowledge and skills, and clinical experience they acquire through education and practice to safely, skillfully and effectively practise diagnostic radiography.

Only medical radiation sciences programs leading to a qualification in diagnostic radiography must meet this standard. To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students are required to:

- 5.6.1 safely and accurately perform and evaluate all projection radiographic examinations for a range of patient/client presentations and complexities
- 5.6.2 identify radiographic anatomy and the common pathologies that are displayed using projection radiography
- 5.6.3 provide a verbal radiographic opinion about any abnormal element in a radiographic image set
- 5.6.4 ensure the referring practitioner is identified as soon as practicable when medically urgent abnormal elements are identified in a radiographic image set
- 5.6.5 safely and accurately perform and evaluate extra-oral dental imaging
- 5.6.6 safely and accurately perform fluoroscopy in a range of settings (including operating theatre)
- 5.6.7 explain the design and operation of CT systems, imaging parameters and scan protocols, patient/client preparation, post processing techniques, including multi-planar reformats and volume imaging, and contrast timing in CT acquisition, including contrast delivery systems
- 5.6.8 safely and effectively perform and evaluate common unenhanced and contrast CT images of the body, including estimating dose levels associated with a variety of CT scans
- 5.6.9 identify sectional CT anatomy and the common pathologies that are displayed by CT
- 5.6.10 describe the principles, operation, and clinical applications of angiography and interventional techniques and explain the use of angiography as a diagnostic and therapeutic tool and relevant post processing options including contrast delivery system
- 5.6.11 identify angiographic anatomy and the common pathologies that are displayed by angiography
- 5.6.12 generate and manipulate clinical 3D datasets and explain the potential for 3D images to be used for quantitative and qualitative purposes
- 5.6.13 describe the principles and applications of magnetic resonance imaging
- 5.6.14 describe the principles and applications of ultrasound imaging
- 5.6.15 describe the principles and applications of diagnostic and screening mammography, and
- 5.6.16 list the key features of childhood behavioural and physical development, and any congenital and acquired paediatric diseases commonly encountered within diagnostic radiography.

Standard 5.7 Medical radiation practice in nuclear medicine technology

Medical radiation practitioners registered in the nuclear medicine technology division must be able to integrate and apply the professional knowledge, technical and clinical knowledge and skills, and clinical experience they acquire through education and practice to safely, skillfully and effectively practise nuclear medicine technology.

Only medical radiation sciences programs leading to a qualification in nuclear medicine technology practice must meet this standard. To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students are required to:

- 5.7.1 safely and accurately perform routine Single Photon Emission Computed Tomography (SPECT/CT) and planar imaging
- 5.7.2 safely and accurately prepare common radiopharmaceuticals
- 5.7.3 explain normal biodistribution of commonly used radiopharmaceuticals and determine whether their patient's biodistribution is normal, altered or unexpected

- 5.7.4 accurately perform quality control on all radiopharmaceuticals and assess the purity of the radioisotope including:
 - radionuclide purity
 - radiochemical purity, and
 - chemical purity
- 5.7.5 safely and accurately perform the range of positron emission tomography - CT (PET/CT) imaging procedures listed in the current Medicare Benefits Schedule (MBS)
- 5.7.6 describe the principles and applications of magnetic resonance imaging
- 5.7.7 safely and effectively deliver nuclear medicine radioisotope therapies
- 5.7.8 identify the various delivery systems of radioisotopes for diagnostic studies/therapies
- 5.7.9 describe the normal biodistribution of radioisotope therapies
- 5.7.10 perform safe and accurate aseptic blood labelling procedures
- 5.7.11 explain *in vitro* laboratory procedures, such as Cr GFR, Cr RBC mass
- 5.7.12 identifying whether results of *in vitro* laboratory procedures are normal, altered or unexpected
- 5.7.13 count samples using a well counter
- 5.7.14 describe how to safely and effectively use a centrifuge and a fume hood, and
- 5.7.15 list the key features of childhood behavioural and physical development, and any congenital and acquired paediatric diseases commonly encountered within nuclear medicine.

Standard 5.8 Medical radiation practice in radiation therapy

Medical radiation practitioners registered in the radiation therapy division must be able to integrate and apply the professional knowledge, technical and clinical knowledge and skills, and clinical experience they acquire through education and practice to safely, skillfully and effectively practise radiation therapy.

Only medical radiation sciences programs leading to a qualification in radiation therapy must meet this standard. To meet this standard, the education provider must provide evidence that the program learning outcomes and assessment ensure all students are required to:

- 5.8.1 interpret a patient's clinical history and referral for radiation therapy, and be able to describe appropriate and modern immobilisation, simulation, planning and treatment methods appropriate for a wide range of cancers and patient presentation
- 5.8.2 identify and explain the immobilisation required for a particular radiation therapy procedure and/or treatment technique
- 5.8.3 apply their knowledge and skills to fabricate suitable immobilisation devices and ancillary equipment as required in radiation therapy
- 5.8.4 recognise limitations/restrictions in the use of stabilisation and immobilisation devices
- 5.8.5 apply their knowledge to safely and effectively perform current treatment simulation techniques related to radiation therapy
- 5.8.6 apply their skills and knowledge in CT simulation
- 5.8.7 produce standard 3D radiotherapy treatment plans using computerised planning systems.
- 5.8.8 explain the concept of advanced imaging and image co-registration in simulation and planning
- 5.8.9 explain the concepts for generating 3D conformal radiation therapy (3D CRT), intensity-modulated radiation therapy (IMRT) and volumetric-modulated arc therapy (VMAT) treatment plans for their patient/client
- 5.8.10 identify and apply radical and palliative treatment doses and acceptable dose limits to critical structures in their radiation therapy practice
- 5.8.11 apply knowledge and understanding of the physical and biological sciences related to 3DCRT, IMRT and VMAT treatment planning in radiation therapy practice
- 5.8.12 explain and apply the concept of plan evaluation to 3DCRT, IMRT & VMAT planning

- 5.8.13 apply their knowledge to safely and accurately perform a wide range of current treatment techniques related to radiation therapy
- 5.8.14 apply their knowledge of brachytherapy, superficial radiotherapy, radiosurgery/stereotactic radiotherapy, paediatric radiotherapy, total body radiation and proton therapy and the physics associated with each of the areas to their radiation therapy practice, and
- 5.8.15 describe the principles and applications of magnetic resonance imaging.

DRAFT

Glossary

Clinical education	the performance of professional procedures and/or processes, including experience providing patient care, by a student or a group of students whilst receiving guidance and feedback from a clinical supervisor for the purpose of developing the professional capabilities required to engage in safe and effective practice of the medical radiation practice profession
Clinical supervision	the oversight – either direct or indirect – by a clinical supervisor of professional procedures and/or processes performed by a student or a group of students within a clinical placement for the purpose of guiding, providing feedback on, and assessing personal, professional and educational development in the context of each student’s experience of providing safe, appropriate and high quality patient care
Clinical supervisor	a registered medical radiation practitioner who guides students’ education during clinical placements. The clinical supervisor’s role may encompass educational, support and managerial functions. The clinical supervisor is responsible for ensuring safe, appropriate and high-quality patient care at all times throughout students’ clinical education.
Current research and scholarship	<p>Involves, in the context of teaching and learning:</p> <ul style="list-style-type: none">• demonstrating current subject knowledge and an ongoing intellectual engagement in primary and allied disciplines, and their theoretical underpinnings• keeping abreast of the literature and new research, including by interaction with peers, and using that knowledge to inform teaching and learning• encouraging students to be critical, creative thinkers and enhancing understanding of teaching through interaction with students• engaging in professional practice that is appropriate to the discipline• being informed about the literature of teaching and learning in relevant disciplines and being committed to ongoing development of teaching practice, and• focusing on the learning outcomes of students. <p>(Source: <i>TEQSA Application Guide</i>)</p>
Education provider	means (a) a university; or (b) other provider registered by TEQSA as a “Higher Education Provider”
Medical radiation practice program of study or medical radiation practice program	means a medical radiation practice program of study provided by an education provider.
Teach out mechanisms	means arrangements that allow students to complete the qualification or program in which they were enrolled at the time the education provider decided to discontinue offering that qualification or program
Testamur	means an official certification document that confirms that a qualification has been awarded to an individual. In Australia this may be called an ‘award’, ‘parchment’, ‘laureate’ or ‘certificate’.
Volume of learning	A volume of learning is included within the AQF as an integral part of the description for each qualification type. The volume of learning is a dimension of the complexity of the qualification type. It 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.

List of acronyms

AQF	Australian Qualifications Framework
CT	Computerised tomography
Cr GFR	Chromium glomerular filtration rate study
Cr RBC	Chromium red blood cell study
IMRT	Intensity-modulated radiation therapy
IT	Information technology
MBS	Medicare Benefits Schedule
MRI	Magnetic resonance imaging
MRPBA	Medical Radiation Practice Board of Australia
PET	Positron emission tomography
SPECT	Single photon emission computed tomography
TEQSA	Tertiary Education Quality and Standards Agency
VMAT	Volumetric modulated arc therapy
Threshold HES	Higher Education Standards Framework (Threshold Standards) 2011