



ABN 26 924 779 836

**Australian Institute of Radiography
Professional Accreditation and Education Board**

Competency Based Standards for the Accredited Practitioner

November 2005

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Glossary of Terms

Accredited Course /Program

An accredited course/program is one which has been reviewed and accepted by the PAEB and has met certain requirements as defined by the profession within the Education Policy of the AIR.

Courses/programs in Australia may be of the following structure:

- 3 year, 6 semester Undergraduate course/program which may lead to Provisional Accreditation (Graduate Practitioner)
- 4 year, 8 semester Undergraduate course/program which may lead to either Provisional Accreditation (Graduate Practitioner) or a Statement of Accreditation (Accredited Practitioner)
- Graduate Entry Masters course/program which may lead to either Provisional Accreditation (Graduate Practitioner) or a Statement of Accreditation (Accredited Practitioner)

An accredited course/ program may also include an overseas course/program (Accredited Practitioner)

Accredited Practitioner

An accredited practitioner will have achieved a level of competence to enable them to accept the responsibilities of practising independently and be capable of performing the expected role of a practitioner in a sole practitioner situation. An accredited practitioner has either, successfully completed the PDY/IMP and received the Statement of Accreditation, graduated from an AIR accredited course which satisfies the requirement for the issuing of a Statement of Accreditation, or in the case of an overseas qualified practitioner who has been assessed by the AIR as being equivalent to an AIR accredited practitioner.

Australian Department of Education, Science and Training (DEST)

The Commonwealth of Australia Government Department responsible for Education, Science and Training.

Australian Institute of Radiography (AIR)

The Australian Institute of Radiography (AIR) is the professional association representing the Medical Radiation Science profession (Radiation Therapists, Radiographers and Sonographers) in Australia.

Competency Based Assessment (CBA)

CBA describes the minimum assessment levels to achieve the Competency Based Standards (CBS).

Competency Based Standards (CBS)

CBS describe the performance benchmarks for Radiation Therapists/Radiographers

Graduate Practitioner

A graduate practitioner is a graduate from an AIR accredited Medical Radiation Science course/program whom, upon completion of such course/program, would receive the Statement of Provisional Accreditation of the AIR. The graduate practitioner is required to

successfully complete the Professional Development Year (PDY)/Intern Model Program (IMP) of the AIR to gain recognition as an accredited practitioner.

Medical Radiation Science (MRS)

Medical Radiation Science is the collective term that includes the practice of Nuclear Medicine Technology, Radiation Therapy, Radiography/Medical Imaging and Sonography. For the purposes of this document the term MRS shall only include Radiation Therapy and Radiography.

National Office of Overseas Skills Recognition (AEI-NOOSR)

This body forms part of the Australian Government International Education Network (AEI) and its function is the development of Australian policy on issues of overseas skills recognition.

Professional Accreditation and Education Board (PAEB)

The Professional Accreditation and Education Board was established to advise Council of the AIR on matters related to undergraduate, graduate entry and postgraduate education and development of the Medical Radiation Science profession.

Professional Development Year (PDY)

The PDY is a mediated entry to the profession, allowing the development of clinical proficiency based on skills and knowledge acquired during the undergraduate program. The PDY must be undertaken during employment or attachment to an accredited clinical centre, on a full time, part time or locum basis and will commence on the first day of employment or attachment. The PDY is 48 weeks full time equivalent, and must be completed within 3 years of graduation. However under extenuating circumstances approval may be sought from the PAEB for an extension. In the state of Victoria, the Intern Model Program (IMP) is completed in lieu of the PDY.

Radiation Oncology

In the clinical context, Radiation Oncology is the treatment of malignant and benign disease using ionising radiation. This may be done to cure disease; to palliate the symptoms and signs of disease; as a primary treatment modality; in combination with other treatment modalities; to improve the quality of life or for research.

Radiation Therapist (RT)

Radiation Therapists are health care professionals primarily concerned with the design and implementation of radiation treatment and issues of care and wellbeing of people diagnosed with cancer and other conditions. The name Radiation Therapist used within this document refers to those professionals that may have been referred to in the past both within Australia and internationally, as Therapeutic Radiographer, Radiation Therapy Technologist, Medical Radiation Science Professional, and Therapy Radiographer.

Radiographer (R)

Radiographers are health care professionals who provide and interpret a range of medical imaging examinations for diagnosis and management of medical conditions. Radiographers are responsible for optimising diagnostic quality whilst maintaining radiation safety. The name Radiographer used within this document refers to those professionals that may be called within Australia and internationally, Radiographer,

Diagnostic Radiographer, Medical Imaging Technologist, Medical Radiation Science Professional and Medical Imaging Scientist.

Radiography/Medical Imaging

In the clinical context, Radiography/Medical Imaging is the professional practice of providing a range of examinations using ionising or non-ionising radiation. This may be done to produce an image to confirm or exclude a clinical diagnosis; to assist and monitor treatment processes; for screening programs or for research.

Scope of Practice (SOP)

Scope of Practice defines the major areas of responsibility and application of knowledge, judgement, functions and skills within the profession.

Executive Summary

The Competency Based Standards apply to the Accredited Practitioner in Radiation Therapy and Radiography on attainment of the AIR Statement of Accreditation. Additional standards will be produced to define the scope of practice for the Graduate Practitioner and the Advanced/Specialist Practitioner. Competency Based Assessment (CBA) Performance Indicators will be the link between the definition of the standards (CBS) and the assessment of professional competence and capability as it applies to practice in Australia.

This document defines the Scope of Practice for the Radiation Therapist and Radiographer at the Accredited Practitioner level. Later documents will define the scope of practice at the graduate practitioner and advanced/specialist practitioner levels.

The competency based standard for the Accredited Practitioner level has been developed following consultation with a wide range of stakeholders throughout Australia.

Foreword

Overview

The Australian Institute of Radiography (AIR) reviewed the existing Competency Based Standards (1998) during the period August 2004 to February 2005. This review process was fundamental in developing a comprehensive set of standards for Radiation Therapists and Radiographers for a five year period.

Steering Committee

The Professional Accreditation and Education Board (PAEB) was appointed as the steering committee responsible for the review and development of these standards.

Development, Consultation & Review Phase

The steering committee reviewed the previous CBS document and researched standards relating to competence. Approaches used and developed by other Allied Health disciplines both locally and internationally were reviewed. A significant shift in the philosophy underpinning this document is the development of standards based on outcomes rather than the previous task orientated style.

Following the development of new draft standards, consultation was sought from:

- Radiation Therapists and Radiographers representing State Branches,
- Specialist Panels of the AIR,
- Academic Institutions *and*,
- Regulatory bodies.

Information gathered from this consultation was used to update the draft. Further consultation was sought from invited Radiation Therapists, Radiographers and Academics as described in Appendix 1.

Periodic Review

The document should be modified and updated periodically by the Professional Accreditation and Education Board of the AIR to incorporate and reflect advances and developments in the MRS profession. This is part of routine quality assurance to ensure that this professional document meets the requirements of the time.

Ownership

The Competency Based Standards and Assessment documents belong exclusively to the AIR. No part of the content may be reproduced without express permission of the AIR.

Introduction

Competency Based Standards (CBS) describe the performance benchmarks for the Accredited Practitioner in Radiation Therapy and Radiography on the attainment of a Statement of Accreditation.

The CBS provides a framework for professional and community expectations. The standards aim to integrate the skills, knowledge and understanding that underpin the professions of Radiation Therapy and Radiography with the unique attributes and attitudes of these disciplines.

The standards have several purposes:

- To provide standards or practice for the accredited practitioner,
- To provide standards necessary to assess overseas applicants seeking a Statement of Accreditation,
- To assist tertiary institutions to develop undergraduate and graduate entry programs, leading to Accreditation with the Australian Institute of Radiography,
- To provide a statement on current status of our profession in the community,
- To provide government bodies such as AEI-NOOSR and DEST with information regarding best practice in our professions,
- To provide a resource for the development of industrial awards,
- To provide a framework for higher levels of practice (and career structure),
- To support registration and licensing issues,
- To provide a framework for resumption of practice,
- To provide a resource document for students entering the profession and practitioners who have had a long period of absence from the profession and employers.

It is not intended for the CBS to set a national curriculum for program development leading to awards in MRS. This document is instead a minimum specification of standards, incorporating academic, clinical and professional elements for use by tertiary institutions in program design.

The CBS for the Accredited Practitioner is one of several documents. The other documents under development define the:

- Competency Based Assessment (CBA) for the Accredited Practitioner
- Competency Based Standard for the Graduate Practitioner
- Competency Based Standard for the Advanced/Specialist Practitioner.

Scope of Practice for Radiation Therapist Accredited Practitioner Level

Radiation Oncology is the treatment of malignant and benign disease using ionising radiations. This may be done:

- to cure disease,
- as a primary treatment modality,
- in combination with other treatment modalities,
- to palliate the symptoms and signs of disease,
- to improve the quality of life and,
- for research.

Radiation Therapists are health care professionals primarily concerned with the design and implementation of radiation treatment and issues of care and wellbeing of people diagnosed with cancer and other conditions undergoing radiation therapy.

The scope of practice of the Radiation Therapist (Accredited Practitioner level) shall include:

- Patient assessment including psychosocial issues,
- Patient positioning and immobilisation,
- Manufacture/construction of ancillary equipment,
- Simulation, including tumour localisation, treatment planning and dosimetry,
- Treatment by superficial to megavoltage external beams and verification,
- Imaging for planning and treatment verification purposes,
- Mentoring, clinical reasoning and research.

Whilst the Accredited Practitioner has the theoretical knowledge, they do not specifically possess the advanced/specialist level competence to practice independently in the following:

- Brachytherapy treatment,
- Intensity Modulated Medical Radiation Science,
- Stereotactic Radiotherapy/Radiosurgery,
- Information Systems Administration.

These specialty areas are within the scope of practice of the Advanced/Specialist Practitioner.

Scope of Practice for Radiographer Accredited Practitioner Level

Radiography is the professional practice of providing a range of diagnostic imaging examinations and therapeutic procedures using ionising and non-ionising radiation. This may be done:

- to create an image to confirm or exclude a clinical diagnosis,
- to assist, monitor and manage treatment processes,
- for screening programs and,
- for research.

Radiographers are health care professionals who provide and interpret a range of medical imaging examinations for diagnosis and management of medical conditions. Radiographers are responsible for optimising diagnostic quality whilst maintaining radiation safety.

The scope of practice of the Radiographer (Accredited Practitioner level) shall include:

- Patient and clinical assessment,
- Application of the science of medical imaging to include
 - general radiography incorporating plain film and digital radiography,
 - fluoroscopy,
 - operating theatre imaging,
 - emergency imaging and,
 - Computed Tomography.
- Image processing and data recording,
- Quality management and diagnostic efficacy,
- Image interpretation,
- Mentoring, clinical reasoning and research.

Whilst the Accredited Practitioner has the theoretical knowledge, they do not specifically possess the advanced/specialist competency level to practice independently in the following:

- MRI,
- Mammography,
- Advanced applications in CT scanning,
- Ultrasound,
- Interventional imaging and advanced angiographic applications,
- Information Systems Administration.

These specialty areas are within the scope of practice of the Advanced/Specialist Practitioner.

The Five Standards in Radiation Therapy and Radiography

In developing the CBS a process of review has identified commonality in many of the standards of other health professions. They are:

1. Knowledge and Understanding
2. Critical Thinking and Evaluation
3. Professional and Ethical Practice
4. Care and Clinical Management
5. Lifelong Learning

These standards provide a means of identifying general expectations about professional practice, attributes and capabilities of Radiation Therapists or Radiographers entering employment immediately following attainment of the AIR Statement of Accreditation. The standards are supported by descriptors and outcome statements as described below.

Standards

The five standards are the explicit requirements of the Radiation Therapist or Radiographer as they move into the clinical environment on the attainment of the Statement of Accreditation.

Descriptors

Descriptors are generic attributes that draw out the key elements of each standard and define the scope of practice.

Outcomes

Outcomes further expand thinking on the professional scope of practice and enable examination of key areas of practice and the associated expectations. Outcomes are measured by performance indicators, which enable determination of compliance with the standard. Performance indicators are defined in the CBA document.

Summary Statements – Standards and Descriptors

Standard 1. Knowledge & Understanding

This standard defines the knowledge, principles and concepts that underpin Radiation Therapy or Radiography.

1.1 **Key Knowledge Concepts**

Demonstrate a broad and thorough knowledge/understanding of the key theoretical concepts underpinning Radiation Therapy or Radiography.

1.2 **Clinical Skills and Practice**

Demonstrate a broad and thorough knowledge of the SOP underpinning Radiation Therapy or Radiography.

Standard 2. Critical Thinking and Evaluation

This standard defines the essential qualities of the Radiation Therapist or Radiographer to think critically, creatively and reflectively.

2.1 **Formulation and Delivery**

Assess clinical situations, determine the key issues and deliver a timely and quality outcome

2.2 **Clinical Skills**

Analyse and respond to problems related to patient treatment and care

2.3 **Analyse, Synthesise, Prioritise**

Analyse and respond to problems of operation and management

2.4 **Research & Innovation**

Initiate and evaluate research outcomes and incorporate into evidence based practice where relevant

2.5 **Evaluation and Quality Assurance**

Evaluate and implement processes and procedures for ensuring quality outcomes

Standard 3. Professional & Ethical Practice

This standard defines the application of professional and clinical skills and the ethical responsibilities of the Radiation Therapist or Radiographer.

- 3.1 ***Autonomy & Accountability***
Operate effectively as an autonomous and responsible practitioner
- 3.2 ***Scope of Practice***
Guided in action by their own and others' Scope of Practice (SOP)
- 3.3 ***Professional Relationships***
Establish and maintain appropriate collaborative relationships with colleagues and members of the multidisciplinary team.
- 3.4 ***Patient Advocacy***
Act to ensure that patient welfare and rights are appropriately respected
- 3.5 ***Legal Framework***
Act to preserve the safety of individuals and groups at all times
- 3.6 ***Quality Management***
Management of quality issues relating to effective practice

Standard 4. Care and Clinical Management

This standard defines the role of the Radiation Therapist or Radiographer to the care, welfare and clinical management of others.

- 4.1 ***Patient Welfare***
Fulfil the duty of care in clinical practice
- 4.2 ***Empathy***
Establish and maintain effective interpersonal relationships with patients and others
- 4.3 ***Cultural Sensitivity***
Respond appropriately in culturally sensitive situations
- 4.4 ***Clinical Management***
Demonstrate effective clinical management of individuals

Standard 5. Lifelong Learning

This standard defines the lifelong learning attributes of the Radiation Therapist or Radiographer.

- 5.1 ***Professional Development***
Demonstrate commitment to on-going professional development
- 5.2 ***Mentoring/Teaching***
Participate in guiding the learning of others
- 5.3 ***Research***
Participation in research

Radiation Therapy Standards

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
<p>Standard 1. Knowledge & Understanding <i>This standard defines the knowledge, principles and concepts that underpin Radiation Therapy.</i></p>	<p>1.1 Key Knowledge Concepts <i>Demonstrate a broad and thorough knowledge/ understanding of the key theoretical concepts underpinning Radiation Therapy</i></p>	<p>Outcome 1.1.1 Demonstrate a broad and thorough knowledge of the science of Radiation Therapy</p>
		<p>Outcome 1.1.2 Demonstrate a broad and thorough knowledge of physical sciences as it relates to Radiation Therapy</p>
		<p>Outcome 1.1.3 Demonstrate a broad and thorough knowledge of biological sciences as it relates to Radiation Therapy</p>
		<p>Outcome 1.1.4 Demonstrate a broad and thorough knowledge of humanities and behavioural sciences as it relates to Radiation Therapy</p>
		<p>Outcome 1.1.5 Demonstrate a broad and current knowledge of Information Technology as it relates to Radiation Therapy</p>
		<p>Outcome 1.1.6 Demonstrate a knowledge of research as it relates to Radiation Therapy</p>
	<p>1.2 Clinical Skills and Practice <i>Demonstrate a broad and thorough knowledge of the SOP underpinning Radiation Therapy.</i></p>	<p>Outcome 1.2.1 Demonstrate a thorough knowledge of the principles of Radiation Therapy and their clinical application</p>
		<p>Outcome 1.2.2 Demonstrate a thorough knowledge of Radiation Therapy procedures and their application to patient welfare.</p>
		<p>Outcome 1.2.3 Demonstrate a thorough knowledge/understanding of radiation oncology procedures to participate with other members of the health care team in decision-making</p>
		<p>Outcome 1.2.4 Demonstrate a thorough knowledge of information management and confidentiality.</p>
		<p>Outcome 1.2.5 Demonstrate knowledge of the SOP of the multidisciplinary team and the role of the Radiation Therapy within the team.</p>

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
<p>Standard 2. Critical Thinking & Evaluation</p> <p>This standard defines the essential qualities of the Radiation Therapist to think critically, creatively and reflectively.</p>	<p>2.1 Formulation and Delivery</p> <p><i>Assess clinical situations, determines the key issues and deliver a timely and quality outcome</i></p>	<p>Outcome 2.1.1 Apply critical thinking and problem solving skills to formulate appropriate clinical decisions</p>
		<p>Outcome 2.1.2 Apply critical thinking skills to time management and resource utilisation.</p>
		<p>Outcome 2.1.3 Evaluation of the appropriateness of patient and clinical information</p>
	<p>2.2 Clinical Skills</p> <p><i>Analyse and respond to problems related to patient treatment and care</i></p>	<p>Outcome 2.2.1 Identify problems as they arise in clinical practice</p>
		<p>Outcome 2.2.2 Apply knowledge and experience to solve problems and ensure care is delivered to achieve best practice</p>
		<p>Outcome 2.2.3 Apply reasoning and problem solving skills to determine appropriate clinical decisions</p>
		<p>Outcome 2.2.4 Reflect upon decisions to modify future practices</p>
	<p>2.3 Analyse, Synthesise, Prioritise</p> <p><i>Analyse and respond to problems of operation and management</i></p>	<p>Outcome 2.3.1 Identify situations requiring problem solving and apply a systematic and logical approach</p>
		<p>Outcome 2.3.2 Initiate resolution of problems to ensure prescribed protocols are maintained</p>
		<p>Outcome 2.3.3 Prioritise issues for management of time and resources</p>
	<p>2.4 Research & Innovation</p> <p><i>Initiate and evaluate research outcomes and incorporate into evidence based practice where relevant</i></p>	<p>Outcome 2.4.1 Evaluate the appropriateness of research findings to practice</p>
		<p>Outcome 2.4.2 Apply research and evaluation findings to evidence based practice</p>
	<p>2.5 Evaluation and Quality Assurance</p> <p><i>Evaluate and implement processes and procedures for ensuring quality outcomes</i></p>	<p>Outcome 2.5.1 Ensure all services and interventions are provided in accordance with definitive protocols and standards of practice</p>
		<p>Outcome 2.5.2 Evaluate practice in an ongoing basis</p>
		<p>Outcome 2.5.3 Analyse and document issues related to reportable incidents, with recommendations for future corrective actions</p>

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
Standard 3. Professional & Ethical Practice This standard defines the application of professional and clinical skills and the ethical responsibilities of the Radiation Therapist.	3.1 Autonomy & Accountability <i>Operate effectively as an autonomous and responsible practitioner</i>	Outcome 3.1.1 Assume responsibility for own actions
		Outcome 3.1.2 Make independent professional decisions within their SOP
		Outcome 3.1.3 Respond to and recognise own abilities and level of professional competence
		Outcome 3.1.4 Maintain effective communication
		Outcome 3.1.5 Ensure documentation is accurate and maintains confidentiality
	3.2 Scope of Practice <i>Guided in action by their own and others' Scope of Practice</i>	Outcome 3.2.1 Recognise and operate within own SOP
		Outcome 3.2.2 Consult with an experienced practitioner when expertise is required beyond own SOP
		Outcome 3.2.3 Recognise the limitations of SOP for student and graduate practitioner
		Outcome 3.2.4 Consult with other health care professionals when issues are beyond own SOP
	3.3 Professional Relationships <i>Establish and maintain appropriate collaborative relationships with colleagues and members of the multidisciplinary team.</i>	Outcome 3.3.1 Ability to work effectively within the organisation
		Outcome 3.3.2 Advise members of the multidisciplinary team about individual patient needs and know when to make appropriate referrals
		Outcome 3.3.3 Demonstrate respect for colleagues and other members of the multidisciplinary team
		Outcome 3.3.4 Participate with other members of the health care team in decision making
	3.4 Patient Advocacy <i>Act to ensure that patient welfare and rights are appropriately respected</i>	Outcome 3.4.1 Practice in accordance with the AIR Guidelines of Professional Conduct
		Outcome 3.4.2 Implement procedures to meet statutory and ethical health and safety requirements
		Outcome 3.4.3 Engage effectively in ethical decision making
		Outcome 3.4.4 Ensure confidentiality of information entrusted to them
		Outcome 3.4.5 Implement procedures relating to legislation in Radiation Therapy
		Outcome 3.4.6 Act to ensure the rights of individuals are not compromised
	3.5 Legal Framework <i>Act to preserve the safety of individuals and groups at all times</i>	Outcome 3.5.1 Demonstrate a thorough knowledge of radiation safety to a level that supports safe practice in Radiation Therapy
		Outcome 3.5.2 Act to minimise risk of infection
Outcome 3.5.3 Practice within the framework of accepted policies and procedures		

Competency Based Standards for the Accredited Practitioner – November 2005

		Outcome 3.5.4 Reporting of incidents
3.6 Quality Management <i>Management of quality issues relating to effective practice</i>	Outcome 3.6.1 Evaluate the quality of practice in the clinical setting.	
	Outcome 3.6.2 Ability to audit, reflect upon and review practice	
	Outcome 3.6.3 Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and communicate the decisions and reasoning appropriately	

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
<p>Standard 4. Care and Clinical Management This standard defines the role of the Radiation Therapist to the care, welfare and clinical management of others</p>	<p>4.1 Patient Welfare <i>Fulfil the duty of care in clinical practice</i></p>	<p>Outcome 4.1.1 Act to ensure the rights of individuals are not compromised</p> <hr/> <p>Outcome 4.1.2 Demonstrate duty of care in patient management</p>
	<p>4.2 Empathy <i>Establish and maintain effective interpersonal relationships with patients and others</i></p>	<p>Outcome 4.2.1 Show empathy towards individuals, their carers and colleagues</p> <hr/> <p>Outcome 4.2.2 Apply strategies to promote individual or group self esteem</p> <hr/> <p>Outcome 4.2.3 Act to maintain the dignity and integrity of individuals or groups</p>
	<p>4.3 Cultural Sensitivity <i>Respond appropriately in culturally sensitive situations</i></p>	<p>Outcome 4.3.1 Act in ways that demonstrate respect for the values, customs, spiritual beliefs and practices of individuals</p>
	<p>4.4 Clinical Management <i>Demonstrate effective clinical management of individuals</i></p>	<p>Outcome 4.4.1 Identify individual patient's health issues and refer to appropriate professional groups within the multidisciplinary team</p> <hr/> <p>Outcome 4.4.2 Develop and document clinical procedures</p> <hr/> <p>Outcome 4.4.3 Participate in individual care in consultation with the team</p> <hr/> <p>Outcome 4.4.4 Assess the individual's condition and appropriateness for the prescribed procedure</p>

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
<p>Standard 5. Lifelong Learning This standard defines the lifelong learning attributes of the Radiation Therapist</p>	<p>5.1 Professional Development <i>Demonstrate commitment to ongoing professional development</i></p>	<p>Outcome 5.1.1 Use professional standards of practice to assess own performances</p>
		<p>Outcome 5.1.2 Participate regularly in continuing professional development and self-directed learning</p>
		<p>Outcome 5.1.3 Participate in training programs related to the introduction of new technologies and procedures</p>
	<p>5.2 Mentoring/Teaching <i>Play an active role in guiding the learning of others</i></p>	<p>Outcome 5.2.1 Participate in education of students and graduates undertaking supervised clinical practice</p>
		<p>Outcome 5.2.2 Contribute to learning experiences and professional development of others</p>
		<p>Outcome 5.2.3 Evaluate progress towards expected training outcomes</p>
	<p>5.3 Research <i>Participation in research</i></p>	<p>Outcome 5.3.1 Demonstrate an understanding of the significance of research in contemporary practice</p>
		<p>Outcome 5.3.2 Participate in and contribute towards research, reasoning and problem solving</p>
		<p>Outcome 5.3.3 Conduct evidence based practice, evaluate practice systematically and participate in audit processes</p>

Radiography Standards

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
<p>Standard 1. Knowledge & Understanding <i>This standard defines the knowledge, principles and concepts that underpin Radiography</i></p>	<p>1.1 Key Knowledge Concepts <i>Demonstrate a broad and thorough knowledge/ understanding of the key theoretical concepts underpinning Radiography</i></p>	<p>Outcome 1.1.1 Demonstrate a broad and thorough knowledge of the science of Radiography</p>
	<td> <p>Outcome 1.1.2 Demonstrate a broad and thorough knowledge of physical sciences as it relates to Radiography</p> </td>	<p>Outcome 1.1.2 Demonstrate a broad and thorough knowledge of physical sciences as it relates to Radiography</p>
	<td> <p>Outcome 1.1.3 Demonstrate a broad and thorough knowledge of biological sciences as it relates to Radiography</p> </td>	<p>Outcome 1.1.3 Demonstrate a broad and thorough knowledge of biological sciences as it relates to Radiography</p>
	<td> <p>Outcome 1.1.4 Demonstrate a broad and thorough knowledge of humanities and behavioural sciences as it relates to Radiography</p> </td>	<p>Outcome 1.1.4 Demonstrate a broad and thorough knowledge of humanities and behavioural sciences as it relates to Radiography</p>
	<td> <p>Outcome 1.1.5 Demonstrate a broad and current knowledge of Information Technology as it relates to Radiography</p> </td>	<p>Outcome 1.1.5 Demonstrate a broad and current knowledge of Information Technology as it relates to Radiography</p>
	<td> <p>Outcome 1.1.6 Demonstrate a knowledge of research as it relates to Radiography</p> </td>	<p>Outcome 1.1.6 Demonstrate a knowledge of research as it relates to Radiography</p>
	<p>1.2 Clinical Skills and Practice <i>Demonstrate a broad and thorough knowledge of the SOP underpinning Radiography.</i></p>	<p>Outcome 1.2.1 Demonstrate a thorough knowledge of the principles of Radiography and their clinical application</p>
	<td> <p>Outcome 1.2.2 Demonstrate a thorough knowledge of Radiography procedures and their application to patient welfare.</p> </td>	<p>Outcome 1.2.2 Demonstrate a thorough knowledge of Radiography procedures and their application to patient welfare.</p>
	<td> <p>Outcome 1.2.3 Demonstrate a thorough knowledge/understanding of radiology procedures to participate with other members of the health care team in decision-making</p> </td>	<p>Outcome 1.2.3 Demonstrate a thorough knowledge/understanding of radiology procedures to participate with other members of the health care team in decision-making</p>
	<td> <p>Outcome 1.2.4 Demonstrate a thorough knowledge of information management and confidentiality.</p> </td>	<p>Outcome 1.2.4 Demonstrate a thorough knowledge of information management and confidentiality.</p>
	<td> <p>Outcome 1.2.5 Demonstrate knowledge of the SOP of the multidisciplinary team and the role of the Radiography within the team.</p> </td>	<p>Outcome 1.2.5 Demonstrate knowledge of the SOP of the multidisciplinary team and the role of the Radiography within the team.</p>

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
<p>Standard 2. Critical Thinking & Evaluation</p> <p>This standard defines the essential qualities of the Radiographer to think critically, creatively and reflectively.</p>	<p>2.1 Formulation and Delivery</p> <p><i>Assess clinical situations, determines the key issues and deliver a timely and quality outcome</i></p>	<p>Outcome 2.1.1 Apply critical thinking and problem solving skills to formulate appropriate clinical decisions</p>
		<p>Outcome 2.1.2 Apply critical thinking skills to time management and resource utilisation.</p>
		<p>Outcome 2.1.3 Evaluation of the appropriateness of patient and clinical information</p>
	<p>2.2 Clinical Skills</p> <p><i>Analyse and respond to problems related to patient treatment and care</i></p>	<p>Outcome 2.2.1 Identify problems as they arise in clinical practice</p>
		<p>Outcome 2.2.2 Apply knowledge and experience to solve problems and ensure care is delivered to achieve best practice</p>
		<p>Outcome 2.2.3 Apply reasoning and problem solving skills to determine appropriate clinical decisions</p>
		<p>Outcome 2.2.4 Reflect upon decisions to modify future practices</p>
	<p>2.3 Analyse, Synthesise, Prioritise</p> <p><i>Analyse and respond to problems of operation and management</i></p>	<p>Outcome 2.3.1 Identify situations requiring problem solving and apply a systematic and logical approach</p>
		<p>Outcome 2.3.2 Initiate resolution of problems to ensure prescribed protocols are maintained</p>
		<p>Outcome 2.3.3 Prioritise issues for management of time and resources</p>
	<p>2.4 Research & Innovation</p> <p><i>Initiate and evaluate research outcomes and incorporate into evidence based practice where relevant</i></p>	<p>Outcome 2.4.1 Evaluate the appropriateness of research findings to practice</p>
		<p>Outcome 2.4.2 Apply research and evaluation findings to evidence based practice</p>
	<p>2.5 Evaluation and Quality Assurance</p> <p><i>Evaluate and implement processes and procedures for ensuring quality outcomes</i></p>	<p>Outcome 2.5.1 Ensure all services and interventions are provided in accordance with definitive protocols and standards of practice</p>
		<p>Outcome 2.5.2 Evaluate practice in an ongoing basis</p>
		<p>Outcome 2.5.3 Analyse and document issues related to reportable incidents, with recommendations for future corrective actions</p>

Competency Based Standards for the Accredited Practitioner – November 2005

Standard	Descriptor	Outcome
Standard 3. Professional & Ethical Practice This standard defines the application of professional and clinical skills and the ethical responsibilities of the Radiographer.	3.1 Autonomy & Accountability <i>Operate effectively as an autonomous and responsible practitioner</i>	Outcome 3.1.1 Assume responsibility for own actions
		Outcome 3.1.2 Make independent professional decisions within their SOP
		Outcome 3.1.3 Respond to and recognise own abilities and level of professional competence
		Outcome 3.1.4 Maintain effective communication
		Outcome 3.1.5 Ensure documentation is accurate and maintains confidentiality
	3.2 Scope of Practice <i>Guided in action by their own and others' Scope of Practice</i>	Outcome 3.2.1 Recognise and operate within own SOP
		Outcome 3.2.2 Consult with an experienced practitioner when expertise is required beyond own SOP
		Outcome 3.2.3 Recognise the limitations of SOP for student and graduate practitioner
		Outcome 3.2.4 Consult with other health care professionals when issues are beyond own SOP
	3.3 Professional Relationships <i>Establish and maintain appropriate collaborative relationships with colleagues and members of the multidisciplinary team.</i>	Outcome 3.3.1 Ability to work effectively within the organisation
		Outcome 3.3.2 Advise members of the multidisciplinary team about individual patient needs and know when to make appropriate referrals
		Outcome 3.3.3 Demonstrate respect for colleagues and other members of the multidisciplinary team
		Outcome 3.3.4 Participate with other members of the health care team in decision making
	3.4 Patient Advocacy <i>Act to ensure that patient welfare and rights are appropriately respected</i>	Outcome 3.4.1 Practice in accordance with the AIR Guidelines of Professional Conduct
		Outcome 3.4.2 Implement procedures to meet statutory and ethical health and safety requirements
		Outcome 3.4.3 Engage effectively in ethical decision making
		Outcome 3.4.4 Ensure confidentiality of information entrusted to them
		Outcome 3.4.5 Implement procedures relating to legislation in Radiography
		Outcome 3.4.6 Act to ensure the rights of individuals are not compromised
	3.5 Legal Framework <i>Act to preserve the safety of individuals and groups at all times</i>	Outcome 3.5.1 Demonstrate a thorough knowledge of radiation safety to a level that supports safe practice in Radiography
		Outcome 3.5.2 Act to minimise risk of infection
Outcome 3.5.3 Practice within the framework of accepted policies and procedures		

Competency Based Standards for the Accredited Practitioner – November 2005

		Outcome 3.5.4 Reporting of incidents
	3.6 Quality Management	Outcome 3.6.1 Evaluate the quality of practice in the clinical setting.
	<i>Management of quality issues relating to effective practice</i>	Outcome 3.6.2 Ability to audit, reflect upon and review practice
		Outcome 3.6.3 Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and communicate the decisions and reasoning appropriately

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Standard	Descriptor	Outcome
<p>Standard 4. Care and Clinical Management</p> <p>This standard defines the role of the Radiographer to the care, welfare and clinical management of others</p>	<p>4.1 Patient Welfare</p> <p><i>Fulfil the duty of care in clinical practice</i></p>	<p>Outcome 4.1.1 Act to ensure the rights of individuals are not compromised</p> <p>Outcome 4.1.2 Demonstrate duty of care in patient management</p>
	<p>4.2 Empathy</p> <p><i>Establish and maintain effective interpersonal relationships with patients and others</i></p>	<p>Outcome 4.2.1 Show empathy towards individuals, their carers and colleagues</p> <p>Outcome 4.2.2 Apply strategies to promote individual or group self esteem</p> <p>Outcome 4.2.3 Act to maintain the dignity and integrity of individuals or groups</p>
	<p>4.3 Cultural Sensitivity</p> <p><i>Respond appropriately in culturally sensitive situations</i></p>	<p>Outcome 4.3.1 Act in ways that demonstrate respect for the values, customs, spiritual beliefs and practices of individuals</p>
	<p>4.4 Clinical Management</p> <p><i>Demonstrate effective clinical management of individuals</i></p>	<p>Outcome 4.4.1 Identify individual patient's health issues and refer to appropriate professional groups within the multidisciplinary team</p> <p>Outcome 4.4.2 Develop and document clinical procedures</p> <p>Outcome 4.4.3 Participate in individual care in consultation with the team</p> <p>Outcome 4.4.4 Assess the individual's condition and appropriateness for the prescribed procedure</p>

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Standard	Descriptor	Outcome
Standard 5. Lifelong Learning This standard defines the lifelong learning attributes of the Radiographer	5.1 Professional Development <i>Demonstrate commitment to ongoing professional development</i>	Outcome 5.1.1 Use professional standards of practice to assess own performances
		Outcome 5.1.2 Participate regularly in continuing professional development and self-directed learning
		Outcome 5.1.3 Participate in training programs related to the introduction of new technologies and procedures
	5.2 Mentoring/Teaching <i>Participate in guiding the learning of others</i>	Outcome 5.2.1 Participate in education of students and graduates undertaking supervised clinical practice
		Outcome 5.2.2 Contribute to learning experiences and professional development of others
		Outcome 5.2.3 Evaluate progress towards expected training outcomes
	5.3 Research <i>Participation in research</i>	Outcome 5.3.1 Demonstrate an understanding of the significance of research in contemporary practice
		Outcome 5.3.2 Participate in and contribute towards research, reasoning and problem solving
		Outcome 5.3.3 Conduct evidence based practice, evaluate practice systematically and participate in audit processes

Appendix 1 Consultation Group Membership

Steering Committee

Mr Tony Knights (Chair) -Academic
Ms Carolyn Astill - RT
Mr Rob Davidson - Academic
Ms Lesa Hornsey -R
Mr Con Kapsis - R
Mr Aldo Rolfo – RT

Consultative Group

Assoc Prof Marilyn Baird (Vic) – Academic
Mrs Kevina Choma (QLD) – RT
Dr Jenny Cox (NSW) – Academic
Mr Nathan Emanuel (NSW) – R
Ms Marianne Hercus (Tas) – RT
Mr Neil Hicks (WA) – R
Ms Jill Lewis (NSW) – RT
Mr Wayne Nuss (Qld) – R
Ms Catherine Osbourne (WA) – RT
Mr Mark Prevost (Vic) – R
Mrs Pam Rowntree (Qld) – Academic
Mr Roger Windle (SA) – Academic

AIR

Mr Stuart Hamilton – AIR President (Tas)
Mr Emile Badawy – AIR
Ms Marcia Fleet – AIR

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