

# Supervised practice program for medical radiation practitioners

# Supervision assessment report three (3): radiation therapy

The quarterly reports submitted during the supervised practice program will contribute to the assessment of the practitioner's application for general registration with the Medical Radiation Practice Board of Australia.

The Principal supervisor must discuss the assessment with the supervised practitioner prior to submitting.

It is important that the Principal supervisor refers to the Board's *Supervised practice registration standard* and the *Supervised practice program guide* before completing assessment reports. These documents can be found at www.medicalradiationpracticeboard.gov.au

The practitioner's capability in each domain must be assessed. If the practitioner is assessed as making limited or no progress, further details must be provided. Comments are not required if the practitioner is making satisfactory progress.

#### Please submit this form.

This assessment form must be sent to mrpsupervisedpractice@ahpra.gov.au

Name of supervised practitioner:			
Registration number: MRP			
Name of principal supervisor:			
Registration number: MRP			
Date of report:	// 20		
Total weeks completed in program:			
No of weeks worked during reporting p	eriod (usually 12 weeks):	Leave taken	_week/s

# Professional capabilities for medical radiation practice

# Key capabilities – what registered medical radiation practitioners must be able to do

The key capabilities describe the key features of safe and competent practice in a range of contexts and situations of varied complexity and uncertainty. During any one procedure or treatment, practitioners are expected to demonstrate key capabilities from various domains. This recognises that competent professional practice is more than a sum of each discrete part and requires an ability to draw on and integrate the breadth of capabilities to support overall performance.

# Enabling components – evidence of the key capabilities for general registration as a medical radiation practitioner

The enabling components describe the essential and measurable characteristics of the corresponding key capabilities and facilitate assessment of performance in the practice setting. Medical radiation practitioners must be able to demonstrate all enabling components for all key capabilities for safe and competent practice. This includes applying, adapting and synthesising new knowledge from experience to continually improve performance.

The enabling components include different ways of demonstrating capability:

- **Apply knowledge / principles of:** indicates a practitioner is expected to apply detailed knowledge in the practice setting.
- Understand indicates a practitioner is expected to apply broad knowledge and understanding of information for safe practice, however may not need to understand or interpret detailed information or may not need to use their knowledge and understanding to perform certain procedures.
- Performance e.g. 'perform', 'identify', 'respond' and/or 'operate' are used for the majority of enabling components these are abilities needed in the practice setting.

# **Definitions**

# Capable

Professional capability is the ability to take appropriate and effective action to formulate and solve problems in both familiar and unfamiliar, complex and changing settings. Professional capability develops over time and must be demonstrated to the standard of performance needed in the workplace.

Prior to completion of the supervised practice program a supervised practitioner must have demonstrated all of the key capabilities, including those relevant for the division of radiation therapy (not including MRI or US except where they form part of the supervised practitioner's practice)

A supervised practitioner may demonstrate capability (all of the enabling components) at any time during the program, including the early stages of the program.

For a supervised practitioner to be assessed as capable they must:

- demonstrate the capability according to the relevant descriptor (apply, understand, perform etc)
- consistently demonstrate all of the enabling components of capability at the standard required for safe and
   effective practice
- accept responsibility and be accountable for their practice, including managing individual patients within the supervisor's general oversight, and
- use their professional judgement, decision-making skills and experiential learning to apply their scientific knowledge, practical skills and ability in any given situation.

# Satisfactory progress (3<sup>rd</sup> report)

Satisfactory progress by the end of period three means the supervised practitioner:

- rarely requires direction and mostly works within expected timeframes for practices or treatments
- rarely requires assistance to apply knowledge of clinical understanding and knowledge of the domain, and
- takes primary responsibility for their practice, including individual patient/clients.

#### Limited progress

The supervised practitioner has not demonstrated satisfactory progress or has otherwise demonstrated limited progression. Minor changes to the supervision plan are likely to enable the supervised practitioner to make sufficient progress over the next supervision period.

The Principal supervisor may make minor adjustments to the supervision plan to ensure development of the supervised practitioner in the next assessment period. Minor adjustments to the supervision plan do not require approval from the Board.

#### No progress

The supervised practitioner is not meeting expectations / not making adequate progress in most or all elements of the domain. Major changes to the supervision plan are required to enable the supervised practitioner to make sufficient progress over the next supervision period.

Major changes to the supervision plan must be approved by the Board.

By the end of the third (3<sup>rd</sup>) reporting period the supervised practitioner should be on track to complete the program by the end of the fourth (4<sup>th</sup>) reporting period. If the Principal supervisor is concerned about the progress of the supervised practitioner they must raise a concern with Ahpra by email to mrpsupervisedpractice@ahpra.gov.au

#### Not assessed

Ordinarily, supervised practitioners will be expected to practice in accordance with the approved supervision plan and this will include demonstrating capabilities across the common domains at all times throughout the period of supervision.

For Domain 1A – diagnostic radiography, the supervision plan generally describes practice arrangements that ensures the supervised practitioner receives experiential learning in the different areas of practice.

An indication that a capability was 'Not assessed' should only be used if the supervised practitioner was not assessed during this assessment period because;

- the approved supervision plan did not require the capability to be assessed in this period, or
- an unscheduled change to the supervision plan has occurred

Details of changes to the supervision plan should be noted in this report and reflected in an amended supervision plan.

# **Domain 1: Medical radiation practitioner:**

- 1.1. Apply knowledge of anatomy, physiology and pathology to practice.
- 1.2. Use clinical information management systems appropriately.
- 1.3. Understand and apply the different methods of imaging and treatment.
- 1.4. Confirm the procedure according to clinical indicators.
- 1.5. Assess the patient's capacity to receive care.
- 1.6. Implement techniques for patient stabilisation and reproducibility of procedures and outcomes.
- 1.7. Deliver patient care, including
  - Recognise patients/clients whose condition is deteriorating, or who are unable to undergo an examination/treatment and respond to their needs in an appropriate and timely way consistent with standards of safe and high-quality care. This includes calling for emergency help when needed.
  - Apply quality criteria to assure image quality, evaluate medical images and identify any urgent and/or unexpected findings.
  - If the practitioner identifies any urgent or unexpected findings, take appropriate and timely
    action to ensure the immediate management of the patient/client.
- 1.8. Apply knowledge of safe and effective use of medicines.

#### Contrast agents and other medicines

Some examinations and treatments include the use of contrast agents and other medicines.

The safe use of contrast agents and/or other medicines used in connection with examinations or treatments must be assessed against the enabling components of Domain 1, Key capability 8 - Apply knowledge of safe and effective use of medicines.

# Assessment:

Capable

Satisfactory progress

Limited progress (provide details below)

□ No progress (provide details below)

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

- 1. Use equipment and perform techniques to ensure reproducibility of the patient's position for radiation therapy
  - a. Identify and apply appropriate equipment and techniques to ensure accurate and reproducible localisation, pre-treatment imaging, planning and treatment, for the patient's/client's diagnosis and condition.
  - b. Fabricate or adapt suitable stabilisation and ancillary equipment as needed.

#### Assessment:

Capable Satisfactory progress

Limited progress (provide details below)

 $\hfill\square$  No progress (provide details below)

Not assessed

#### Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# 2. Perform localisation and pre-treatment imaging

- a. Select imaging modalities suited to individual patient/client presentations and related planning procedures.
- b. Perform localisation for a range of cancer sites using other modalities.
- c. Apply knowledge of a range of imaging modalities for use in localisation.

### Assessment:

Capable Satisfactory progress

Limited progress (provide details below)

No progress (provide details below)

☐ Not assessed

#### Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

#### 3. Perform treatment planning

- a. Apply the principles of radiation physics, dosimetry and radiobiology to treatment planning.
- b. Apply knowledge of tumour and target volumes, and normal tissue volumes to treatment planning.
- c. Apply knowledge of cross-sectional anatomy, physiology and oncology to treatment planning.
- d. Create clinically acceptable treatment plans.
- e. Evaluate treatment plans to ensure they are clinically acceptable and safe.

**Treatment planning** may include but is not limited to imaging and treatment modalities used including CT, MRI, PET and may include brachytherapy, superficial radiation therapy, radiosurgery/stereotactic radiation therapy, paediatric radiation therapy, total body irradiation and proton therapy.

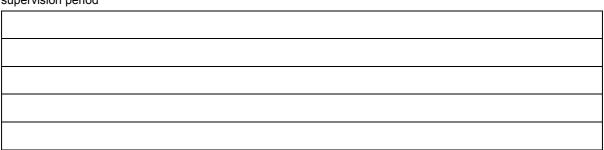
**Treatment plans** may include but are not limited to 2D, 3D and 4D, conformal radiation therapy (CRT), intensity-modulated radiation therapy (IMRT) and may include volumetric modulated arc therapy (VMAT).

**Evaluating radiation therapy treatment plans** may include but are not limited to radiation therapists evaluating and analysing treatment plans that they create, as well as treatment plans created by other practitioners.

#### Assessment:

Capable	Satisfactory progress	Limited progress (provide details below)
□ No progress (pr	ovide details below)	Not assessed

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?



4.	Perform radiation therapy treatment according to approved radiation therapy prescriptions and
	treatment plans

- a. Operate imaging equipment and radiation therapy treatment systems safely and effectively.
- b. Operate treatment delivery record and verification systems safely and effectively.
- c. Implement the radiation therapy treatment plans for a range of treatment techniques.
- d. Apply knowledge of radical and palliative treatment doses and acceptable dose limits to critical structures during implementation of treatment plans.
- e. Evaluate treatment verification images and modify the patient's treatment delivery according to local protocols.
- f. Evaluate treatment plans to ensure they are clinically acceptable and safe.

# Assessment:

Capable	Satisfactory progress	Limited progress (provide details below)
No progress (provi	de details below)	□ Not assessed

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# 5. Perform computed tomography (CT) imaging.

- a. Operate CT systems safely and effectively
- b. Apply appropriate imaging parameters for the patient/client presentation.
- c. Adjust relative dose levels based on the range of patient/client presentations.
- d. Collaborate in the design and evaluation of CT protocols.
- e. Perform and evaluate contrast and non-contrast CT examinations of the body and, when appropriate, modify them to consider patient/client presentation and clinical indications.
- f. Process data image sets, including multi-planar reformats and volume imaging.

#### Contrast agents and other medicines

CT may contrast-enhanced studies which requires the safe and appropriate selection of CT contrast agents for the patient presentation.

The safe use of contrast agents and/or any other medicines used in connection with CT examinations must be assessed under Domain 1, Key capability 8 - Apply knowledge of safe and effective use of medicines.

#### Assessment:

Capable

Satisfactory progress

☐ Limited progress (provide details below) ☐ Not assessed

□ No progress (provide details below)

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# **Domain 2: Professional and ethical practitioner**

- 2.1. Practise in an ethical and professional manner, consistent with relevant legislation and regulatory requirements.
- 2.2. Provide each patient with dignity and care
  - Cultural competency is the acknowledgment of the importance of culture, the assessment of crosscultural relations, vigilance of the dynamics that may result from cultural differences, expansion of cultural knowledge and adapting services to meet culturally-unique needs
  - Cultural safety is the individual (and institutional) knowledge, skills, attitudes and competencies needed to deliver optimal health care for Aboriginal and Torres Strait Islander Peoples as determined by Aboriginal and Torres Strait Islander individuals, families and communities.
- 2.3. Take responsibility and accountability for professional decisions.
- 2.4. Advocate on behalf of the patient when appropriate.
- 2.5. Seek (supports) opportunities to progress the profession.

#### Assessment:

Capable Satisfactory progress

Limited progress (provide details below)

□ No progress (provide details below)

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# **Domain 3: Communicator and collaborator**

- 3.1. Communicate clearly, sensitively and effectively with the patient and their family or carers.
- 3.2. Collaborate with other health practitioners.

#### Assessment:

Capable

Satisfactory progress

Limited progress (provide details below)

□ No progress (provide details below)

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# **Domain 4: Evidence-informed practitioner**

- 4.1. Resolve challenges through application of critical thinking and reflective practice.
- 4.2. Identify ongoing professional learning needs and opportunities.

Satisfactory progress

# Assessment:

Capable

Limited progress (provide details below)

□ No progress (provide details below)

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# Domain 5: Radiation safety and risk manager

- 5.1. Perform and provide safe radiation practice.
- 5.2. Protect and enhance patient safety
- 5.3. Implement quality assurance processes imaging or treating patients
- 5.4. Maintain safety of the workplace and associated environments

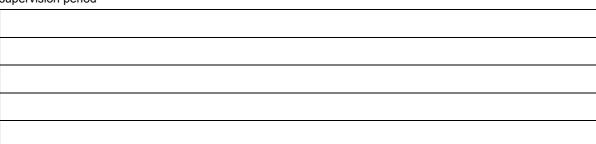
## Assessment:

- Capable
- Satisfactory progress

Limited progress (provide details below)

□ No progress (provide details below)

#### Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?



# Assessable capabilities if magnetic resonance imaging (MRI) forms part of a supervised practitioner's practice

The following enabling components cover the knowledge, skills and attributes needed by all medical radiation practitioners who use MRI as part of their practice. Meeting the capability requirements ensures that practitioners who use MRI are capable of providing safe, quality, patient-centred care.

### Perform magnetic resonance imaging (MRI).

- a. Operate MRI systems safely and effectively.
- b. Apply knowledge of the principles of MRI physics and surrounding environment to ensure patient and others' safety.
- c. Select equipment and imaging parameters relevant to the patient presentation and where appropriate, modify imaging parameters to achieve optimal diagnostic outcomes.
- d. Collaborate in the design and evaluation of MRI protocols.
- e. Perform and evaluate MRI examinations where appropriate, modify the examination according to the MRI findings and clinical presentation.
- f. Process image data sets.

#### Contrast agents and other medicines

MRI includes contrast-enhanced studies and the safe and appropriate selection of MRI contrast agents for the patient presentation.

The safe use of contrast agents, and any other medicines used in connection with MRI examinations must be assessed under Domain 1, Key capability 8 - Apply knowledge of safe and effective use of medicines.

#### **MRI** safety

As part of assessment a supervised practitioner must consistently apply the knowledge and principles of MRI safety in performance of MRI examinations.

MRI safety includes but is not limited to:

- maintaining the integrity of MRI safety zones
- applying principles of electro-magnetic forces and fields (static and gradient and radiofrequency)
- minimising the bioeffects of magnetic fields (including tissue heating and peripheral nerve stimulation)
   exposure limits (including specific absorption rates)
- exposure limits (including specific absorption rates)
- assessing and managing risks associated with devices/implants/projectiles, acoustic risks, and
- implementing emergency procedures in the event of quench or the distressed and/or deteriorating patient.

#### Assessment:

Capable	Satisfactory progress	Limited progress (provide details below)
□ No progress (pro	ovide details below)	Not assessed

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# Assessable capabilities if ultrasound (US) forms part of a supervised practitioner's practice

The following enabling components cover the knowledge, skills and attributes needed by all medical radiation practitioners who use ultrasound (US) as part of their practice. Meeting the capability requirements ensures that practitioners who use ultrasound are capable of providing safe, quality, patient-centred care.

### Perform ultrasound imaging

- a. Operate ultrasound imaging systems safely and effectively.
- b. Apply knowledge of the principles of ultrasound physics to minimise the likelihood of biological effects and identification of artefacts.
- c. Apply knowledge of cross-sectional anatomy, embryology, pathophysiology, haemodynamic and sonographic appearances of normal and abnormal anatomy.
- d. Use standard techniques/images and equipment for the body area being examined and, where appropriate, modify them to consider the patient presentation and clinical indications.
- e. Perform and evaluate ultrasound imaging and where appropriate, extend or modify the examination according to the sonographic findings and clinical presentation.
- f. Document the real-time examination and evaluate findings.

Ultrasound imaging systems must include 2D, Doppler and may include contrast and 3D where appropriate.

**Ultrasound physics** includes transducer design and operation, identification of artefacts and understanding of the biological effects of ultrasound.

**Documenting the real-time examination** must follow organisational protocols and still images/cine loops must accurately represent any pathology present or absent.

#### Assessment:

□ No progress (provide details below)

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Satisfactory progress

Limited progress (provide details below)
 Not assessed

Detail the reasons for assessment: What specific practice areas within the domain need to be addressed?

# **Overall assessment**

1. Do you have a concern about this supervised practitioner's progress or anticipate that the supervised practitioner may have difficulties in successfully completing the program by the end of the 4<sup>th</sup> reporting period?

Yes (Principal supervisor must contact Ahpra by email <a href="mailto:mrpsupervisedpractice@ahpra.gov.au">mrpsupervisedpractice@ahpra.gov.au</a>)

No (go to Q2)

2. Is the supervised practitioner suitable to progress to next period of supervision?

Yes (go to Q3)

No (go to Q4)

3. Have you discussed this supervision report with the supervised practitioner and agreed with the assessment contained within and to continue with the existing agreed supervision plan?

🗌 Yes

No (you must discuss the assessment before submitting)

# Limited progress / No progress

 If the practitioner is not suitable to progress to the next period of supervision: detail changes recommended to the previously agreed supervision plan and reasons for the changes (if necessary, please provide additional information on a separate sheet)



5. Have you discussed this supervision assessment with the supervised practitioner and agreed to recommend an amendment to the existing supervision plan?

🗌 Yes

□ No (you must discuss the assessment before submitting)