



## Australian and New Zealand Society of Nuclear Medicine Limited

ABN: 35 133 630 029

22 July 2013

Mr Adam Reinhardt  
Executive Officer  
Medical Radiation Practice Board of Australia  
GPO Box 9958  
Melbourne VIC 3001

Dear Mr Reinhardt

### **RE: Draft Professional Capabilities for Medical Radiation Practitioners**

On behalf of the Australian and New Zealand Society of Nuclear Medicine (ANZSNM) we wish to provide comment and feedback on the proposed Professional Capabilities for Medical Radiation Practice and responses to the questions for consideration by interested parties.

Regards

Liz Bailey  
President  
ANZSNM

Regards

Nicholas Farnham  
Chair  
ANZSNMT

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**Submission on behalf of the Australian  
and New Zealand Society of Nuclear  
Medicine  
(ANZSNM)**

**Draft Professional Capabilities for Medical  
Radiation Practice of the Medical Radiation  
Practice Board of Australia (MRPBA)**



## **Introduction:**

The ANZSNM is the national professional organization representing professionals from all disciplines involved in the field of Nuclear Medicine. It is the current professional body for Nuclear Medicine Technologists/Scientists in Australia, with approximately 80% of working practitioners being members, and these form the ANZSNMT.

With the transition to a National Board, the ANZSNM and ANZSNMT recognize the need for greater transparency and the issues outlined in the draft standard. The ANZSNM has in place a recently updated Scope of Practice document that could be used as a starting point for developing professions standards for nuclear medicine technologists. With this in mind, the ANZSNM would be happy to work with the MRPBA to develop guidelines for professional capabilities that meet the requirements of the National Board as proposed in the consultation documents.

## **Question 1:**

### **Are the domains for the professional capabilities appropriate?**

The domains defined in this document sufficiently separate the reference criteria to outline professional capabilities for Medical Radiation Practitioners.

## **Question 2:**

### **Are there additional domains necessary to identify the professional skills, attributes and the application of knowledge necessary for entry-level independent practice?**

No additional domains are required in this document. Any additional information required in this document, as outlined below, will fall under the current domains.

## **Question 3:**

### **Are the descriptions of what a practitioner must be able to do suitable for entry-level practitioners?**

Please note below our concerns in regards to specific domains:

- a) **Domain 5 Radiation Safety** – this needs to include a description of the importance of understanding radiation safety issues regarding pregnancy and breastfeeding for patients undergoing a nuclear medicine study;
- b) **Domain 6A Practice in Diagnostic Radiography** - contains descriptor 8 “Describe the principles and applications of MR imaging” and descriptor 9 “Describe the principles and applications of Ultrasound imaging”. These two descriptors need to be included in Domain 6B Practice in Nuclear Medicine. In many departments, radiology and nuclear medicine are operated as a single medical imaging department, with the need for multi-skilling of staff. Therefore, MR imaging knowledge is vital for two simple reasons: i) Nuclear Medicine can be based in radiology departments that contain MRI machines and therefore a knowledge, especially regarding safety of MRI machines is vital for anyone that may be coming in contact with them; and ii) the introduction of new technology in Nuclear Medicine such as PET/MRI will mean that Nuclear Medicine Technologists will require a knowledge and understanding of MRI to train on and operate this technology.

Ultrasound is an imaging specialty that has crossover with nuclear medicine and there are several nuclear medicine procedures that require ultrasound guidance and are booked in conjunction with ultrasound. For these reasons Nuclear Medicine Technologists require a knowledge and understanding of ultrasound to be able to safely work in line with Sonographers. Specialisation in ultrasound is an area that represents a career progression for some Nuclear Medicine Technologists;

- c) **Domain 6B “Practice in Nuclear Medicine”** – the order of the points should be defined so as to reflect the importance of knowledge for an entry level Nuclear Medicine Technologist. Therefore, point 5 “Implement routine SPECT CT and planar imaging” should be swapped with point 4 “Implement CT imaging for nuclear medicine imaging” to emphasis the importance of a sound understanding of ‘standard’ nuclear medicine procedures as well as specialised techniques.

#### **Question 4:**

##### **Are the descriptions of how capability can be recognized suitable?**

Overall the capabilities seem to be well defined, however a few minor suggestions have been outlined below:

- a) **Domain 1 Professional and Ethical Conduct** - point 3 “Manage their own mental and physical health, and responsibly determine their own ongoing fitness to practice”. The document does not outline a clear definition of the key elements of fitness to practice. If this is defined in another regulation or policy, then reference to this should be included;
- b) **Domain 3 Reflective practice and professional learning** - point 3 “Improve and adapt professional practice by engaging in critical self-reflection, and integrating new experience and knowledge into their own practice”. Capability (b) describes “Evidence of engagement in a recognised method of critical self-reflection”. The document needs to include a clearer definition of the recognised methods of critical self-reflection;
- c) **Domain 4 Quality and risk management** - point 2 needs to specifically mention pregnancy and breastfeeding;
- d) **Domain 6B Practice in nuclear medicine** - point 2 needs to include pregnancy.

#### **Question 5:**

##### **Do the descriptors provide sufficient capacity to be applied in a range of clinical settings?**

The descriptors provide adequate capacity to be applied in a range of clinical settings.

#### **Question 6:**

##### **Are the definitions of each domain appropriate?**

All the descriptors for the domains adequately define the contents and role of the domain

**Question 7:**

**Is it appropriate to require the same level of knowledge and skill in CT of entry-level practitioners in each division of practice?**

It is a must to include the same knowledge and skill in CT for all divisions of practice. This is especially important with the current range of SPECT/CT and PET/CT scanners that includes CT scanners that can work in the ranges of kV and mA equivalent to those used by radiology CT departments. The Department of Health in Victoria and the Environment Protection Authority (EPA) in NSW license graduates from the Victorian Society of Nuclear Medicine Technologists Diagnostic CT Course that allows Technologist's to use Diagnostic Quality CT in conjunction with SPECT and PET imaging. Many other states are looking to implement similar licensing arrangements.

**Question 8:**

**Is the document clear?**

Yes the document is clear. The domains provide good separation of topics and the format using the tables helps to line up descriptors and capabilities.

**Question 9:**

**Is the glossary correct and comprehensive?**

The definitions of 'fitness to practice' and 'reflective practice' outlined in this document are not satisfactory. Extra information is required to clearly define these terms either in the Capabilities descriptor or as a Glossary term.

**Question 10:**

**What is the likely outcome on individual registrants?**

This document should provide a good basis of the expectations of the employee on how an entry level practitioner should be able to perform. It is in line with the current expectations of an entry level practitioner.

**Question 11:**

**Are there any jurisdiction specific impacts for practitioners or governments or other stakeholders that the National Board should be aware of?**

There may be issues arising from these capabilities specifically related to the definitions for radiation licensing allowing certain divisions the ability to practice specialised techniques. These capabilities should not be restrictive for each division of practice where future technology may see an overlap of skills and knowledge. This is particularly true for nuclear medicine with the expansion of SPECT/CT to include full diagnostic quality CT. PET/MRI will be coming to Australia very soon and we do not envisage the need for a radiographer to be assigned to PET/MRI suites when Nuclear Medicine Technologists are capable of learning MRI imaging techniques and safety.

**Question 12:**

**Are there any implementation issues the National Board should be aware of?**

There are no implementation issues that seem obvious.