

## Public consultation paper

26 April 2021

## Draft revised National exam guidelines

The Medical Radiation Practice Board of Australia (the Board) is consulting on draft revised *National exam guidelines*.

The current National exam guidelines provides guidance to applicants and registered practitioners about their obligations in connection with the national exam.

The national exam is based on <u>Professional capabilities for medical radiation practice</u> which were updated and commenced on 1 March 2020. The draft revised *National exam guidelines* incorporates these changes into the exam and proposes changes to some exam rules, proposes a limit on attempts and the exam pass mark.

In addition, a draft *National exam manual* has been developed to provide information to assist in the preparation for the exam.

#### **Making a submission**

The Board is inviting comments on the draft revised *National exam guidelines and National exam manual*. There are also specific questions which you may wish to address in your response.

Please provide written submissions by email, marked: 'Consultation on draft revised National exam guidelines" to <a href="mailto:medicalradiationconsultation@ahpra.gov.au">medicalradiationconsultation@ahpra.gov.au</a> by 12pm midday (AEST) Friday, 25 June 2021

Submissions for publication on the Board's website should be sent in Word format or equivalent1.

Submissions by post should be addressed to the Executive Officer, Medical Radiation Practice, Ahpra, GPO Box 9958, Melbourne 3001.

#### **Publication of submissions**

The Board publishes submissions at its discretion.

The Board generally publishes submissions on its website to encourage discussion and inform the community and stakeholders. Please advise us if you do not want your submission published.

We will not place on our website, or make available to the public, submissions that contain offensive or defamatory comments or which are outside the scope of the subject of the consultation. Before publication, we will remove personally identifying information from submissions, including contact details.

<sup>&</sup>lt;sup>1</sup> You are welcome to supply a PDF file of your feedback in addition to the word (or equivalent) file, however we request that you supply a text or word file. As part of an effort to meet international website accessibility guidelines, Ahpra and National Boards are striving to publish documents in accessible formats (such as word), in addition to PDFs. More information about this is available at: <a href="www.ahpra.gov.au/About-AHPRA/Accessibility.">www.ahpra.gov.au/About-AHPRA/Accessibility.</a>

The views expressed in the submissions are those of the individuals or organisations who submit them, and their publication, does not imply any acceptance of, or agreement with, these views by the Board.

The Board accepts submissions made in confidence. These submissions will not be published on the website or elsewhere. Submissions may be confidential because they include personal experiences or other sensitive information. Any request for access to a confidential submission will be determined in accordance with the Freedom of Information Act 1982 (Cth), which has provisions designed to protect personal information and information given in confidence. Please let us know if you do not want us to publish your submission or want us to treat all or part of it as confidential.

Published submissions will include the names of the individuals and/or the organisations that made them unless confidentiality is requested. Please identify clearly and at the beginning of a submission if confidentiality is being requested.

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### Overview of consultation

#### **Executive summary**

- 1. The Medical Radiation Practice Board of Australia (the Board) is consulting on proposed revisions to the *National exam guidelines* for medical radiation practice.
- 2. The draft revised *National exam guidelines* (the revised guidelines) give guidance to candidates sitting the exam about the expectations and requirements for the exam. The draft revised guidelines describe a number of important aspects including the eligibility requirements, exam rules, and the pass mark for the exam.
- 3. The Board has also developed a *National exam manual* (the manual) to give further information. It is proposed that the manual will be updated as the information about the exam changes. The manual gives information about the structure of the exam, how candidates can prepare for the exam and what they can expect when they attend an exam centre or sit an online exam.
- 4. The purpose of the exam is to give an objective measure of an individual's capacity to apply knowledge, solve problems and critically analyse scenarios to give assurance that the candidate can meet the minimum requirements for safe practice in the profession.
- 5. The exam is based on the <u>Professional capabilities for medical radiation practice</u> (the professional capabilities) which describe the entry level professional capabilities for the three divisions of medical radiation practice.
- 6. The exam forms part of a range of risk-based regulatory mechanisms used by the Board to assess initial and continuing registration as a medical radiation practitioner. As part of the review of the guidelines the Board has considered the way in which the exam supports protection of the public by ensuring that only practitioners who are suitably trained and qualified to practise in a competent and ethical manner are registered.
- 7. In this consultation the Board is seeking input from a wide range of stakeholders on the revised *National exam guideline*.

#### **Discussion**

#### History and development of the National exam

- 8. In 2014, recognising a gap in the regulatory options available to support decision-making particularly for practitioners with qualifications received overseas, the Board agreed to develop the national exam for medical radiation practice.
- 9. The Board agreed that the exam would assess a practitioner's cognitive skills and knowledge that allow safe practice and are described in the *Professional capabilities for medical radiation practice*.
- 10. The Board engaged external consultants and experts in test development with experience in large population cognitive skills assessment to assist in the development of the exam.
- 11. The Board also engaged senior practitioners in the medical radiation profession to help develop questions for the exam. The content writers for the exam were provided with training in question development and exam theory.
- 12. The questions created by senior practitioners were overseen for quality and consistency and experienced academics. All questions were assessed by the National Exam Committee and the best questions were chosen for inclusion in exams.
- 13. To calibrate the exam, in November 2015, the Board requested final years students from two Australian universities to voluntarily sit the exam. These students had recently completed their approved qualification and were due to graduate and register in the profession for the first time.
- 14. The results from the calibration exam showed a mean score of just less than 75%.
- 15. Taking into account the testing of minimum thresholds, the pressures associated with high stakes examinations, and minimising the possibilities of chance, the Board is satisfied that the pass mark of 75% set a realistic expectation.

#### Eligibility to sit the exam

- 16. The Board directs candidates to sit an exam as part of an approved registration standard or otherwise in accordance with the National Law.<sup>2</sup>
- 17. A qualification that is accredited and approved by the Board meets the requirements of s.54 of the National Law as a qualification for general registration. For this reason, when applying for registration for the first time, graduates from an <u>approved program of study</u> are <u>not</u> required to sit the exam.
- 18. Applicants with qualifications that have not been accredited or approved by the Board will have their qualification assessed against the <u>Board's assessment criteria</u>.
- 19. Practitioners whose qualification meets the assessment criteria are qualified for general registration.
- 20. For practitioners whose qualifications do not meet the assessment criteria, but are considered to be relevant to practice in the profession, can sit the exam as part of the statutory requirements for a qualification for general registration.
- 21. The Board also uses the exam for practitioners who are applying to return practice after an extended absence. Instead of requiring an applicant to complete parts of a program of study, the Board uses the exam as an alternative method for assuring practitioners have the cognitive skills and knowledge necessary for practicing safely in the profession.

#### **Exam performance**

- 22. The first examination was held in February 2016 and has been offered every three months thereafter.
- 23. Since that time, the exam has been completed 238 times, by 140 candidates, with 78 candidates passing the exam.
- 24. The current pass rate for the first attempt is 36.45%. As candidates make further attempts at the exam the pass rate reduces.

#### Greater reliance on common capabilities

- 25. Exam results show that some candidates pass the exam with greater reliance on Part A questions that address common practice capabilities such professional and ethical practice, communication, evidence informed practice and safe radiation practice.
- 26. Part B of the exam contains questions that address the capabilities relevant to practice in a specific division. For example, in diagnostic radiography this would include capabilities for general radiography, fluoroscopy and computed tomography.
- 27. Analysis of the exam results shows that the passing rate for Part A of the exam is approximately 46%. In contrast the pass rate for Part B of the exam is 23%.

#### Recent changes effecting the exam guidelines

- 28. The Board published revised <a href="Professional capabilities">Professional capabilities</a> for medical radiation practice which came into effect on 1 March 2020. The capability statements identify the minimum knowledge, skills and professional attributes necessary for safe, independent practice in the divisions of diagnostic radiography, nuclear medicine technology and radiation therapy. To be eligible for general registration, a medical radiation practitioner must show that they meet the Professional capabilities for practice in the profession.
- 29. The recent change in the Professional capabilities requires a change to the exam and exam guidelines to align the structure of the exam with the domains, capabilities and enabling components of the revised *Professional capabilities for medical radiation practice*.
- 30. The national exam is typically delivered at approved exam centres located in capital cities around Australia and are overseen by an exam supervisor or 'proctor'. The 'proctor's' main role is to verify the identity of a candidate sitting the exam, to ensure the integrity of the exam and to ensure the Board's instructions for the exam are carried out.

<sup>&</sup>lt;sup>2</sup> Health Practitioner Regulation National Law, as in force in each state and territory (the National Law).

- 31. The Board has recently trialled online proctored exams (OLP). OLP exams are conducted remotely via the internet and accessed by the candidate in their home or office. A trained exam supervisor (proctor) observes the candidate remotely (visually and audibly) while they sit the exam. The usual requirements for exam administration are the same for OLP exams, including checking and establishing identity.
- 32. While there are technology requirements for candidate sitting the exam remotely (e.g. provision of own computer and camera), online proctored (OLP) exams offer the benefit of being available domestically and internationally, while maintaining appropriate exam integrity.
- 33. The exam guideline needs to be updated to provide guidance with respect to Online Proctored exam (OLP).

#### **Proposed changes**

- 34. While there are some structural and procedural matters that necessitate updating the exam guidelines the Board is also taking the opportunity to consider other aspects of the exam as well.
- 35. The draft revised *National exam guidelines* keeps much of the existing guidelines. The more significant changes being proposed to the draft revised guidelines are described below.
- 36. In revising the exam guidelines, the Board considered the experiences of candidates who have prepared for and sat the exam, and the experience of workplaces and clinical supervisors who have taken on candidates who passed the exam and have been successfully registered.

#### **Development of exam manual**

- 37. The purpose of the *National exam <u>guidelines</u>* (**Attachment A**) is to state the Board expectations and describe candidate obligations in connection with the National exam. The National Law provides at s.41 that guidelines may be used in proceedings as evidence of what constitutes appropriate professional conduct or practice for the health profession.
- 38. In contrast, the draft *National exam* <u>manual</u> (Attachment B) gives information about what the candidate might expect and may experience in the preparation and participation in the national exam. The manual restates some sections of the *revised guideline* to draw the candidate's attention some of the more important aspects of the national exam.
- 39. It is proposed that the *draft manual* will be updated as information about the exam changes. For example, the manual contains a list of suggested resources for candidates to reference in the preparation for the exam. The resources list will be updated as newer versions of textbooks and/or resources are published.

#### Professional capabilities for medical radiation practice

- 40. In March 2020, the Board published revised <u>Professional capabilities for medial radiation practice</u>. The professional capabilities identify the minimum knowledge, skills and professional attributes necessary for safe, independent practice in diagnostic radiography, nuclear medicine technology and radiation therapy.
- 41. The revised *National exam guidelines* have been amended to allow current and future changes to the professional capabilities and other regulatory instruments relevant to practice in the profession. (e.g. *Code of conduct*).
- 42. The structure of the exam, which is not necessarily evident to the candidate while sitting the exam, has been modified to align with the revised *Professional capabilities for medical radiation practice* but maintains sections Part A and Part B.

#### Pass mark

- 43. Around 60 candidates sit the medical radiation practice exam each year, with the vast majority being internationally qualified candidates.
- 44. Exam questions are developed to test the minimum skills, knowledge and capability of candidate's and their capacity to meet the *Professional capabilities for medical radiation practice*. Given that questions are developed to test the minimum thresholds for practice in the profession, it is reasonable to expect that all registered practitioners would be capable of answering all exam questions correctly.

- 45. The Board acknowledges that under high stakes exam conditions it is unrealistic to expect that many candidates would achieve a score of 100%. However, the public must be confident that registered medical radiation practitioners are safe to practise.
- 46. The current pass mark for the exam is an average of 75% of both Part A (common capabilities for all medical radiation candidates), and Part B (division of registration specific capabilities).
- 47. At 75%, the pass mark also ensures that a candidate cannot pass the exam by chance alone, that is, they must be able to show that they have a sufficient knowledge skills and attributes to practise the profession safely and effectively.
- 48. Since 2016, there has been occasions where some candidates have just achieved the 75% average pass mark, however the pass has shown a disproportionate reliance on generic health practitioner skills (Part A) in lieu of a satisfactory performance in division specific (diagnostic radiography, radiation therapy or nuclear medicine technology) skills and knowledge (Part B).
- 49. Both sections of the exam are equally important and satisfactory performance in both sections is essential to safe practice.
- 50. The Board proposes to adjust the minimum passing score, from an average of 75% in the exam, to a minimum score of 75% in both Part A and Part B of the exam.
- 51. In revising the exam score from an average of 75%, to a minimum of 75% in both parts of the exam, the Board recognises that the number of candidates who successfully pass the exam will decrease.
- 52. The current pass rate for the exam is 36.45%. If the pass mark were to change from an average of 75% to a minimum of 75% in Part A (common capabilities) and Part B (division specific capabilities), based on a recalculation of previous candidates, the pass rate would likely reduce to 18.22%.
- 53. If the proposed change in pass mark were to be implemented, it is expected that 9 fewer candidates would pass the exam each year.

#### Limiting the number of attempts

- 54. In establishing the arrangements for the exam in 2015, the Board having consulted on the possibility of limiting the number of attempts to three (3), ultimately decided that it was not necessary to impose a strict limit on the number of times a candidate can attempt the exam. The exam served its regulatory purpose in that those who failed the exam could not be registered. For those candidates that passed the exam, much like a graduate who only just passes subjects in a program of study, they meet the minimum requirements of practice in the profession and become eligible for registration.
- 55. The pattern of results shows that the majority of candidates pass the exam in three attempts, noting that candidates sit different exams on each occasion.
- 56. The evidence also suggests that candidates gain a level of insight by attempting and failing the exam, including developing a greater understanding of exam requirements which assists in deciding whether continued attempts are a realistic option for them.
- 57. The existing exam guidelines also allow the Board to direct that an individual may not sit or try the exam again where it is appropriate to do so (for example a candidate has been caught cheating or otherwise breaching exam rules).
- 58. Following feedback received in preliminary consultation the Board is considering limiting the number attempts at the exam to three (3). That is, after three (3) failed exams the candidate would be barred from attempting the exam further. A consequence of being barred from attempting the exam further would mean that a candidate would be unable to meet the eligibility requirements for registration or in some cases renewal of registration.
- 59. Limiting the number of attempts at the exam to three (3) reflects a common approach used by education providers and is also consistent with the approach taken by the Psychology Board of Australia with respect to their exam process.
- 60. Using existing data, between 2016 and 2021, if the number of attempts were limited to three (3), 13 candidates would have barred from further attempts at the exam. Of these 13 candidates, 5 succeeded in passing the exam.

#### **Options statement**

61. The Board has considered a number of options in developing this proposal.

#### Option 1 - Do nothing

- 62. The existing *National examination guidelines* were published in 2015 and in keeping with good regulatory practice are due for review. There have been a number of developments during the time since publication including the publication of revised *Professional capabilities for medical radiation practice* which:
  - strengthen the requirements for recognising and responding to the deteriorating patient.
  - obliges practitioners to alert other health practitioners involved in the care of a patient when urgent or unexpected findings are identified.
  - introduce new minimum capabilities for ultrasound and magnetic resonance imaging (MRI).
  - improve practitioner capabilities when using scheduled medicines.
  - make cultural safety a critical component of safe healthcare particularly with respect to Aboriginal and Torres Strait Islander Peoples.
- 63. While the existing guidelines are working well, the review has identified a number of opportunities to improve them. This includes revising the guidelines to reflect the requirements of the revised professional capabilities which includes the agreed definition of cultural safety for use in the National Scheme<sup>3</sup> and updates in exam protocol and platforms for exam delivery.
- 64. The 'do nothing' option would mean that developments in the profession, expected practitioner capabilities and other changes to exam process would not be included in the guidelines. This would risk the Board's regulatory instruments becoming progressively less relevant and consistent with good professional practice.

#### Option 2 - Revise and update the guideline and develop a manual

- 65. Under this option the Board would revise the requirements and expectations of the *National exam guidelines* as described in this consultation paper. This includes revising the exam taxonomy to reflect the revised *Professional capabilities for medical radiation practice* that were consulted upon in 2019 and became effective on 1 March 2020, in addition to other changes and improvements in exam administration. As part of the review the Board is proposing to publish an *Exam manual* that gives regularly updated information about the exam to candidates.
- 66. This option has a number of identified benefits, including:
  - updates the advice to candidates about the exam
  - enabling the revised Professional capabilities for medical radiation practice, and any future revisions to be more readily taken up in exam questions
  - improved readability
  - improved clarity for candidates around the exam pass mark
  - maintains a minimum threshold for general registration, and
  - continues to ensure that candidates possess a threshold level of knowledge, skills and professional attributes regardless of the pathway to registration.

#### **Preferred option**

67. The Board prefers Option 2.

Relevant	sections	of the	<b>National</b>	Law
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Section 3 Section 49

Section 52

Section 53

<sup>&</sup>lt;sup>3</sup> National Registration and Accreditation Scheme (the National Scheme).

Section 54

Section 66

Section 72

# Health Practitioner Regulation National Law as in force in each state and territory (the National Law)

The National Scheme is governed by a nationally consistent law passed by each state and territory parliament - the National Law.

Follow this link to access a copy relevant to your state or territory, see: <a href="www.ahpra.gov.au/About-AHPRA/What-We-Do/Legislation">www.ahpra.gov.au/About-AHPRA/What-We-Do/Legislation</a>.

#### Questions to consider

In making a submission to this public consultation the Board asks that stakeholders also consider the following questions.

#### Questions about the National exam guidelines

- 1. Do the draft revised *National exam guidelines* give clear guidance about the expectations, obligations and requirements for candidates sitting the national medical radiation practice exam?
- 2. Are there any other effects that the Board should be aware of if the exam pass mark is increased?
- 3. Are there any relevant effects that the Board should be aware of if the Board restricted the number of times a candidate can fail the exam to three?
- 4. Is the content of the draft revised guidelines helpful, relevant and workable?
- 5. Is there any content that needs to be changed or deleted in the draft revised guidelines?
- 6. Are there other requirements that need to be included in the draft revised guidelines?

#### Questions about the National exam manual

- 7. Is there any content that needs to be changed or deleted in the draft manual?
- 8. Is there other information that needs to be included in the draft manual?

#### Other questions

- 9. Are there any effects for patients and consumers, particularly vulnerable members of the community that have not been considered in the draft revised *National exam guidelines* or manual?
- 10. Are there any effects for Aboriginal and Torres Strait Islander Peoples that have not been considered in the draft revised National exam guidelines or manual?
- 11. Are there any relevant effects for candidates, employers, consumers or other stakeholders that the Board should be aware of?
- 12. Do you have any other comments on the draft revised guidelines or the draft manual?

Attachment A: Draft revised National exam guidelines

**Medical Radiation Practice Board of Australia** 

# **NATIONAL EXAM GUIDELINES**

Effective from: TBA

#### Introduction

The Medical Radiation Practice Board of Australia (the Board) has established the national exam for medical radiation practice (exam) in accordance with its powers and functions described in the <a href="Health Practitioner">Health Practitioner</a> Regulation National Law as in force in each state and territory (the National Law).

The exam is based on the *Professional* capabilities for medical radiation practice in combination with professional obligations prescribed by the Board which are updated as required to reflect contemporary professional practice.

In addition to these guidelines the Board has published an *Exam manual* to provide information to candidates and help them prepare to sit the exam.

## **Application of guidelines**

These guidelines apply to any registered medical radiation practitioner who has been directed to sit the exam. These guidelines also apply to any person attempting the exam as part of meeting eligibility requirements for registration as a medical radiation practitioner.

## Purpose of the exam

The purpose of the exam is to assist the Board in making regulatory decisions. The Board uses the exam as a consistent and objective measure of a candidate's ability to meet the minimum threshold requirements for safe and effective practice.

The purpose of the exam is to assess a candidate's:

- ability to review critically, analyse, consolidate and synthesise knowledge
- ability to differentiate theoretical concepts, to exercise critical thinking and judgement in identifying and solving problems
- initiative and judgement in planning, problem solving and decision-making in professional practice
- capacity to analyse a range of circumstances encountered in clinical practice, and evaluate options to maximise patient care
- capacity to provide safe, patient-centred, culturally safe care
- capacity to adapt knowledge and skills in diverse contexts, and
- accountability for professional practice and inter-professional practice.

# When the Board may require an exam

The Board may use an exam:

- before deciding an application for registration
- where a candidate is not qualified for general registration
- where a candidate is returning to practice after an extended break from practice, and/or
- where there are concerns about a supervised practitioner's capacity to practise safely.

Ordinarily, recent graduates from an approved program of study, or applications made under the Trans-Tasman Mutual Recognition Act, are exempt from sitting the exam.

#### Standard of the exam

The *Professional capabilities for medical radiation practice* identify the minimum knowledge, skills and professional attributes necessary for safe, independent practice in diagnostic radiography, nuclear medicine technology and radiation therapy.

To be successful in the exam a candidate must apply their knowledge holistically to a clinical problem or to appropriately manage the clinical environment. The exam typically requires a candidate to draw upon and integrate a range of key capabilities and enabling components from the Professional capabilities to successfully answer any question.

#### Pass mark

The exam operates as a pass/fail exam, with the pass mark set to ensure that candidates adequately meet the Board's *Professional capabilities for medical radiation practitioners*. All questions are of equal value and there is no deduction of marks for wrong answers. Individual questions are not weighted and contribute equally to the candidate's overall exam mark.

To pass the exam a candidate must score at least 75 per cent in both Part A and Part B of the exam.

## Limit on attempts

Candidates will be allowed a maximum of three (3) attempts at passing the exam.

Following a third failed attempt at the exam, a candidate will not be allowed to attempt or sit the exam further.

Candidates must not attempt the exam within three months of their last attempt.

#### **Exam rules**

All formal exams have rules for the conduct of the exam. A breach of exam rules can have significant consequences for candidates.

Before sitting the exam, candidates will be required to agree to a set of terms and conditions about the exam, including keeping the content of the exam and questions confidential.

- Candidates are not allowed to take any reference material (electronic or hard copy) into the exam venue or to use during the exam.
- Mobile phones and other equipment must not be taken into the exam.
- Access to the internet is not allowed in the exam rooms or in the exam waiting areas.

#### Meeting the requirements

The exam is hosted by a contracted exam provider. In addition to the exam rules set out in these guidelines, candidates sitting the exam must comply with all instructions given to them by the exam provider.

#### **Exam conduct**

Candidates sitting an exam are subject to the usual rules of ethical and professional conduct, these include rules against cheating, or attempting to gain unfair advantage to pass the exam.

Failure to comply with the rules of an exam or any instruction of the exam invigilator / proctor may be regarded as a breach of professional conduct.

The Board regards misconduct during an exam as a serious matter. Causing results to be falsified, fraudulent or dishonest conduct in connection with an exam has the potential for candidates who are not qualified or not otherwise competent and safe to practise, to be improperly registered. This type of conduct is inconsistent with the requirements of good professional practice.

Before being registered, where an applicant has cheated or has otherwise engaged in fraud, misconduct or unprofessional conduct in connection with the exam the Board may:

- cancel or void the candidate's exam results
- refuse to allow a candidate to attempt the exam
- refuse an application for registration.

Where a registered practitioner has engaged in fraud, misconduct or unprofessional misconduct in connection with an exam the Board may refer the matter to a responsible tribunal. If a tribunal finds a complaint is sustained, it may make a range of orders including cancellation of registration and/or disqualifying a person from applying for registration for a specified period.

#### Meeting identification requirements

Candidates will be required to prove their identity as part of being admitted to the exam. To satisfy the identification requirements an exam invigilator / proctor may ask a candidate to produce additional photographic identification.

Candidates should be able to produce more than one form of photographic identification to establish their identification.

Identification source documents must be government issued, or from a similarly reputable and secure source.

Where an exam invigilator / proctor has a reasonable concern about a candidate's ability to properly establish their identity and/or there is a concern that identity documents are being misused, the candidate will be refused access to the exam. Fraudulent use of identity documents is a serious matter and may be referred to police.

#### Online proctored exams

On occasion the Board will allow a candidate to attempt an exam using an online proctored platform.

Online proctored exams allow candidates to sit the exam in their own environment. To ensure the exam is conducted with appropriate oversight candidates and their computers are monitored by the exam provider.

Before, during and after the exam the candidate must comply with instructions for sitting the exam and any instructions of the online proctor. It is a breach of exam rules for the candidate to take steps to limit or defeat monitoring arrangements.

For online proctored exams the candidate must provide their own computer or laptop. Candidate's must ensure that their computer is in good working order and must provide the

hardware and software that meets the technical requirements of the exam platform.

#### Forfeit of fees

Where a candidate fails to attend an exam without reasonable cause, or the candidate has been refused access or continued access to the exam due to breach of exam rules, the candidate will forfeit the fees paid to sit the exam.

#### **Exam results**

Exam results will be provided approximately four weeks after candidates have sat the exam.

## Preparing to sit the exam

The Board has developed an *Exam manual* to support candidates. The manual provides information about the exam and material that may help candidates prepare to sit the exam.

#### Previous exam papers

Previous exams are not available.

#### Practice exam

A practice exam is available for candidates who have registered and paid to sit an exam. The practice exam is a sample set of questions that provides candidates with a sense of how the exam is structured, the types and style of questions and how exam time will need to be managed.

#### **Additional needs**

Candidates with additional needs are able to request support to allow them to sit the exam. Additional needs requests need to be made to the National Exam Coordinator by email to: <a href="mailto:mrpexam@ahpra.gov.au">mrpexam@ahpra.gov.au</a>, at least 30 days in advance of a scheduled exam.

## **Special consideration**

Special consideration is not a means of circumventing the Board's usual exam process.

Special consideration may be available to candidates who are unable to sit or complete an exam due to exceptional circumstances beyond their control. Candidates may be given an opportunity to re-sit the exam at the next available date without incurring additional exam fees.

Applications for special consideration:

- will only be accepted from eligible candidates
- will not be approved unless, in the view of the National Exam Committee, there are exceptional circumstances beyond the control of the candidate, and
- must be supported by adequate evidence to satisfy the National Exam Committee.

A request for special consideration that is based on the content of the exam will not be considered.

Special consideration will not lower the pass mark and will not improve a candidate's overall score. A successful application for special consideration will only allow a candidate to attempt a future exam without incurring additional exam fees.

# Board may refuse to grant or renew registration

Where a candidate has failed the exam, the Board may rely on the exam result to refuse a new application or an application to renew registration.

#### **Definitions**

Approved program of study means a program of study that has been accredited by the Medical Radiation Practice Accreditation Committee and leads to a qualification approved by the Medical Radiation Practice Board of Australia and is published on the Australian Health Practitioner Regulation Agency (Ahpra) website.

**Recent graduate** means a person applying for registration having completed an approved program of study that was awarded not more than two years before the date of their application.

#### Review

This guideline will be reviewed from time to time as required. This will generally be at least every five years.

This guideline replaces the previous guideline dated 1 December 2015

Attachment B: Draft National exam manual

**Medical Radiation Practice Board of Australia** 

# National exam manual

Effective from: TBA

#### 1. Purpose of this manual

The *National exam manual* (the manual) has been developed by the by the Medical Radiation Practice Board of Australia (the Board) to provide information to candidates about the national exam.

This manual should be read in conjunction with the *National exam guidelines* (the guidelines) which provide guidance about the exam and the conduct expected of exam candidates. Guidelines developed by a National Board may be used in proceedings as evidence of what constitutes appropriate professional conduct or practice for the health profession.

This document provides information to candidates about the exam, the format of the exam, what to expect and consider when preparing for the exam.

This manual will be updated regularly by the Board to relfect contemporary medical radiation practice and developments in the profession.

#### 2. Format of the exam

The exam is a computerised multiple-choice question (MCQ) format. The multiple-choice question format is a form of assessment in which candidates are asked to select the best possible answer out of a number of choices.

The exam will be up to three hours (180 minutes) in duration. However, candidates need to be available for a total of four hours to complete pre-examination and post-examination administration activities.

The examination will contain up to 200 questions that are separated broadly into the following parts:

#### **PART A (Division specific practice)**

- About half of the exam questions will be about the relevant division of registration, that is:
  - Domain 1A Diagnostic radiography questions, or
  - Domain 1B Nuclear medicine technology questions, or
  - Domain 1C Radiation therapy questions.

#### PART B (Common)

 About half of the exam questions will come from domains 1 to 5, which are common capabilities for medical radiation practice.

Exam questions will reflect health situations relevant to all these phases of the human lifecycle including *inutero*, neo-natal, paediatric, adult and older adult.

#### What is assessed?

The Professional capabilities identify the minimum knowledge, skills and professional attributes necessary for safe, independent practice in diagnostic radiography, nuclear medicine technology and radiation therapy.

The capabilities have been grouped into domains which identify elements of practice. The domains for the professional capabilities for medical radiation practice are:

Domain 1	Medical radiation practitioner
	1A: Diagnostic radiographer
	1B: Nuclear medicine technologist
	1C: Radiation therapist
Domain 2	Professional and ethical practitioner
Domain 3	Communicator and collaborator
Domain 4	Evidence informed practitioner
Domain 5	Radiation safety and risk manager

#### **Taxonomy**

Part A	Division of practice questions (Domain 1A or 1B or 1C)	45-55%
Part B	Common questions (drawn from Domains 1,2,3,4,5)	45-55%
Total		100%

#### **Exam questions**

Exam questions will be mostly in the format of:

- a vignette or scenario, or
- a lead-in question,
- both with four possible answers, one of which one is the correct answer and three are distracters.

Exam questions have been developed to test the key capabilities and enabling components of the Professional capabilities for medical radiation practice. Questions will also address the professional and related obligations of a registered practitioner.

Exam questions are developed by experienced members of the medical radiation practice profession and overseen by senior practitioners and education specialists who review and establish the best answer by consensus. The correct answer is the best or most correct option in their view.

Exam questions are changed regularly so candidates who repeat the exam will get a different set of questions.

#### 3. Passing the exam

The exam is a pass or fail exam.

#### The Board's guidelines stipulate a passing score at 75 per cent for both Part A and Part B of the exam.

The passing score is the Board's view of the minimum cognitive skills and knowledge necessary for safe practice.

The Professional capabilities form a single minimum threshold for practice in the profession, and each exam question is developed to assess these minimum thresholds. Given that the exam questions are set at the minimum requirement for practice it is reasonable to expect that any registered practitioner would be able to answer all the questions in the exam correctly.

The Board recognises the pressures associated with high stakes examinations. Taking this into account and allowing for the possibilities of chance, the Board is satisfied that a pass mark of mark of 75% in both Part A and Part B of the exam provides reasonable opportunity for candidates to pass the exam while providing for the protection of the public by ensuring that only health practitioners who are suitably trained and qualified to practise in a competent and ethical manner are registered.

#### 4. Attempts

The Board's guidelines stipulate that candidates may only attempt the exam on three (3) times.

Candidates must not attempt the exam within three months of their most recent attempt.

#### 5. Preparing for the exam

The responsibility to prepare for and pass the exam rests with the candidate. Candidates are expected to develop a broad strategy for preparing for the exam.

Candidates with little or no recent study or practice are likely to have difficulty with the examination.

In preparing for the exam candidates should:

13. read the *National exam guidelines* to learn about the purpose of the exam, eligibility to sit the exam, exemptions and policies relevant to the exam

- 14. carefully read the *National exam manual* (this document) to develop an understanding of how to prepare for the exam and what to expect on the exam day
- 15. develop a thorough understanding of the Professional capabilities for medical radiation practice
- 16. review the resource list (included in this manual) and use these resources in conjunction with the *Professional capabilities for medical radiation practitioners*
- 17. develop a program of revision of academic and professional literature that aims to meet the professional capabilities requirements, and
- 18. after registering to sit the exam, complete the practice exam to see how the exam is structured, the types and style of questions and how exam time will need to be managed.

#### Practice exam

When a candidate has registered to sit the exam, they can sit a practice exam to further help their preparation.

The practice exam consists of a set of exam questions. It is designed to provide candidates with the 'look and feel' of the exam including how the exam is structured, the types and style of questions and how exam time will need to be managed.

To sit the practice exam, candidates first need to create an account on the <u>exam portal</u> and register for the exam. Once registered, candidates can sit the practice exam at any time before their scheduled exam date.

Candidates who successfully complete the practice exam will not be allowed to re-sit it. Candidates who fail the practice exam are eligible to re-sit the practice exam after a day.

#### 6. Before the exam

#### **Additional support**

Candidates with a documented health condition, mental health condition or disability can request additional support to provide appropriate assistance to allow them to sit the exam.

#### Applications for Additional support

Additional support requests need to be made in writing to the <u>National Exam Coordinator</u> a **minimum of thirty days in advance** of the intended exam date. Relevant documentary evidence (e.g. medical certificate) must be attached to the application.

#### Possible outcome of an application for special accommodation

Candidates with additional support needs will be provided with facilities to support the following:

- **Mobility condition**: all exam centres have wide passages, wheelchair access, accessible toilets and adjustable desks.
- **Visual impairment**: the exam can be delivered with larger fonts and higher contrasting colour, and reader assistance.
- **Hearing impairment:** site support can be provided to ensure that exam supervisors can communicate instructions in a satisfactory manner.
- Other mental or physical health conditions: other conditions supported by appropriate documentation are addressed case-by-case.
- Online proctored exams: where a candidate is sitting an online proctored exam, the candidate will need to choose a suitable environment and must ensure that their computer (hardware and software) is appropriate for their needs.

A request will be determined by the National Exam Coordinator.

#### **Special consideration**

Special consideration is available to candidates who are unable to sit or complete an exam due to exceptional circumstance beyond their control. Candidates may be given an opportunity to re-sit the exam at the next available date without incurring additional exam fees.

Candidates who can demonstrate that they have adverse circumstances beyond their control are eligible for special consideration. These reasons include:

- acute illness (such as hospital admission, onset of serious illness)
- loss or bereavement (such as death of a close family member)
- hardship or trauma (such as being victim of crime, severe disruption to domestic life)
- unforeseen call-up for service (such as military service, court appearance, jury service, emergency service)
- work commitments and circumstances beyond their control (a letter on company/organisation letterhead from an employer confirming this must be attached to the application form)
- software malfunction involving the exam provider/digital platform, or exam provider computer hardware failure, and
- natural disaster serious event necessitating the evacuation of the exam centre.

#### Applications for special consideration

Applications for special consideration:

- will only be accepted from eligible candidates
- will not be approved unless there are exceptional circumstances beyond the control of the candidate, and
- must be supported by satisfactory evidence of the exceptional circumstances.

Failure to follow this process may result in the application being delayed or not accepted.

Applications for special consideration must be submitted in writing to the <u>National Exam Coordinator</u> before the exam or within 14 working days after the date of the exam (depending on the nature of the request). Relevant documentary evidence of the exceptional circumstances must be attached to the application and must include one or more of the following:

- medical certificate
- death certificate
- police report
- statutory declaration
- exam centre / proctor report, or
- evidence of requirement to attend court, jury service, military service, emergency service.

Candidates who complete the exam are usually not eligible for special consideration unless there are special circumstances.

No special consideration request will be considered based on the content of the exam. The special consideration procedure is not a means of circumventing the Board's usual exam process. Special consideration will not lower the pass mark, nor will it improve a candidate's overall score.

#### Possible outcome of an application for special consideration

Written requests for special consideration will be reviewed and considered by the National Exam Coordinator and assessed against the special consideration criteria outlined above. The review will take place within 21 days of receiving the request.

If the National Exam Coordinator grants the request for special consideration, they will decide how special consideration will take effect and let the candidate know in writing. Any special arrangement for consideration will be acted upon promptly. The National Exam Coordinator's decision is final.

When a request is granted, the usual outcome would be to allow the candidate to re-sit the exam as soon as possible at no additional cost to the candidate. If approved, special consideration may consist of:

- deferral of the exam until the next available date (no additional fee or reduced fee), or
- other special arrangements for undertaking the exam (no additional fee or reduced fee).

#### 7. Booking the exam

#### **Eligibility**

To be eligible to sit the exam a candidate must have applied for registration as a medical radiation practitioner or otherwise be a registered medical radiation practitioner.

#### Registering to sit the exam

To register for the exam candidates will need to do the following:

- 1. Create an account on the exam portal. The exam portal uses 128-bit encryption to protect data and meets international security standards to protect candidate's information. The account will be activated within five days. An email confirmation will be sent to the candidate when an account has been activated.
- 2. When the candidate's account has been activated, they can register to sit the exam through the exam portal. The candidate account will grant access to the practice exam and enable booking and payment. The candidate will receive a confirmation email with the details of the exam date, exam centre and requirements for the exam day.

Candidates are responsible for scheduling the exam and presenting at the right time and exam centre.

#### Venues

The Board uses the services of exam platform administrator to deliver the national exam.

The current exam platform provider, Kryterion, has many exam centres across Australia and internationally. Ordinarily candidates will choose their preferred exam centre to sit the exam when paying for and booking the exam date. In some cases, a candidate may be offered an online proctored exam either as a preference or where there are no suitable exam centres available in that jurisdiction.

Enquiries about exam centre availability can be directed to the National Exam Coordinator on: <a href="mailto:mrpexam@ahpra.gov.au">mrpexam@ahpra.gov.au</a>.

#### **Exam timetable**

The timetable of exam dates for each calendar year is published on the Board's website along with the closing dates for applications to register for the exam. Exams will usually be scheduled at least twice a year and up to four times a year.

Exams will be made available in the capital city of each state and territory of Australia.

Candidates who are unable to register for a published exam sitting will need to contact the <u>National Exam</u> Coordinator to discuss requirements.

#### Changing the scheduled exam date

Candidates can change the date and time of their scheduled exam for any reason up to 72 hours before the scheduled exam date without incurring additional fees. Exams can be rescheduled using the <u>exam portal</u>.

Candidates are only allowed to change the date and time within 72 hours of the exam if special circumstances apply – see the section on *Special consideration* in this manual. Candidates who need to reschedule an exam within 72 hours of the booked exam date must contact the National Exam Coordinator immediately for assistance at: <a href="mailto:mrpexam@ahpra.gov.au">mrpexam@ahpra.gov.au</a>.

#### 8. Paying for the exam

#### Exam fee

The fee for sitting the exam is published on the Board's website in the Schedule of fees.

#### Paying for the exam

Ahpra only accepts credit card payment (including Visa or Mastercard debit cards) for the exam. Payment must be made through the <a href="exam portal">exam portal</a>

For candidates who do not have a credit card, Ahpra will accept payment from someone else (a manager, relative, etc) on a candidate's behalf.

#### Additional charges

Some banks may apply an international transaction fee to MasterCard or Visa purchases where the transaction is made in Australian dollars but the party accepting the card is overseas. Kryterion Testing Solutions head office is based in Arizona, USA. Candidates are advised to check with their bank regarding transaction fees.

#### Payment confirmation

Payment confirmations are sent automatically to the email address listed on the exam candidate account.

If a confirmation email has not been received within five days into an inbox (or spam or junk folder), contact the National Exam Coordinator for assistance.

#### Refunds

Candidates that cancel an exam booking 72 hours before the scheduled exam date will have the exam fee refunded to the credit card originally used for payment. It may take up to ten days before the credit is shown in the account.

Candidates that cancel an exam booking within 72 hours of the scheduled exam date are not refunded the exam fee, unless special consideration has been approved (see the *Special consideration* section of this manual for more information).

#### 9. Sitting the exam

The following section provides important information for candidates when sitting the exam. It should be read carefully and followed closely.

#### What to bring to the exam centre?

Candidates will need to present the exam supervisor (sometimes also called exam invigilator, proctor or exam adjudicator) with the following documents:

- the printed email confirmation containing the candidate's exam authorisation code, and
- two (2) types of formal identification (one must be a photo ID). Examples of photo identification include a passport, driver's license, or other forms of government issued identification.

Failure to bring sufficient identification and the exam authorisation code may result in the candidate being excluded from sitting the exam.

Where an exam supervisor has a reasonable concern about a candidate's ability to properly establish their identity and/or there is a concern that identity documents are being misused, the candidate will be refused access to the exam. Fraudulent use of identity documents is a serious matter and may be referred to police. Candidates who are refused access to the exam will forfeit the fees paid to sit the exam.

#### Arriving at the exam centre

Candidates should arrive at the exam centre at least 15-20 minutes before the scheduled exam time to complete the check-in and security processes.

Candidates who arrive late should talk to the exam centre staff who will do all they can to ensure they can sit their exam.

Candidates who are not able to sit the exam should contact the <u>National Exam Coordinator</u> as soon as possible for advice.

#### Check-in and security processes

There are a variety of security processes in place at all testing venues.

In addition to verifying registration to sit the exam, and providing formal identification, candidates will be required to:

• **turn out exterior pockets** (on jackets, jeans etc.) to verify they are either empty or do not contain any prohibited items

- hand over external eyewear to the exam supervisor for (brief) inspection to verify that the eyewear is not technology-enabled, and
- review and agree to a set of terms and conditions for the exam to keep the exam and questions confidential. By accepting this agreement candidates will confirm eligibility to undertake the exam and acceptance of the exam rules. Candidates will be asked to sign a statement like the following:

This exam is confidential and proprietary. It is made available to you, the examinee, solely for the purpose of assessing your proficiency level in the skill areas referenced in the title of this exam. To protect the integrity of the exams, the examinee must adhere to strict guidelines. The examinee shall not disclose to any third party the contents of this exam, including but not limited to questions, form of questions, or answers, in whole or in part, in any form or by any means, verbal or written, electronic or mechanical, for any purpose. I have read and agree to the terms of the above statement.

#### Items allowed/not allowed in the testing room

Candidates will not be allowed to take any of the following items into the exam:

- any reference material (electronic or hard copy)
- · mobile phones
- any devices that connect to the internet (e.g. smart watches)
- other equipment (including pens and paper)
- water or other beverages (to safeguard the computer equipment). Please note that candidates will not be allowed extra time in the exam to have water breaks, and
- any personal items (these will be stored securely by the exam supervisor).

Candidates may take the following items into the exam:

a non-programmable calculator (must not be capable of connecting to the internet).

Exceptions can be made for candidates to take personal items needed for medical conditions into the exam room. A request for additional needs must be submitted to the <u>National Exam Coordinator</u> at least 30 days in advance of the exam date, and be formally approved (see *Additional needs* of this manual for more information).

#### What to expect in the exam environment?

The exam is a high-stakes exam delivered in a regulatory context. It is a formal exam within a highly controlled exam environment that includes clear rules, rigorous security protocols and supervision. Exam supervisors are trained and certified to deliver high-stakes exams and follow standard operating procedures. The exam environment will be different to what many candidates will have experienced in sitting exams at school or university in less formal or less controlled settings.

Candidates may complete an exam in a room with candidates who are sitting other exams, or who are from other professions. These candidates may have different requirements, rules or restrictions than those that apply to candidates sitting the national medical radiation practice exam. It is recommended that candidates familiarise themselves with the rules that apply to the national exam (in this manual) before the exam day.

Because exam centres work with many providers using staggered exam start times, it is normal for other exam candidates to enter or leave the room while exams are in progress. To minimise disruption, candidates will have access to noise-cancelling headphones or disposable earplugs.

Candidates who have concerns with the exam environment should speak with the exam supervisor on the day to allow the best opportunity for prompt resolution of the problem. It is important that candidates are provided with a professional and secure environment to complete the exam. Exam supervisors are required to note any problems arising during the conduct of an exam and report these to Kryterion. Such reports are used to verify and support any applications for special consideration or reviews based on exam process or unfairness in the conduct of the exam.

#### Online proctored exams

Using the exam portal to register for an exam, some candidates will be able to select online proctored exam. This will allow the candidate to sit the exam online from the convenience of their home or office. The exam is delivered online to a candidate's computer and then visually and audibly monitored by a Kryterion Certified Proctor. Candidates must have a webcam attached to their computer in order to take a Kryterion online-

proctored exam. An internal webcam does not provide a sufficient view of the exam area. Candidates must use a camera with a heavy base and flexible neck allow for easier placement that contains a built-in microphone.

There are specific technical requirements that a candidate must have in order to access and sit the online exam. Candidates can check the Kryterion website for the Online Testing Requirements

On the day of the exam candidates should login 10 minutes before the scheduled start time. This will allow the time necessary to verify that the Internet connection is viable, the candidate's webcam is functioning properly, and the exam environment is appropriate for an online-proctored exam.

The candidate must ensure that the exam environment:

- Is well lit, quiet and free from distraction.
- The exam surface is clutter-free and contains only one computer, one monitor, one keyboard, and one
  mouse.
- Only allowed items are in exam area. Once the sentinel loads, the allowed exam aids will be shown as
  icons on the right side of the screen. These icons are not interactive tools; they simply identify allowed
  items
- Lanyards/name badges, hats, watches, bracelets and necklaces are not allowed to be worn during the
  exam. Please remove all items from their neck and wrists.

#### During the exam:

- Candidates may only interact with exam proctors and are not allowed to have any interaction with other individual.
- Candidates may not use dual monitors.
- candidates cannot take a break for any reason. If a candidate leaves the workstation during the exam, they are in breach of the exam rules and will be ejected from the online session.
- Candidates may not lean out of the camera view during their test session. The proctor must always be able to see candidates.
- Mobile/cell phones are not allowed and must not be used during the exam.
- Reading the exam aloud is prohibited.
- Candidates will be recorded throughout the entire exam

If candidates experience technical issues during an online-proctored exam, they are able to chat online with the Kryterion Certified Proctor in order to resolve the issue.

#### **Expectation of professional conduct**

All formal exams have rules relating to conduct. However, there are some rules that, if breached, would have a significant effect on the candidate's future capacity to sit an exam or to be or remain registered.

Candidates sitting the exam are subject to the usual rules of ethical and professional conduct.

Failure to comply with any rule or instruction by an exam supervisor will be considered a breach of discipline and may lead to exclusion from the exam and the candidate exam failure. More serious breaches of exam rules or security may result in disciplinary or criminal action.

The Board views misconduct during an exam as a serious matter. Falsifying results, fraudulent or dishonest conduct in connection with an exam has the potential for candidates who are not qualified or not otherwise competent and safe to practise to be improperly registered. In such cases, the Board will consider any complaint and may refer the matter to a responsible tribunal. If a tribunal finds a complaint sustained it may make a range of orders, including cancellation of registration and disqualifying a person from applying for registration for a specified period.

#### 10. After the exam

#### If a candidate misses the exam date

Candidates that could not sit or complete the exam due to exceptional circumstance beyond their control can apply for special consideration. See Section 5 of this manual for more information.

#### Receiving results

Candidates will receive their exam results by email within four weeks of the close of the exam period. Results will state whether the candidate passed or failed. No further detail about results will be provided, as the exam is a regulatory exam, not an exam given in an educational context. Results will not be given by telephone.

After the exam has finished, any communication about the exam must be addressed to Ahpra through the <u>National Exam Coordinator</u>. Candidates must not communicate with members of the Medical Radiation Practice Board of Australia or the Board's committees about the exam.

#### Exam failure

Where a candidate has failed the exam, the Board may refuse a new application or an application to renew registration for reasons which may include that the candidate:

- has failed the exam, and/or
- has engaged in misconduct in connection with an examination.

In some cases, candidates who fail the exam may be allowed to re-sit the exam at the next exam sitting if it is within the statutory period for application for registration.

Candidates who fail the exam are strongly encouraged to review their study plan and consider making changes and improvements to the way they are preparing for the exam. See Section 4 of this manual for more information on strategies to prepare for sitting the exam.

#### Review

There is no review process based on the content of the exam. Exam results (e.g. a fail result) are not subject to review

Candidates can apply for special consideration if they are unable to sit or complete the exam due to exceptional circumstances beyond their control. See the *Special consideration* section of this manual for more information.

A candidate can request a review if the candidate believes:

- that their exam performance was impaired as a result of a deficiency or error in the exam process, or
- that there was unfairness in the conduct of the exam, or
- there was an administrative breach during the exam.

Any request for review must be made in writing to the <u>National Exam Coordinator</u> within eight weeks of sitting the exam, and must include the following:

- the grounds and reasons for seeking review, and
- any relevant supporting documentation or other material.

#### Possible outcome of a review

The written request for review will be considered by the Board as well as assessed against the review criteria (as outlined above). The review will take place within 21 days of receiving the request.

The Board will let the candidate know the decision and the reasons for the decision in writing as soon as practicable after the review. The Board's decision is final.

The usual outcome for a successful review would be to allow the candidate to re-sit the exam as soon as possible at no additional cost to the candidate. A successful review outcome may consist of:

- re-sitting the exam at the next available date (no additional fee or reduced fee), or
- other special arrangements for undertaking the exam (no additional fee or reduced fee), or
- not counting the exam results (if failed) in the number of failed exams (see the exam failure policy).

The Board recognises the rights of candidates to have their personal information protected. Candidates can be assured that <a href="Ahpra's Privacy Policy">Ahpra's Privacy Policy</a> will be complied with when managing reviews.

#### 11. Further Information

#### Contact

All correspondence about the national exam should be directed to the National Exams Coordinator at <a href="mailto:mrpexam@ahpra.gov.au">mrpexam@ahpra.gov.au</a>.

#### Review

This manual will be reviewed as required, generally every five years. This manual may be updated from time to time to reflect changes in the information available about the exam.

## Reading and resources list

#### Please note that this list will be updated as new and relevant resources are developed.

Candidates are required to manage their own preparation for the examination. Part of that preparation will often include reading and revising academic textbooks and other professional resources. The reading and resources list provided below are suggested items and are intended to help candidates prepare.

The list of resources provides a good cross section of academic and professional material commonly used in medical radiation practice. It is not an exhaustive list. Reading and revising all of the items on this list does not guarantee success as the exam is not simply a recitation of facts, rather it requires the application of knowledge to various clinical scenarios.

When searching for other reference and resource material, candidates should take care to ensure that the material is relevant to current professional practice. Please be careful when using resources that reference overseas laws, regulatory requirements or specific practice requirements in those jurisdictions as they may differ from practice in Australia.

Medical Radiation Practice Board of Australia, Code of conduct.

Medical Radiation Practice Board of Australia, Mandatory notification guidelines.

Medical Radiation Practice Board of Australia, <u>Professional capabilities for medical radiation practitioners</u> (2020).

Medical Radiation Practice Board of Australia video resources, see: <u>See something, Say Something – Communicating for Safety.</u>

Other registration standards, codes, guidelines and policies of the Medical Radiation Practice Board of Australia.

#### Cultural safety resources

- National Scheme's <u>Aboriginal and Torres Strait Islander Health and Cultural Safety Strategy</u>
- Queensland Government, Queensland Health, Aboriginal and Torres Strait Islander Patient care guideline see: Aboriginal and Torres Strait Islander Patient Care Guidelines (health.gld.gov.au)
- Victorian Government, Department of Health and Human Services, Aboriginal and Torres Strait Islander cultural safety webpage, see: <u>Department of Health and Human Services Victoria | Aboriginal and Torres</u> Strait Islander cultural safety framework (dhhs.vic.gov.au)
- Australian Government, Australian Institute of Health and Welfare (AIHW), Cultural safety in health care for Indigenous Australians: monitoring framework, see: <u>Cultural safety in health care for Indigenous</u> Australians: monitoring framework, Summary - Australian Institute of Health and Welfare (aihw.gov.au)

Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Radiation Protection Series, see: www.arpansa.gov.au/regulation-and-licensing/regulatory-publications/radiation-protection-series.

Australian Commission on Safety and Quality in Healthcare (accessible from website) relevant publications, including:

- Australian Charter of Healthcare Rights.
- Your role in using the Australian Charter of Healthcare Rights.
- NSQHS Standards.
- Patient Clinician Communication.
- Communicating for Safety.
- Recognising and responding to acute physiological deterioration.
- Reduction in Radiation Exposure to Children and Young People from CT Scans.

Cancer Institute NSW, Radiation Oncology protocols, see: www.eviQ.org.au.

Australian Sonographers Association - *Clinical guidelines*, see <u>www.sonographers.org/resources-tools/clinical-guidelines</u>.

Hand Hygiene Australia, '5 Moments of Hand Hygiene', see: www.hha.org.au.

National Health and Medical Research Council Guidelines and Publications website section.

Martini, F. H. Nath, J.L. Bartolomew, E.F. (2019) Fundamentals of Anatomy & Physiology. 11<sup>th</sup> edition. Person Education Ltd. Harlow. United Kingdom.

Moore, K.L. Dalley, A.F. Agur, A.M.R. (2017) Clinically Oriented Anatomy 8<sup>th</sup> edition. Lippincott Williams and Wilkins. United States of America

Widmaier EP, Raff, H and Strang KT, (2018) Vander's Human Physiology: The Mechanisms of Body Function, 15<sup>th</sup> edition. McGraw-Hill: Sydney

Hubert, R.J.Vanmeter, K.C. (2018) Gould's Pathophysiology for the Health Professions. 6<sup>th</sup> edition. Elsevier - Health Sciences Division

Katzung, B.G (2017) Basic and Clinical Pharmacology. 14th Edition. McGraw-Hill Education

Bushong S.C. (2020) Radiologic Science for Technologists: Physics, Biology and Protection, 12<sup>th</sup> edition. Elsevier - Health Sciences Division

Samei, E Peck, D.J (2019) Hendee's Physics of medical imaging. 5th edition. John Wiley & Sons

Seeram, E (2019) Rad Techs Guide to Radiation Protection. 2<sup>nd</sup> edition. John Wiley & Sons

Seeram, E. (2018). "CT at a glance." John Wiley & Sons

Hsieh, J. (2015). "Computed Tomography: Principles, design, artifacts, and recent advances", SPIE Optical Engineering Press, Bellingham, WA.

Abrahams, R.B Huda, W Sensakovic, W (2019) Imaging Physics Case Review. Elsevier Health Sciences

Carter, C. Veale, B (2018) Digital Radiography and PACS. 3rd edition. Elsevier - Health Sciences Division

Seeram, E (2019) Digital Radiography: Physical principles and quality control 2<sup>nd</sup> edition. Springer

Berglund, C (2012) Ethics for Health Care. 4th edition. OUP Australia & New Zealand

Scher, S Kozlowska, K (2018) Rethinking Health Care Ethics. Springer

Allan, S (2019) Law and ethics for health practitioners. Elsevier Health Sciences

Long, B.W. Rollins, J Smith, B (2018) Merrill's Atlas of Radiographic Positioning and Procedures,14<sup>th</sup> Edition. Elsevier - Health Sciences Division

Lampignano, J Kendrick, L.E. 92017) Bontrager's Textbook of radiographic positioning and related anatomy. 9<sup>th</sup> edition. Elsevier Health Sciences.

McQuillen Martensen K (2020) Radiographic Image Analysis, 5th edition, Elsevier - Health Sciences Division

Eisenberg, R Johnson, N.M. (2020) Comprehensive Radiographic Pathology 7th Edition. Mosby.

Singh, A (2019) Emergency Radiology: Imaging of Acute Pathologies 2<sup>nd</sup> edition. Springer International Publishing

Chowdhury, R Wilson, I Rofe, C Lloyd-Jones, G (2017) Radiology at a Glance. 2nd edition. John Wiley & Sons

Gill, Robert (2020) The Physics and Technology of Diagnostic Ultrasound: A Practitioner's Guide. High Frequency Publishing; 2nd ed.

Rumack, C.M. Levine, D (2018) Diagnostic ultrasound. 5th edition. Elsevier

Mettler, F.A. Guiberteau, M.J. (2018) Essentials of nuclear medicine and molecular imaging. 7<sup>th</sup> edition. Elsevier Health Sciences.

Lin, E.C. Alavi, A (2019) PET and PET/CT: A clinical guide. 3<sup>rd</sup> edition. Thieme.

Chandra, R Rahmin, A (2017) Nuclear medicine physics: the basics. 8<sup>th</sup> edition. Lippincott Williams & Wilkins

Zimmerman, R (2017) Nuclear medicine: Radioactivity for diagnosis. 2<sup>nd</sup> edition. EDP Science.

 $Hashemi,\,R.H.,\,Bradley,\,W.G.,\,Lisanti,\,C.\,\,(2017)\,MRI:\,The\,\,Basics.\,\,4^{th}\,\,edition.\,\,Lippincott\,\,Williams\,\,and\,\,Wilkins$ 

Saha, G.B. (2017) Fundamentals of nuclear pharmacy. 7th Ed. Springer.

Gibbons, J (2019) Khan's The Physics of Radiation Therapy. 6th Edition. Lippincott Williams and Wilkins.

Washington, C.M. Leaver, D.T. (2019) Washington & Leaver's Principles and Practice of Radiation Therapy. 5th edition. Elsevier Health Sciences

Juijiang Li, Lei Xing, Napel, S Rubin, D.L. (2019) Radiomics and radiogenomics: technical basis and clinical applications. CRC Press.

Small, W Tarbell, N.J Yao, Min (2017) Clinical radiation oncology: Indications, techniques and results. 3<sup>rd</sup> edition. John Wiley & Sons.

Pawlicki, T. Dunscombe, P Mundt, A Scalliet, P (2011) Quality and Safety in Radiation Therapy. CRC Press.

Radiation Oncology protocols, Cancer Institute NSW,

Australian Sonographers Association - Clinical guidelines <a href="https://www.sonographers.org/resources-tools/clinical-guidelines">https://www.sonographers.org/resources-tools/clinical-guidelines</a>

#### Statement of assessment

Board's statement of assessment against Ahpra's Procedures for the development of registration standards, codes and guidelines and COAG Principles for best-practice regulation

#### National exam guidelines and National exam manual

The Australian Health Practitioner Regulation Agency (Ahpra) has *Procedures for the development of registration standards* which are available at: <a href="https://www.ahpra.gov.au">www.ahpra.gov.au</a>.

These procedures have been developed by Ahpra in accordance with section 25 of the Health Practitioner Regulation National Law, as in force in each state and territory (the National Law), which requires Ahpra to establish procedures for ensuring that the National Scheme operates in accordance with good regulatory practice.

Below is the National Board's assessment of its proposed guidelines against the three elements outlined in the Ahpra procedures.

 The proposal takes into account the National Scheme's objectives and guiding principles set out in section 3 of the National Law

The Board considers that the draft *National exam guidelines* and the draft *National exam manual* meet the objectives and guiding principles of the National Law.

The draft *National exam guidelines* will give guidance for practitioners about the expectations and requirements of the national exam, while the draft *National exam manual* gives regularly updated information about the exam.

The draft guidelines and manual also support the National Scheme to operate in a transparent, accountable, efficient, effective and fair way.

#### 2. The consultation requirements of the National Law are met

#### **Board assessment**

The National Law requires wide-ranging consultation on proposed registration standards, codes and guidelines, and for the Board to consult other Boards on matters of shared interest.

The Board will ensure that there is public exposure of its proposal and there is the opportunity for public comment by completing a six-week public consultation process. This process includes the publication of the consultation paper (and attachments) on its website.

The Board has drawn this paper to the attention of stakeholders.

The Board will consider the feedback it receives when finalising guidance for the medical radiation profession.

#### 3. The proposal takes into account the COAG Principles for Best Practice Regulation

#### **Board assessment**

In developing these draft guidelines for consultation, the Board has considered the *Council of Australian Governments (COAG) Principles for best practice regulation*.

As an overall statement, the Board has taken care not to propose unnecessary regulatory burdens that would create unjustified costs for the profession or the community.

The Board makes the following assessment specific to each of the COAG principles expressed in the Ahpra procedures.

#### **COAG Principles for Best Practice Regulation**

A. Whether the proposal is the best option for achieving the proposal's stated purpose and protection of the public

#### **Board assessment**

The National Law makes available the use of an exam by the Board to assess a range of regulatory issues. The Board considers that draft *National exam guidelines* give important guidance to practitioners on the eligibility, conduct, and results of the exam, while the *National exam manual* gives information to practitioners about preparing to sit the exam.

B. Whether the proposal results in an unnecessary restriction of competition among health practitioners

#### **Board assessment**

The Board considered whether its proposal could result in an unnecessary restriction of competition among health practitioners. The Board considers that this proposal is not expected to affect the levels of competition among health practitioners. The Board expects that the exam will continue to add practitioners to the medical radiation workforce who are qualified and competent to practice in an ethical way.

C. Whether the proposal results in an unnecessary restriction of consumer choice

#### **Board assessment**

The Board considered whether its proposal could result in an unnecessary restriction of choice for health consumers. The Board does not expect that the draft guidelines and manual will significantly affect on the levels of choice among health consumers.

D. Whether the overall costs of the proposal to members of the public and/or registrants and/or governments are reasonable in relation to the benefits to be achieved

#### **Board assessment**

The Board considered the overall costs of the draft *National exam guidelines* and the draft *National exam manual* to members of the public, registrants and governments and concluded that the likely costs are appropriate when offset against the benefits for ensuring that only qualified and competent practitioners are registered.

The Board considers the requirements will have a low to moderate effect on costs to practitioners. These costs relate to the exam infrastructure while questions development costs are subsidised by the Board.

E. Whether the requirements are clearly stated using 'plain language' to reduce uncertainty, allow the public to understand the requirements and understanding and compliance by registrants

#### **Board assessment**

The Board considers the draft guidelines and manual have been written in plain English that will help practitioners to understand the guidelines and manual. The Board has modified the structure of the draft National exam guidelines and the draft National exam manual and revised the wording to make them easier to understand.

F. Whether the Board has procedures in place to ensure that the proposed registration standard, code or guideline remains relevant and effective over time

#### **Board assessment**

The Board proposes to review the draft *National exam guidelines* after five years of operation which will include an assessment against the objectives and guiding principles in the National Law and the *COAG principles for best-practice regulation*.

The Board proposes to update the information in the draft *National exam manual* regularly to help practitioners in their preparation for the exam.

However, the Board may choose to review the guidelines if it is necessary to ensure the guidelines continued relevance and workability.

## National Boards' Patient and Consumer Health and Safety Impact Statement

## Statement purpose

The National Boards' Patient and Consumer Health and Safety Impact Statement (the statement)<sup>4</sup> explains the potential impacts of a proposed registration standard, code or guideline on the health and safety of the public, vulnerable members of the community and Aboriginal and Torres Strait Islander Peoples.

The four critical components considered in the statement are:

- 1. The potential impact of the revised *National exam guideline* and *National exam manual* on the health and safety of patients and consumers particularly vulnerable members of the community including approaches to mitigate any potential negative or unintended effects.
- 2. The potential impact of the revised *National exam guideline* and *National exam manual* on the health and safety of Aboriginal and Torres Strait Islander Peoples including approaches to mitigate any potential negative or unintended effects.
- 3. Engagement with patients and consumers particularly vulnerable members of the community about the proposal.
- 4. Engagement with Aboriginal and Torres Strait Islander Peoples about the proposal.

The National Boards' Health and Safety Impact Statement aligns with the National Scheme's <u>Aboriginal and Torres Strait Islander Cultural Health and Safety Strategy 2020-2025</u> the <u>NRAS Strategy 2015-2020 Strategy</u>, and reflects important aspects of the revised consultation process in the <u>AManC Procedures for developing registration standards</u>, codes and guidelines and accreditation standards.

<sup>&</sup>lt;sup>4</sup> This statement has been developed by Ahpra and the National Boards in accordance with section 25(c) and 35(c) of the *Health Practitioner Regulation National Law* as in force in each state and territory (the National Law). Section 25(c) requires Ahpra to establish procedures for ensuring that the National Registration and Accreditation Scheme (the National Scheme) operates in accordance with good regulatory practice. Section 35(c) assigns the National Boards functions to develop or approve standards, codes and guidelines for the health profession including the development of registration standards for approval by the COAG Health Council and that provide guidance to health practitioners registered in the profession. Section 40 of the National Law requires National Boards to ensure that there is wide-ranging consultation during the development of a registration standard, code, or guideline.

Below is our initial assessment of the potential effect of a proposed *revised National exam guideline and National exam manual* on the health and safety of patients and consumers, particularly vulnerable members of the community, and Aboriginal and Torres Strait Islander Peoples. This statement will be updated after consultation feedback

1. How will this proposal impact on patient and consumer health and safety, particularly vulnerable members of the community? Will the impact be different for vulnerable members compared to the general public?

The Board has carefully considered the effects the proposed revised *National exam guideline* and *National exam manual* could have on patient and consumer health and safety, particularly vulnerable members of the community in order to propose a preferred option for consultation.

A primary goal of the proposed revised *National exam guidelines* and *National exam manual* is to update the taxonomy of the exam to reflect good contemporary practice in line with the recently revised, consulted upon and published Professional capabilities for medical radiation practice which:

- Strengthen the requirements for recognising and responding to the deteriorating patient.
- Obliges practitioners to alert other health practitioners involved in the care of a patient when urgent or unexpected findings are identified.
- Introduce new minimum capabilities for ultrasound and magnetic resonance imaging (MRI).
- Improve practitioner capabilities when using scheduled medicines.
- Make cultural safety a critical component of safe healthcare particularly with respect to Aboriginal and Torres Strait Islander Peoples.

The proposed revised *National exam guidelines* and *National exam manual* are based on best available evidence and from monitoring the impact and effectiveness of the existing <u>guidelines</u>. Our engagement through consultation will help us to better understand possible outcomes and meet our responsibilities to protect patient safety and healthcare quality.

2. How will this consultation engage with patients and consumers, particularly vulnerable members of the community?

In line with our <u>consultation processes</u> the Board will be carry out wide-ranging consultation with patient safety and consumer bodies, peak bodies, community and other relevant organisations to get input and views from vulnerable members of the community.

3. What might be the unintended impacts for patients and consumers particularly vulnerable members of the community? How will these be addressed?

The Board has carefully considered what the unintended effects of the proposed revised *National exam guideline* and *National exam manual* might be. Consulting with patient safety and consumer bodies will help us to identify any other potential effects. We will fully consider and act to address any unintended effects for patients and consumers that may be raised during consultation particularly for vulnerable members of the community.

4. How will this proposal impact on Aboriginal and Torres Strait Islander Peoples? How will the impact be different for Aboriginal and Torres Strait Islander Peoples compared to non-Aboriginal and Torres Strait Islander Peoples?

The Board will be actively seeking feedback from Aboriginal and Torres Strait Islander organisations and stakeholders to understand if there are any potential effects of the revised *National exam guideline* and *National exam manual* on Aboriginal and Torres Strait Islander Peoples and how the effect might be different when compared to non-Aboriginal and Torres Strait Islander Peoples. Our engagement through consultation will help us to identify any other potential effects and meet our responsibilities to protect safety and healthcare quality for Aboriginal and Torres Strait Islander Peoples.

5. How will consultation about this proposal engage with Aboriginal and Torres Strait Islander Peoples?

The Board is committed to the National Scheme's <u>Aboriginal and Torres Strait Islander Cultural Health and Safety Strategy 2020-2025</u> which focuses on achieving patient safety for Aboriginal and Torres Islander Peoples as the norm, and the inextricably linked elements of clinical and cultural safety.

The *National exam guidelines* and *National exam manual* proposes changes to the content of the national exam based on the revised *Professional capabilities for medical radiation practice*. The revised professional capabilities make cultural safety a critical component of safe healthcare. In the development of the revised professional capabilities the Board engaged with the Aboriginal and Torres Strait Islander Health Strategy Group (the Strategy Group) secretariat.

As part of this consultation process, we will be engaging with the Strategy Group and requesting their feedback on the proposal. We will also be engaging with Aboriginal and Torres Strait Islander organisations and stakeholders to get input from Aboriginal and Torres Strait Islander Peoples.

6. What might be the unintended impacts for Aboriginal and Torres Strait Islander Peoples? How will these be addressed?

The Board has carefully considered what the unintended effects arising from the proposed *revised National exam guideline* and *National exam manual* might be for Aboriginal and Torres Strait Islander Peoples. The Board acknowledges that the exam is typically used for a small number of practitioners (less than 60 each year) and primarily for practitioners who are qualified overseas. Importantly the revised <a href="Professional capabilities for medical radiation practice">Professional capabilities for medical radiation practice</a> make cultural safety a critical component of safe healthcare with respect to Aboriginal and Torres Strait Islander Peoples and candidates will need to answer exam questions about cultural safety that have been developed by Aboriginal and Torres Strait Islander Peoples.

We will engage with relevant Aboriginal and Torres Strait Islander peak bodies to help us identify any other potential effects. We will consider and take actions to address any other unintended effects for Aboriginal and Torres Strait Islander Peoples that may be raised during consultation.

7. How will the impact of this proposal be actively monitored and evaluated?

Part of the Board's work in keeping the public safe is ensuring that all standards, codes and guidelines are regularly reviewed. We will monitor and regularly review the operation and effect of the proposed revised National exam guideline and National exam manual to check that they are working as intended.

### Stakeholder consultation list

#### April 2021

#### **Proposed revised National exam guidelines**

A list of the stakeholder groups who have been sent this consultation paper:

- Aboriginal and Torres Strait Islander groups
- Commonwealth, state and territory health departments
- consumer organisations
- employer groups
- Health Professions Accreditation Councils
- medical radiation practice education providers
- professional associations and industrial unions related to medical radiation practice
- National Boards
- patient safety bodies
- registered medical radiation practitioners
- · specialist medical professional associations, and
- state and territory health complaints entities.

The consultation paper is also accessible on the Medical Radiation Practice Board of Australia's website, under *News*, then *Current consultations*, see: <a href="https://www.medicalradiationpracticeboard.gov.au">www.medicalradiationpracticeboard.gov.au</a>.