

Phase 1 Examinations (Clinical Radiology) Policy



The Royal Australian
and New Zealand
College of Radiologists

The Faculty of Clinical Radiology

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The Royal Australian and New Zealand College of Radiologists
Level 9, 51 Druitt Street
Sydney NSW 2000 Australia

New Zealand Office: Floor 6, 142 Lambton Quay, Wellington 6011, New Zealand

Email: ranzcr@ranzcr.edu.au
Website: www.ranzcr.edu.au
Telephone: +61 2 9268 9777

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About the College

The Royal Australian and New Zealand College of Radiologists (RANZCR; the 'College') is a not-for-profit association of members who deliver skills, knowledge, insight, time and commitments to promote the science and practice of the medical specialties of clinical radiology (diagnostic and interventional) and radiation oncology in Australia and New Zealand.

The Australian Medical Council on behalf of the Medical Board of Australia accredits the College for the education and training program for clinical radiologists and radiation oncologists in Australia. The Medical Council of New Zealand accredits the College for the education and training program for clinical radiologists and radiation oncologists in New Zealand.

The Faculty of Clinical Radiology (FCR), RANZCR, is the peak bi-national body for setting, promoting and continuously improving the standards of training and practice in diagnostic and interventional radiology for the betterment of the people of Australia and New Zealand.

The Faculty of Radiation Oncology (FRO), RANZCR, is the peak bi-national body advancing patient care and the specialty of radiation oncology through setting of quality standards, producing excellent radiation oncology specialists, and driving research, innovation and collaboration in the treatment of cancer.

The College is led by clinicians who are democratically elected by the membership. The ultimate oversight and responsibility for the College is vested in the Board of Directors.

Vision

RANZCR leading best practice in clinical radiology and radiation oncology for the benefit of our patients and society.

Purpose

To drive the safe and appropriate use of radiology and radiation oncology to optimise health outcomes through leadership, education and advocacy.

Values

Commitment to Best Practice

Exemplified through an evidence-based culture, a focus on patient outcomes and equity of access to high quality care; an attitude of compassion and empathy.

Acting with Integrity

Exemplified through an ethical approach: doing what is right, not what is expedient; a forward thinking and collaborative attitude and patient-centric focus.

Accountability

Exemplified through strong leadership that is accountable to members; patient engagement at professional and organisational levels.

Leadership

Exemplified through a culture of leadership where we demonstrate outcomes.

Code of Ethics

The Code defines the values and principles that underpin the best practice of clinical radiology and radiation oncology and makes explicit the standards of ethical conduct the College expects of its members.

1. INTRODUCTION

1.1 Approval and Commencement

This policy:

- (a) Commences operation on 1 February 2022.
- (b) Replaces the Part 1 Examination (Clinical Radiology) Policy, Version 1.0 which will cease operation on 31 January 2022.

1.2 Purpose

The purpose of the Phase 1 Examinations (Clinical Radiology) Policy and the associated guidelines is to achieve coordinated and consistent Clinical Radiology examination practices across the College. This policy describes the requirements for the Phase 1 Examinations for trainees in the Clinical Radiology Training Program.

1.3 Scope

This policy:

- (a) Applies from 1 February 2022, to all trainees undertaking training within the Clinical Radiology Training Program, irrespective of the date they commenced their training.
- (b) Details the requirements to be eligible to sit the Phase 1 Examinations.
- (c) Prescribes the format and structure of the Phase 1 Examinations.
- (d) Outlines the requirements for successful completion of the Phase 1 Examinations.

1.4 Definitions

In this Phase 1 Examinations (Clinical Radiology) Policy:

Assessment means an activity used to gauge a trainee's progression through the Clinical Radiology Training Program or the Radiation Oncology Training Program and/or their competency against the requirements of the Clinical Radiology Training Program or Radiation Oncology Training Program. Note: for the purpose of this Policy, the term 'assessment' is distinct to the term 'examination'

Branch Education Officer (BEO) is a member of the Clinical Radiology Education and Training Committee which is a standing Committee of the Faculty of Clinical Radiology. The BEO monitors and supports the training programs within their own branch, liaises regularly with Directors of Training (DoTs), Network Training Directors (NTDs) and the Chief Accreditation Officer (CAO) regarding any significant training issues

Candidate means a trainee who has had their examination application accepted by the College

Chief Censor means the clinician appointed under the Faculty By-laws to oversee all aspects of training and assessment conducted as part of the Clinical Radiology Training Program or the Radiation Oncology Training Program

Clinical Radiology means the clinical practice of performing and interpreting diagnostic imaging tests, and carrying out interventional procedures or treatments

Clinical Radiology Examination Advisory Committee (CREAC) means the advisory committee to the Clinical Radiology Education and Training Committee which is responsible for overseeing Clinical Radiology Phase 1 and Phase 2 Examinations

College means The Royal Australian and New Zealand College of Radiologists

Constructed Response Questions (CRQs) means questions that require candidates to demonstrate their knowledge in an area by providing in-depth written responses

Director of Training (DoT) means the clinician/s appointed by the College, with overall responsibility for the structure and quality of training in a College-accredited training site in line with College policies and the specific arrangements within their training network. The Director of Training is also responsible for providing trainees with information and feedback on their progress

DoT Review means the process whereby the Director/s of Training (DoT/s) and the trainee jointly evaluate a trainee's progress with learning and assessment requirements for the phase of training or the training program

e-Portfolio System or e-Portfolio means the online system which serves the purpose of managing a trainees' assessments and progression in the Clinical Radiology Training Program and Radiation Oncology Training Program

Examination means a form of assessment as defined in the College's Examination Policies

Examination opportunity means sitting for either or both of the Phase 1 Anatomy Examination and the Phase 1 Applied Imaging Technology (AIT) Examination

Examination Review Panel means a panel of content experts guided by formal processes as set out in their relevant Terms of Reference. These panels work closely with educational assessment experts engaged by the College to ensure that the correct processes are followed appropriately at each stage of the examination cycle

Head of Department (HoD) means the person responsible for the administrative running of a clinical radiology or radiation oncology hospital department or practice

Member means a member of the College as specified under the RANZCR Articles of Association

Network Training Director (NTD)/ Training Network Director (TND) means the person responsible for providing coordination of, and leadership to the Network and is a central point of contact to the College and health jurisdictions regarding training delivery matters in that Network

Phase 1 of training means the phase spanning from a minimum of 12 months of accredited training time to a maximum of 24 months of accredited training time in the Clinical Radiology Training Program

Staff Member means any person appointed by the CEO or delegate who is working in a permanent, temporary, casual, termed appointment or honorary capacity for the College and for the avoidance of doubt includes contractors, consultants, and other workers at the College, including all personnel associated with third parties

Student Member means means a person who has been granted student membership in accordance with the Articles of Association. Student Members are also referred to as trainees

Trainee means a College member actively participating in either the Clinical Radiology Training Program or the Radiation Oncology Training Program and is considered a student member under the RANZCR Articles of Association

Training Site means an organisation that actively engages and is responsible and accountable for the delivery of training in Clinical Radiology or Radiation Oncology. These organisations may be public or private entities who are accredited by the College and are required to follow the relevant training curriculum and accreditation standards as set out by the College

The ***Clinical Radiology Curriculum Learning Outcomes*** articulates the competencies a trainee must achieve by the end of the Clinical Radiology Training Program

2. POLICY GUIDELINES

- (a) The policy guidelines (where issued) form part of this policy and prescribe the processes to be followed and the forms to be used.
- (b) To the extent that there are any inconsistencies between this policy and the Clinical Radiology Training Program Handbook or the guidelines, the intent of this policy prevails.

3. ABOUT THE EXAMINATIONS

The Phase 1 Examinations comprise of one examination in Anatomy and one examination in Applied Imaging Technology (AIT). Both examinations must be successfully completed by the end of Phase 1 of training.

4. EXAMINATION ELIGIBILITY AND APPLICATION

4.1 Eligibility Requirements

- (a) In order to apply for the Phase 1 Examinations in Clinical Radiology, trainees in the Clinical Radiology Training Program must:
 - have been accepted into an accredited training position by the date of the application to sit the examination;
 - submit their examination application prior to the submission deadline (late applications will not be accepted);
 - be a financial member of the College (all annual member subscription and annual training fees must be up to date or not overdue where the due date is after the examination date).
- (b) Trainees who are subject to a Remediation Plan in accordance with the College's 'Remediation in Training Policy' are not permitted to sit the Phase 1 Examinations during a remediation plan period.

Refer to the Remediation in Training Policy for further information.

- (c) Trainees who are on interrupted training ('Break in Training') are to refer to the College's 'Interrupted and Part-Time Training Policy' for requirements related to sitting the Phase 1 Examinations during their interrupted training ('Break in Training').

Refer to the Interrupted and Part-Time Training Policy for further information.

4.2 The Application Process

(a) Application to Sit the Phase 1 Examinations

Applications to sit the Phase 1 Examinations must be made via the appropriate application form (available on the College website). The application form must be signed by the Director of Training (DoT) or the Head of Department (HoD). Trainees must indicate whether they intend to sit for either the Anatomy Examination or the AIT Examination, or both.

Trainees will receive an email notification acknowledging receipt of their examination application within 10 business days (where reasonably practical). Confirmation of receipt of application will not be given verbally (i.e. via telephone).

New trainees joining the training program, **will not be permitted to sit** the examination until their training program application has been approved by the College.

(b) **Examination Fees**

Examination fees must be paid prior to sitting the Phase 1 Examinations.

For details on examination fees refer to the 'Fees' page of the College website.

(c) **Examination Fee Refunds**

Candidates may withdraw from the Phase 1 Examinations, without financial penalty, if they do so not less than four weeks in advance of the examination date.

Candidates who withdraw within four weeks of the exam may receive a 50% refund of the fees paid.

Candidates who fail to attend the examinations will forfeit the examination fee.

5. OVERVIEW OF THE PHASE 1 EXAMINATIONS

5.1 Aims

The content of the Phase 1 Examinations is derived from the Clinical Radiology Curriculum Learning Outcomes. The objective of the Phase 1 Examinations is to assess a candidate's competency and required level of knowledge and understanding of Anatomy and AIT, as it relates to clinical radiology.

5.2 Anatomy Examination

(a) **Examination Components**

There are six topic areas (body regions) covered in the examination. Please note, these percentages provide approximate weightings of examination content and may vary slightly between examinations:

1. Brain	20%
2. Head and neck	15%
3. Spine	10%
4. Thorax	15%
5. Abdomen and pelvis	25%
6. Limbs	15%

(b) **Format and delivery**

There are four item formats (styles of question):

1. Labelling (120 labels, ¼ mark per label, total 30 marks);
2. Multiple choice questions (MCQs) (60 questions, 1 mark per question, total 60 marks);
3. Very short answer (VSA) questions (30 questions, 1 mark per question, total 30 marks);
4. Short answer questions (SAQs) (20 questions, 3 marks per question, total 60 marks).

The Phase 1 Anatomy Examination is delivered in electronic format twice a year. The examination is 3 hours in duration with five minutes reading time provided.

5.3 Applied Imaging Technology (AIT) Examination

(a) **Examination Components**

There are three topic areas covered in the examination:

1. Theoretical principles

2. Imaging technology
3. Radiation protection and patient safety

(b) **Format and delivery**

There are two item formats (styles of question):

1. Multiple choice questions (MCQs) (60 questions, 1 mark per question, total 60 marks);
2. Constructed response questions (CRQs) (9 questions with sub-questions, 10 marks per question, total 90 marks).

The Phase 1 AIT Examination is delivered in electronic format twice a year. The examination is 3 hours in duration with five minutes reading time provided.

6. EXAMINATION OPPORTUNITIES AND PROGRESSION

- (a) The Anatomy Examination and AIT Examination can be sat independent of each other.
- (b) Candidates may have up to a maximum of four consecutive opportunities from the date of commencement of training, irrespective of the:
 - candidate's Full Time Equivalent (FTE) status; and
 - number of examinations sat at an opportunity.
- (c) Not sitting an examination opportunity will be recorded as a missed opportunity.
- (d) Candidates must (at their next opportunity) re-sit an examination not passed at their previous opportunity.
- (e) Trainees will be deemed to have lost their examination opportunity if they fail to attend the examination/s on the examination date (irrespective of whether the trainee applies for the examination/s or does not apply for the examination/s) and/or have not been approved by the College:
 - to defer/withdraw under the Consideration of Special Circumstances Policy; or
 - to engage in interrupted training ('Break in Training') under the Interrupted and Part-Time Training Policy; or
 - for a remediation plan period under the Remediation in Training Policy.
- (f) Trainees who fail to sit the first available opportunity following commencement of training (where the commencement of training date is prior to the examination application closing date) will be deemed to have lost that examination opportunity.

7. CANDIDATE CONDUCT IN EXAMINATIONS

- (a) For all Phase 1 Examinations, candidates are expected to conduct themselves in accordance with the instructions outlined in the examination verification letter, invigilator instructions or any other examination guideline or instruction that the College deems necessary for the examinations at all times.
- (b) Candidates who are deemed to be non-compliant with any examination guidelines or instructions may have their examination sitting voided and recorded as a failed examination.

8. RESULTS AND FEEDBACK

8.1 Examination Passing Standards

- (a) The *passing standard* required for each examination is set by the relevant examination review panel using formal standard setting procedures which are not subject to challenge.

The *passing standard* scores for each examination are reviewed every examination and may be adjusted with consideration to minor differences in the difficulty between examination in order to maintain the standards.

A *minimum score required to pass* is obtained by applying an error adjustment to the 'passing standard score' and is the lower bound of the error adjustment, which is derived from formal methods to account for the variability in the standard setting procedures.

Each examination is mapped (blueprinted) to the Clinical Radiology Curriculum Learning Outcomes. Questions are distributed across the topic areas to examine a fair and wide distribution of relevant knowledge.

Examination components are the different item formats as well as the different topic areas. The *minimum component standards* are also standard set by the relevant examination review panels and may be modified based on review by the relevant examination review panel to account for differences in exam difficulty.

- Candidates who reach the *passing standard* are granted a PASS.
- Candidates who reach the *minimum score required to pass* but who do not reach the *passing standard* are granted a CONCEDED PASS.
- As well as achieving the overall *passing standard*, candidates must achieve minimum standards in each examination component ('*minimum component standards*') in order to pass the examination overall. Candidates who meet the *overall minimum score required to pass* but fail to meet the *minimum component standards* receive a COMPONENT FAIL result.

(b) **Determination of Final Result**

For the Anatomy Examination, candidates must achieve the overall examination passing standard AND also achieve the minimum component standards for the different item formats and the six topic areas.

For the AIT Examination, candidates must achieve the overall exam passing standard AND also achieve the component passing standards for the different item formats and the three topic areas.

For the Anatomy Examination and the AIT Examination:

- Double marking processes are employed for the SAQs and CRQs. These questions are marked according to specific marking rubrics.
- There is no penalty marking for an incorrect answer.

A candidate must legitimately meet the passing standards. The College does not amend or upgrade examination marks following the release of confirmed results.

8.2 Content/Distribution of Results and Feedback

(a) Candidate Results

All candidates will be provided with information in their examination results letters relating to the passing standard for the relevant examination, their performance in relation to the overall passing standard and the minimum component standards.

Candidates will also be advised of the number of opportunities associated with their examination sitting.

Results of the examinations will be uploaded to the e-Portfolio System for viewing. Email notification will be sent to trainees when results are uploaded.

(b) Candidate Feedback

All candidates will receive feedback on their specific performance in examination components as part of their examination results letter in such format as determined by the College.

Candidates should also refer to the Examination Reports for additional feedback from the relevant panels including general comments on cohort performance.

Candidates are not provided with:

- correct responses to questions;
- personal responses to questions;
- a copy of the examination papers;
- data pertaining to standard setting procedures; or
- copies of marking criteria/rubric/template;

and requests for remarking will not be entertained.

No other feedback can be requested by candidates.

(c) Directors of Training (DoTs) and other Authorised Representatives

Examination result information may be distributed to DoTs, authorised representatives, Branch Education Officers, Network Training Directors and any other training committee, representative or person as deemed appropriately related to a candidate's training and progression, as determined by the College.

9. COMPLETION OF THE PHASE 1 EXAMINATIONS

9.1 Successful Completion of the Phase 1 Examinations

In order for a trainee to successfully complete the Phase 1 Examinations, the trainee must pass both the Anatomy Examination and the AIT Examination by the end of Phase 1 of training and within the maximum number of examination opportunities.

9.2 Unsuccessful Completion of the Phase 1 Examinations

A trainee who does not successfully complete the Phase 1 Examinations as referred to in Part 9.1 of this policy will be withdrawn from the Clinical Radiology Training Program.

Refer to the Withdrawal from Training Policy for further information.

10. RECONSIDERATION, REVIEW AND APPEAL OF DECISIONS

(a) Request for Reconsideration, Review and Appeal of Examination Results

Candidates seeking a reconsideration of their examination results must submit a Reconsideration Application Form and pay the associated Reconsideration Fee within 10 calendar days of their notification of examination results. Candidates who have exhausted all available examination opportunities and have applied for reconsideration of their examination results will not receive notification of withdrawal from the Clinical Radiology Training Program until the Reconsideration, Review and Appeals process has been concluded.

If the application for Reconsideration, Review or Appeal is unsuccessful, the trainee will receive a letter advising of their withdrawal from the Clinical Radiology Training Program under Category 2 ('Competence').

Refer to the Reconsideration, Review and Appeal of Decisions Policy for further information and application.

Refer to the Withdrawal from Training Policy for further information.

(b) Difficulty/Deficiency with Typing

The examinations are not a test of candidate's typing skills and sufficient time has been allocated to answer all questions. Claims raised in relation to a candidate's difficulty/deficiency with typing are not sufficient grounds for a reconsideration, review or appeal under the Reconsideration, Review and Appeal of Decisions Policy.

11. RELATED POLICIES

- Interrupted and Part-Time Training Policy
- Remediation in Training Policy
- Withdrawal from Training Policy
- Consideration of Special Circumstances Policy
- Reconsideration, Review and Appeal of Decisions Policy

These policies can be downloaded from the College website via:

<https://www.ranzcr.com/trainees/general/training-policies>