The Royal Australian and New Zealand College of Radiologists®

Clinical Radiology Training Program Handbook

Clinical Radiology Training Program Handbook
Specialty Training Unit

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Clinical Radiology Training Program Handbook, Version 2.4

Approved by:

Clinical Radiology Education and Training Committee

Faculty of Clinical Radiology Council

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Revision Summary

Version	Date	Classification	Description
2.0	March 2023	Minor	• Updated contact list • Inclusion of diagrams of WAN and LAN • Clarification around non-consecutive leave • Intrinsic roles updated • Clarification and updated instructions on Competencies of Early Training, Structured Learning Experiences and Monitoring and Review sections • Update instructions and clarification on Reporting Assessments • Inclusion of DoT Review Chart • Updated examinations section to align to new Phase 1 and Phase 2 examinations • Updated CATs diagram • Inclusion of Indigenous Health Research Prize • Updated Basic Research Methods Course • Updated ePortfolio support section • Updated instructions on progression and training application process • Inclusion of links to the Training Requirements Policy and Re-entry into the Training Program Policy • Inclusion of Nuclear Medicine Pathway section • Updated design of handbook reference symbols • Updated CLP image
2.1	April 2023	Minor	• Inclusion of the Trainee Wellbeing Officer to the list of College Support
2.2	July 2023	Minor	• Clarification of training time in Phase 2
2.3	January 2024	Minor	• Updated Work-Based Assessments requirements • Inclusion of the Selection process for 2025 candidates • Clarification and minor updates on the following topics: Training Program Application Process, Recognition of Prior Learning application form, TLO contact details, Clinical Supervisor Feedback, Examinations, CATs supervisor sign-off, ePortfolio, Progression, Nuclear Medicine, Training Program Checklist and Fellowship • Publons Academy has been renamed to the Web of Science Academy • Basic Research Methods Course has been renamed to Research Methods for Medical Imaging Professionals Course
2.4	January 2025	Minor	• Updates to selection and Training Program onboarding process, sub-specialty rotations, Multi-Source Feedback, Clinical Supervisor Feedback, Research, Feedback on the Training Program, and College contacts.

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PREFACE

A clinical radiologist is a specialist medical doctor who has had postgraduate training in diagnostic and procedural radiology. This training includes performing and interpreting diagnostic imaging tests across a range of modalities including X-ray, ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), mammography and nuclear medicine, as well as carrying out diagnostic and therapeutic procedures under radiological guidance.

Clinical radiologists have broad medical training as well as comprehensive specialist training in clinical radiology. They combine their knowledge of anatomy, applied imaging technology, pathology and clinical medicine with their diagnostic and procedural skills and knowledge. This extensive training uniquely qualifies radiologists to be experts in image interpretation and imaging-guided treatment.

Working alongside other doctors and healthcare practitioners in the clinical multidisciplinary team, radiologists are integral to the care of patients, by making accurate diagnoses, monitoring response to treatment, performing imaging-guided treatments and advising on how best to use imaging in the care of patients.

To become a clinical radiologist, a trainee must complete the training program administered by The Royal Australian and New Zealand College of Radiologists (RANZCR; 'the College'). The program provides learning experiences to enable trainees to develop competence across a wide variety of imaging modalities and procedural skills, in line with the curriculum learning outcomes. The learning outcomes are regularly reviewed to ensure that they continue to meet the contemporary needs of the profession and the community.

This Training Program Handbook provides information and guidance for trainees, Fellows and staff in relation to all aspects of the Clinical Radiology Training Program, from commencement to Fellowship.

Throughout the handbook electronic hyperlinks are provided to associated documentation, including:

- Board and Committee Terms of Reference
- Position descriptions of roles associated with the delivery of the training program
- Learning Outcomes
- Accreditation Standards and Criteria
- Additional guidelines, procedures and processes
- Resources
- Policies

Further information specific to College representatives detailing how to fulfil their roles as Directors of Training (DoTs), Clinical Supervisors (CSs), Examiners, Accreditors, as well as the schedule of training program activities (e.g., for examinations or courses) are available via the College website.

We welcome new trainees into the program and provide support and encouragement to them throughout the program, as they strive to meet the requirements for attaining the Fellowship of the College.

We trust that all trainees will find their chosen career path to be exciting, challenging and rewarding.

Acknowledgement

The College is grateful for all those who have contributed their time and their invaluable input to developing the Clinical Radiology Training Program Handbook resource.

Thank you to the members of the working groups, committees and Council who contributed to the Training and Assessment Reform initiative. Special mention to the all the trainees, Fellows and staff for their professional expertise and involvement.

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Section One
INTRODUCTION

ABOUT THE COLLEGE

The Royal Australian and New Zealand College of Radiologists (RANZCR) is a not-for-profit professional organisation for clinical radiologists and radiation oncologists in Australia, New Zealand, and Singapore. RANZCR is a membership organisation led by clinicians who are elected by the membership, with oversight from a Board of Directors.

We are the leaders in medical imaging and cancer care. We enable the best practice of clinical radiology, radiation oncology and associated sub-specialty areas through engagement, education, and advocacy, and by supporting clinical excellence. Our Fellows play a critical role in the diagnosis and monitoring of disease and provide interventional treatments and targeted treatments for cancer.

Our evidence-based culture focuses on best practice outcomes for patients and equity of access to high quality care, underpinned by an attitude of compassion and empathy. As an organisation we are committed to diversity and inclusion, and to the training and professional development of our Fellows and trainees throughout their career. We are dedicated to enhancing the health outcomes of Māori, Aboriginal and Torres Strait Islander peoples and to increasing their participation in the professions of clinical radiology and radiation oncology by ensuring our educational programs support best outcomes for them. This includes a commitment to cultural safety in our organisation, for staff and members.

Purpose

To enable the safe and appropriate use of clinical radiology and radiation oncology to optimise health outcomes for our patients and society.

Values

Our leadership values underpin all that we do and embody our focus on quality patient outcomes.

Integrity

We maintain the confidence and trust of our stakeholders through our honesty, transparency, and authenticity.

Accountability

We take responsibility for all our actions, behaviours, performance, commitments, and decisions.

Inclusivity

We foster an inclusive workplace and clinical environments for people in Australia and New Zealand.

Innovation

We constantly strive to reimagine excellence in everything we do.

Code of Ethics

- *RANZCR's Code of Ethics* 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.
- The College endorsed the joint statement regarding a *respectful culture in medicine*. This aligns with the College's Code of Ethics and supports the principles which focus on promoting environments which are safe, inclusive and respectful and target eliminating unacceptable behaviour including bullying, harassment and racism.

HOW TO USE THE HANDBOOK

Training Program Handbook

The Clinical Radiology Training Program Handbook has been developed to ensure trainees, Directors of Training, Clinical Supervisors, training sites, and training networks have a comprehensive resource with all relevant information of the Training Program, including links to all training documents, forms and policies.

This resource has been divided into sections that cover all elements of training from commencement through to Fellowship. It is recommended that this Handbook and the Curriculum Learning Outcomes document be utilised throughout all stages of the Training Program. Each section has been designed so that it can be read independently.

- For ease of reference, links have been provided to other relevant sections within the Handbook and to further information, which can also be found in the Trainees section of the College website at www.ranzcr.com/trainees.

Handbook Symbols

Throughout the Training Program Handbook, a range of symbols are used to represent the type of document or information; these are:

Reference to section in the Handbook or Learning Outcomes

Link to relevant policies or other related documents

ePortfolio information

Link to College website or electronic documents.

- If you have any questions, please email CRtraining@ranzcr.edu.au. For specific queries, please refer to the College Contacts for the most appropriate staff member.

COLLEGE CONTACTS

Trainees and members can contact the College on:

Australia: +61 2 9268 9777 New Zealand: +64 4 472 6470

For specific queries, please refer below for College contact information.

DEPARTMENT	DESCRIPTION	INFORMATION
College	General College enquiries	Australia: +61 2 9268 9777 New Zealand: +64 4 472 6470 ranzcr@ranzcr.edu.au
Training Program	Enquiries about training, selection and progression	+61 2 9268 9700 CRTraining@ranzcr.edu.au
Trainee Liaison Officer	Trainee guidance, support and wellbeing	Australia/Singapore: +61 437 893 913 New Zealand: +64 7434 8515 tlo@ranzcr.edu.au
First Nations Trainee Liaison Officer (FNTLO)	First Nations trainee guidance, support and wellbeing	Australia: +61 2 9268 9758 FNTLO@ranzcr.edu.au
DoT and CS Support	DoT, CS, TND applications and support	+61 2 9268 9795 CRtraining@ranzcr.edu.au
Fellowship	Completion of training and admission to Fellowship	+61 2 9268 9700 fellowship@ranzcr.edu.au
ePortfolio	Technical Support	+61 2 9268 9700 eportfolio@ranzcr.edu.au
Finance	Enquiries about College fees	+61 2 9268 9777 finance@ranzcr.edu.au
Examinations	Enquiries about examinations	+61 2 9268 9797 CRexams@ranzcr.edu.au
International Medical Graduate Educational Support Officer (IMG ESO)	IMG guidance, support and wellbeing	+61 2 9268 9765 imgeso@ranzcr.edu.au
CPD	Enquiries about transitioning to CPD	Surnames A-K: +61 2 9268 9737 Surnames L-Z: +61 2 9268 9703 cpd@ranzcr.edu.au
Accreditation	Enquiries about training site accreditation	+61 2 9268 9777 accreditation@ranzcr.edu.au

NETWORK TRAINING

The Clinical Radiology Training Program is based on a partnership between trainees and their training network. Trainees have the primary role of directing their own learning. The training network and training site are responsible for ensuring trainees have access to learning opportunities, focussed teaching and support that will allow trainees to complete their training.

Networks and Training Sites

'Network Training' is a term used to describe a group of sites that provide comprehensive training by supporting a trainee as they rotate across a number of hospitals, private practices, regional practices and specialty sites. Network Training exposes trainees to a range of training experiences and environments and prepares trainees with broad skills and knowledge of multiple sites and systems.

Network Training is a structured system of training delivery where training sites are joined together in a network to best deliver all aspects of the training program.

Network governance arrangements vary in the different Branches, dependant on Branch size and geographic distribution:

- Branches consist of at least one Local Area Network (LAN)
- In larger Branches there may be more than one LAN, and the Branch then becomes a Wide Area Network (WAN, consisting of more than one LAN).

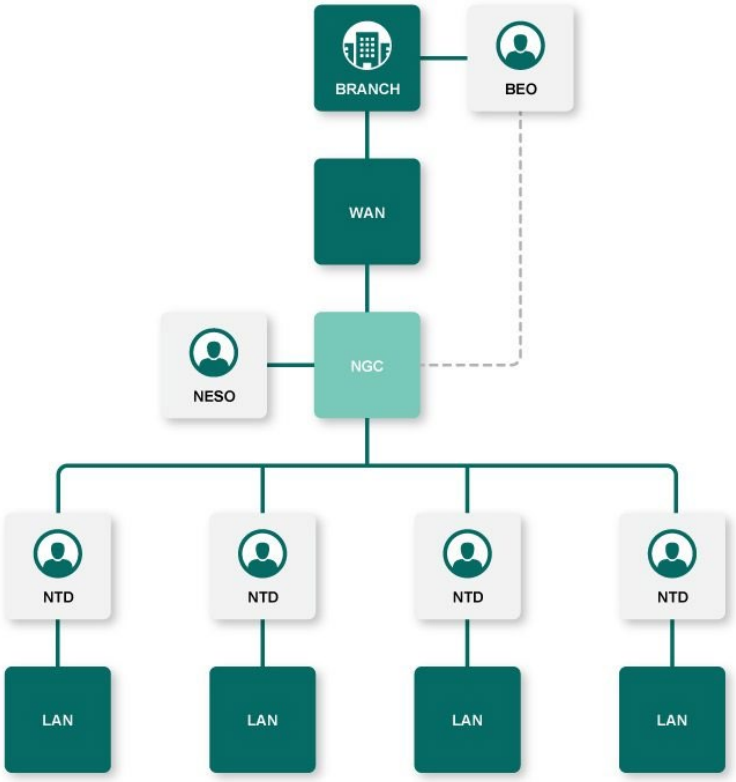
The Network Training structure therefore lies within the Branch structure. The local Branch Committee is independent of the network training committees and does not have responsibility for training matters. The Branch Education Officer (BEO) sits on the local Branch Committee and may or may not be Chair of the Network Governance Committee in jurisdictions with a WAN.

Refer to Appendix 4 for a diagram of the LAN and WAN structures.

Further information on Branches in Australia and New Zealand can be found on the College website.

Wide Area Network

This consists of two or more LANs (as represented in the image below). In addition to overseeing LANs in their jurisdiction the WAN may be involved in Network Training and policy development. The WAN is responsible for centralised recruitment.



The WAN is administered by a Network Governance Committee (NGC) consisting of:

- A Chair (usually the BEO)
- NTDs from each LAN within the WAN
- The Network Education Support Officer (NESO) who administers the WAN.
- Other e.g., jurisdictional employment representatives as necessary.

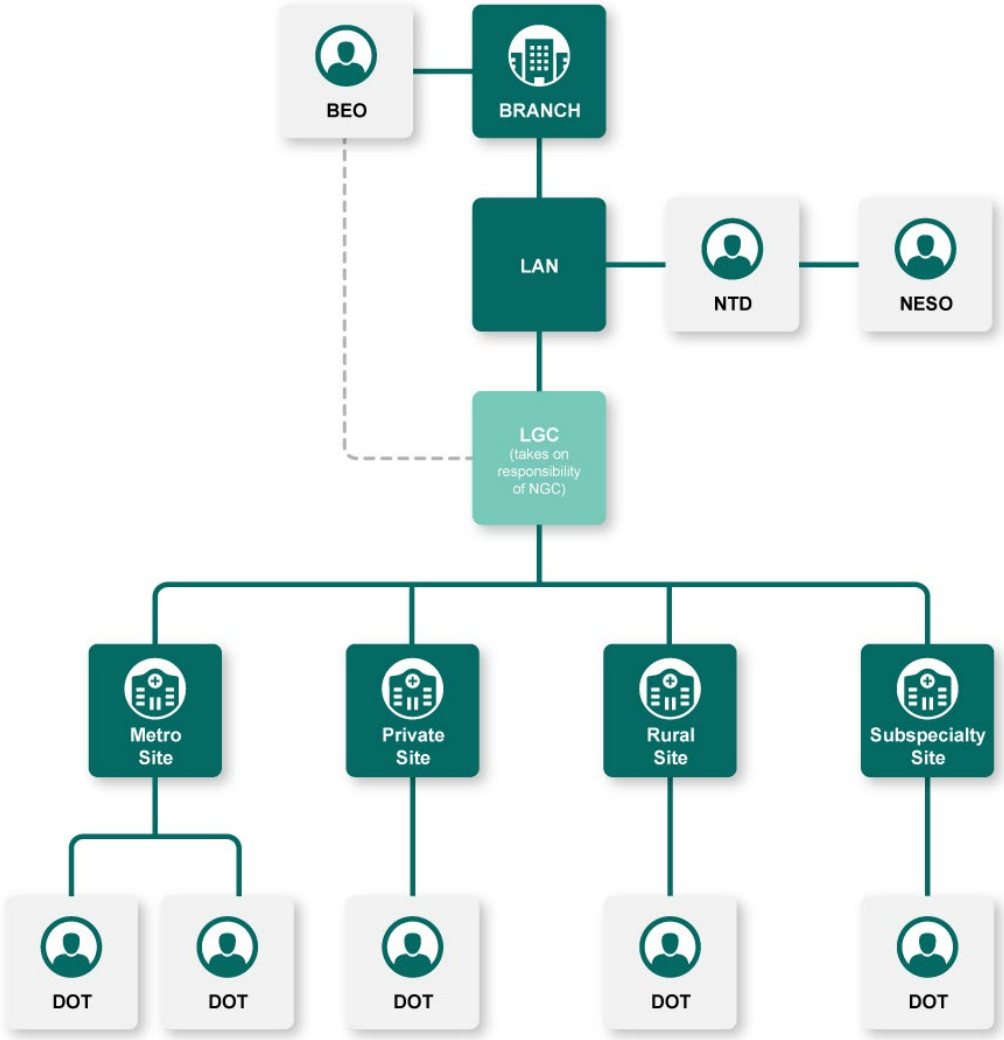
Where there is only one LAN within a Branch, the LGC takes on the responsibilities of the NGC.

Both the network and individual training sites are measured against specific standards. These standards apply to the accreditation of clinical radiology networks and training sites located in Australia, New Zealand and Singapore.

For more information, refer to the Accreditation Standards for Education, Training and Supervision of Clinical Radiology Trainees.

Local Area Network (LAN)

This consists of at least one main site with private and rural linked, and sub-specialty sites (as represented in the image below). The LAN must be able to provide all aspects of the training program within its component sites.



The LAN is administered by a Local Governance Committee (LGC) consisting of:

- A Network Training Director (NTD) who cannot be a Director of Training (DoT), Head of Department (HoD) or BEO
- DoT(s) for each site
- Network Education Support Officer (NESO)
- Administrative support
- Additional Supervisors of Training, Clinical Directors and interface with local employment authorities as necessary.

Network Rotation Principles

Trainees are expected to rotate to a number of accredited training sites throughout their training. Training departments and networks work with trainees to plan for their rotations.

Each trainee is hired into a network and will be assigned to a LAN. The specific details of rotational arrangements to various training sites within the network will be determined by the Network Training Director (NTD) and the Local Governance Committee (LGC) in consultation with trainees.

Training sites work together as a network to provide trainees with the opportunity to attain all the competencies of the learning outcomes by the end of the training program. While not all individual sites within a network can support learning in every aspect of the learning outcomes, it is expected that a combination of experience at multiple sites will. Trainees should have the opportunity to rotate to private and regional or remote sites.

Allocated Rotations

All trainee rotations within the network must be prospectively planned. At least six months' notice should be given for rotations requiring relocation, to allow the trainee to make appropriate arrangements. Rotations should be devised in order to assist the trainee to gain exposure to all the learning opportunities they will require in order to satisfy training requirements.

Trainees must spend no longer than four years at any single training site during the training program.

Refer to the current list of Accredited Training Sites on the College website.

Supervision, Training and Teaching

Trainees are expected to be onsite as per their employment full-time equivalent (FTE) status, noting that a minimum of 0.5 FTE is required to accrue accredited training time.

Of this time, trainees must be actively supervised for at least 1 hour per session, or an average of 8 hours per week. Active supervision does not have to be undertaken face to face, but it must involve direct contact between a Clinical Supervisor and the trainee.

Protected Time

The minimum number of protected hours per week to be allocated to trainees for study and learning activities is 2-4 hours per week (excluding statutory requirements for leave). This must include a minimum of 1-2 hours per week of formal teaching time. Formal teaching sessions may be in the form of a didactic lecture, an interactive tutorial, or another appropriate format. Formal teaching sessions may be delivered face-to-face or via video conferencing.

Trainees who believe that their workload (whether during or outside normal working hours) is unreasonably impacting on their ability to attend formal teaching sessions, should first discuss the issue with their DoT and, if the issue is still unresolved, should then contact a member of the Speciality Training Unit at the College.

For more information on mandatory time requirements in relation to supervision and teaching time for trainees and DoTs, refer to the Supervision, Training and Teaching of Clinical Radiology Trainees – Protected Time Policy.

GOVERNANCE OF THE TRAINING PROGRAM

The Faculty of Clinical Radiology is the peak body for diagnostic and interventional radiology in Australia and New Zealand. The Faculty of Clinical Radiology is governed by a Council and sets, promotes, and continuously improves the standards of training and practice in clinical radiology for the betterment of the people of Australia and New Zealand.

The Faculty of Clinical Radiology acts in the following areas to advance the profession and its relationships with government, the wider medical system, and the public:

- Study, research, and advancement of knowledge
- Skill, expertise, and ethical standards in practice
- Quality and rigour in training and assessment
- The needs of consumers and the community
- Matters of public interest connected to diagnostic and procedural radiology
- Collaboration with clinicians, health practitioners and others.

The Faculty of Clinical Radiology has a number of initiatives as well as Committees and Working Groups which oversee specific operational areas that develop policy and support decision making across the Faculty.

For more information, refer to Faculty of Clinical Radiology.

Clinical Radiology Education and Training Committee

The Faculty of Clinical Radiology Council has delegated the responsibility for the Clinical Radiology Training Program to the Clinical Radiology Education and Training Committee (CRETC).

The CRETC is chaired by the Chief Censor and its aim is to develop and oversee the educational content, assessments, and accreditation mechanisms to ensure that trainees can become competent clinical radiologists. The Committee is also responsible for assessing the suitability of candidates for Fellowship (including International Medical Graduates).

For more information, refer to the CRETC Terms of Reference.

Clinical Radiology Curriculum Assessment Committee

The Clinical Radiology Curriculum Assessment Committee (CRCAC) is an advisory committee to the Clinical Radiology Education and Training Committee.

The CRCAC is chaired by the Deputy Chief Censor and is responsible for the development and maintenance of the Clinical Radiology Training Program curriculum learning outcomes, development and monitoring of clinical radiology work-based assessments and ensuring the clinical radiology assessments measure progress against the curriculum learning outcomes.

For more information, refer to the CRCAC Terms of Reference.

Clinical Radiology Examination Advisory Committee

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

There are six Examination Panels responsible for setting, reviewing and development of the various examinations:

- Applied Imaging Technology Examination Review Panel
- Anatomy Examination Review Panel
- Phase 2 Pathology Examination Review Panel
- Phase 2 Radiology MCQ Examination Review Panel
- Phase 2 Case Reporting Examination Review Panel
- Phase 2 OSCER Examination Review Panel.

For more information, refer to the CREAC Terms of Reference.

Clinical Radiology Trainee Committee

The Clinical Radiology Trainees Committee (CRTC) is a standing committee of Faculty of Clinical Radiology Council, and represents the interests of trainees within the RANZCR, facilitates opportunities for communication and information sharing between trainees, and fosters dialogue on issues important to the trainee community.

The aim of the CRTC is to ensure that trainee perspectives, issues and priorities are represented at all key levels within the College.

For more information, refer to the CRTC Terms of Reference.

For more information, refer to **Section 15 – Communication and Engagement**.

Network Governance Committee

The Network Governance Committee (NGC) is responsible for oversight of the Wide Area Network (WAN), resolution of local issues, the development of the training network program and network recruitment. The NGC manages the training network according to agreed principles of College policies. Additionally, the NGC is responsible for reviewing trainee portfolio applications to determine if trainee's meet the progression requirements.

The Chair of the NGC is the Branch Education Officer (BEO) and the Committee is comprised of the Network Training Director of each Local Area Network (LAN).

For more information, refer to the Network Governance Committee Terms of Reference.

Local Governance Committee

The Local Governance Committee (LGC) is responsible for oversight of the Local Area Network (LAN), resolution of local issues and development of the network training program.

The Chair of the LGC is the Network Training Director (NTD) and the Committee is comprised of the Directors of Training (DoTs) from each site within the Local Area Network (LAN).

Where there is only one LAN within a Branch, the LGC takes on the responsibilities of the NGC.

For more information, refer to the Local Governance Committee Terms of Reference.

RESPONSIBILITIES WITHIN THE TRAINING PROGRAM

The RANZCR Clinical Radiology Training Program is a collaborative process between trainees, radiologists and staff, each with their specific roles. The responsibilities of various stakeholders in the program are listed below.

Training Site Roles

Trainee

Trainees are responsible for:

- Abiding by training program policies and guidelines provided in the Training Program Handbook
- Completing training program requirements and recording completion in a timely manner
- Seeking education opportunities to meet learning needs
- Requesting feedback from supervisors and incorporating feedback into practice
- Initiating Work-Based Assessments and using learning experiences to gain insight into areas which need improvement
- Actioning suggestions from DoTs and CSs to optimise performance
- Responding to specific requests by the College or College Officers, such as DoTs and Clinical Supervisors
- Learning to use the ePortfolio and using it effectively to monitor performance and progression through the training program
- Actively participating in the performance and progression and remediation plan processes to improve performance, when required
- Acting professionally and responsibly at all times, including being respectful of all colleagues and co-workers
- Providing feedback to the College about aspects of the training site and program through evaluation processes, e.g., Trainee Assessment of Training Sites (TATS) survey
- Maintaining their College membership, keeping contact details up to date and remaining up to date with payment of fees for the duration of training
- Maintaining medical registration and meeting any reporting, notification or other obligations under the relevant National Laws and registration bodies of Australia, New Zealand and/or Singapore.

Director of Training

Directors of Training (DoTs) are the College's representatives for training in clinical radiology within accredited departments. They provide liaison between trainees and hospital/department administration regarding matters related to training as well as with Branch Education Officers and the College Office. The role of the DoT also encompasses organisation and management, education, and human relations.

For more information, refer to the Director of Training Role Description.

Clinical Supervisor

A Clinical Supervisor (CS) is defined as a consultant radiologist who is involved with trainee teaching, assessment, and feedback. All clinical radiologists seeing patients in training centres are deemed CSs and are expected to be involved in supervision.

It is expected that trainees have all reports reviewed by a CS. The degree of supervision may vary depending on the experience and level of training of the trainee. As more experience and seniority are achieved, trainees may report in a more independent fashion at the discretion of the CS.

For more information, refer to the Clinical Supervisor Role Description.

Network Training Roles

Branch Education Officer

The Branch Education Officer (BEO) is a member of the Clinical Radiology Education and Training Committee (CRETC) and may Chair the Network Governance Committee (NGC) within their own Branch. They are members of the NGC, or in jurisdictions with only one LAN, the Local Governance Committee. The BEO supports and monitors the implementation of the training program within their own Branch, assists the NGC with the co-ordination of recruitment and selection processes and regularly communicates with Network Training Directors (NTDs) to support them with their role.

For more information, refer to the Branch Education Officer Role Description.

Network Training Director

The Network Training Director (NTD) is a radiologist who is not a DoT or a Head of Department (HoD). The role of the NTD is to provide coordination and leadership to the Local Area Network (LAN) regarding training delivery matters in that network and Chairs. The NTD also chairs the Local Governance Committee (LGC).

For more information, refer to the Network Training Director Role Description.

Network Education Support Officer

Training networks are supported by a Network Education Support Officer (NESO) who provides administrative support to the Network Training Director to ensure the functioning of the training network.

For more information, refer to the Network Education Support Officer.

Section Two
OVERVIEW OF THE TRAINING PROGRAM

COMMENCING THE TRAINING PROGRAM

Selection Process

A new selection policy has been implemented by the College to help create a more fair and transparent process for selection into specialty training. Before applying for any training position, applicants are required to register via the College website to obtain a RANZCR College Verification Number (CRVN). To initiate the registration process, candidates create a 'MyRANZCR' profile and then navigate to the 'Apply' tab. Candidates will be prompted to answer eligibility screening questions, and upon meeting the criteria will complete the registration from and pay the fee. The College will then verify the eligibility documents and issue a CRVN.

Applicants are required to include their RANZCR CRVN with applications made to jurisdictions and will not be considered for selection if they do not have a CRVN. The CRVN will be valid for 12 months and does not guarantee an interview for selection into training, nor does it guarantee appointment to a training position or continuing employment.

Refer to the Selection into Specialty Training Policy.

Training Program Onboarding Process

Successful candidates will receive a link via email directing them to the application portal. They will then be asked to confirm and update their personal information, upload their contract, and sign the Trainee Compact.

Once the College verifies the contract, the successful candidate will receive a confirmation email and be issued an enrolment fee. The contract must be verified, and enrolment fee paid before accredited training commences.

The status of an application can be viewed by logging onto MyRANZCR and navigating to the application tab. When the College is ready to accept a contract, the status will change to 'Contract Upload'.

Trainee Compact

The Trainee Compact outlines trainees' obligations to the College while completing the training program, and to their training site/employer. Trainees are required to read and understand the document and sign the last page.

Membership and Training Fees

Trainees must be financial members of the College during the training program. Each year, trainees pay a RANZCR Membership Subscription Fee, and an Annual Training Fee to cover the costs of running the training program. Trainees also pay Examination Fees when sitting examinations.

The RANZCR fee structure and the fee amounts are determined by the RANZCR Board of Directors on an annual basis as part of the annual budgeting process.

The Annual Membership Subscription fee is valid for the current financial year. Trainees will be charged the Annual Membership Subscription fee pro rata calculated from their commencement date.

The Annual Training Fee is paid per calendar year. Trainees will be charged the Annual Training Fee pro rata calculated from their commencement date.

Part time trainees, i.e., those training between 0.4 and 0.65 full time equivalent (FTE), are eligible for part time membership and training fees.

There are also fees associated with courses and examinations which are to be paid upon registration of the specific activity.

Upon completion of training, an Admission to Fellowship Fee is payable at the time that trainees submit their application for Admission to Fellowship. This Admission to Fellowship fee is a one-off fee which can be paid in full or in monthly instalments. A 10% up-front payment discount is available to trainees who have paid their fee in full by the invoice due date.

For current fees, refer to Fees on the College website.

For more information regarding fees, refer to the RANZCR Fees Policy.

Orientation

Training sites provide an orientation at the commencement of a training year and when a trainee commences at a new accredited training site. The orientation should address:

- Introduction to staff particularly key staff members. The introduction includes information regarding the trainee's phase of training, obtained competencies, and expected trainee responsibilities.
- The role and relationships between trainees, Clinical Supervisors, other members of the healthcare team, DoT and managers within the training site and training network (where applicable)
- The department layout and equipment
- Arrangements and organisation of the dedicated onsite protected teaching
- Training on any systems in use (i.e. PACS)
- Case-mix description / models of care / work practices
- Indigenous health processes and resources
- Training on all processes pertaining to receiving referrals, undertaking procedures, report writing, rostering, after hours and on call work and Work Health and Safety procedures
- The administrative arrangements and organisational structures within the training site
- Trainee management (supervision, training and teaching processes)
- Awareness of the location of all resources available including policies and procedures related to discrimination, bullying, harassment, and cultural safety
- Trainee support programs
- Patient safety training applicable to the site

Trainees should arrange a one-on-one meeting with their DoT within the first two weeks of starting a new rotation.

SUMMARY OF TRAINING PROGRAM REQUIREMENTS

The Clinical Radiology Training Program is designed as a five-year training program and structured in three major phases. This sequencing is to ensure trainees develop foundation knowledge and skills during Phase 1 and then have the opportunity to further develop their abilities and breadth of practice during Phase 2 of the training program. In Phase 3, trainees consolidate their skills and focus on areas of interest.

Phase 1 extends from the trainee's commencement in training through to 12-24 months into the program. Phase 2 continues through to 48-72 months, and Phase 3 is 12 months duration.

Trainees continue in each phase until they have achieved the expected standard of competence and completed the training requirements of that phase. The length of each phase is determined by each trainee's progress. Trainees will progress at different rates; some trainees who have completed similar learning prior to commencing the training program may progress more quickly, others may need additional time to acquire the expected knowledge and skills to demonstrate competence.

Completion of the Training Program leads to certification as a Fellow of the College (FRANZCR). Fellowship of RANZCR is the only specialist qualification that leads to recognition as a specialist radiologist in Australia or registration in the vocational scope of practice of diagnostic and interventional radiology in New Zealand. Fellowship is awarded after all training program requirements are met.

Phase 1

Anticipated Completion of Phase 1	**Minimum:** 12 months of accredited training time **Maximum:** 24 months of accredited training time
Learning Outcomes Primary Focus	**Section 1 – Intrinsic Roles** **Section 2 – Applied Imaging Technology** **Section 4 – Anatomy**
Competencies of Early Training	*Within the first six months of training:* **Radiography Attachment** All trainees must spend one week (FTE) / 10 sessions rostered with a radiographer to obtain experience across a range of modalities and gain insight on patient positioning and various protocols. **Report Writing Module** Trainees must complete the RANZCR report writing module. **Key Conditions Assessment** Trainees are expected to attempt the Key Conditions Assessment within six months of training. Trainees must reach Level 3 on the entrustability scale on the Key Conditions Assessment within 12 months or they will be placed on remediation. Refer to **Section 4 – Competencies of Early Training** for more information on the Key Conditions Assessment and expectations before a trainee can be rostered after hours.

Structured Learning Experiences	**Attachments** Trainees should demonstrate progress toward completing attachments for nuclear medicine, breast, obstetrics and gynaecology, paediatrics and procedural radiology. **Experiential Training Requirements** Trainees should demonstrate progress toward completing experiential training requirements (ETRs). It is recommended (not mandatory) that trainees complete the following by the end of Phase 1: • 1,000 -2,000 General X-ray (10,000 to be completed by the end of Phase 3) • 2,000 CT studies (5,000 to be completed by end of Phase 3) • 100 MRI studies (750 to be completed by the end of Phase 3).
Work-Based Assessments (WBAs)	**Reporting Assessment** Trainees must complete 10 imaging interpretation and reporting sessions per six-month period. **Performed Ultrasound Assessment** Trainees must perform 50 general ultrasound studies, with 1 in 5 assessed and the remainder to be logged and achieving Level 4 on the entrustability scale (direct supervision not required) by the end of Phase 1. **Fluoroscopic Procedures Assessment** Trainees should demonstrate progress toward competence in performing fluoroscopic procedures with 1 in 5 assessed and the remainder to be logged. **Procedural Radiology Assessment** Trainees should demonstrate progress toward competence in procedural radiology, with 1 in 5 procedures assessed and the remainder to be logged. **Clinical Radiology/Multidisciplinary Meeting Assessment** Trainees must attend and log 10 Clinical Radiology/Multidisciplinary meetings by the end of Phase 1. Attendance is sufficient in Phase 1.
Research	Two Critically Appraised Topics (CATs) must be completed during Phase 1. A project proposal for the research project must be developed and approved by the end of Phase 1.
Monitoring and Review	DoT Review every six months. Clinical Supervisor Feedback (CSF) with a minimum of 6 responses every 6 months. One Multi-Source Feedback (MSF) assessment. Trainees must complete the Trainee Assessment of Training Sites (TATS) every six months.
Examination	Anatomy Examination – one paper of three hours duration. Applied Imaging and Technology Examination – one paper of three hours duration.
Progression to Phase 2	Upon completion of all Phase 1 training requirements, trainees may request a portfolio review after a minimum of 12 months of accredited training.

Phase 2

Anticipated Completion of Phase 2	**Minimum**: 24 months of accredited training time **Maximum:** 48 months of accredited training time Trainees must accrue 48 months of accredited training time (Phase 1 and 2 combined) before progressing to Phase 3.
Learning Outcomes Primary Focus	**Section 1 – Intrinsic Roles** **Section 3 – Artificial Intelligence** **Section 5 – Pathology** **Section 6 – Diagnostic Radiology** **Section 7 – Procedural Radiology**
Structured Learning Experiences	**Attachments** Trainees must complete attachments for nuclear medicine, breast, obstetrics and gynaecology, paediatrics and procedural radiology. **Experiential Training Requirements** Trainees should demonstrate progress toward completing all ETRs. It is recommended (not mandatory) that trainees have completed the following by the end of Phase 2: • 4,000 CT studies (5,000 to be completed by the end of Phase 3) • 400 MRI studies (750 to be completed by the end of Phase 3) • 8,000 plain (general) x-rays (10,000 to be completed by the end of Phase 3) **Online Learning** • Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety Course.
Work-Based Assessments	**Reporting Assessment** During Phase 2, trainees must complete 10 imaging interpretation and reporting sessions per six-month period. **Performed Ultrasound Assessment** Trainees should demonstrate progress toward competence on performing paediatric and obstetric and gynaecology ultrasounds with 1 in 5 assessed and the remainder to be logged. **Fluoroscopic Procedures Assessment** Trainees should demonstrate progress toward competence on performing fluoroscopic procedures with 1 in 5 assessed and the remainder to be logged. **Procedural Radiology Assessment** Trainees should demonstrate progress toward competence in procedural radiology procedures across four categories with 1 in 5 procedures assessed and the remainder to be logged. **Clinical Radiology/Multidisciplinary Meeting Assessment** Trainees must prepare for and present at 30 Clinical Radiology/Multidisciplinary meetings, including 15 with a pathologist present, and have each of these meetings assessed. They must demonstrate progress toward Level 4 on the entrustability scale by the end of Phase 3. Attendance alone is not sufficient.

Research	Two CATs must be completed during Phase 2. Trainees should progress toward completing their research project and oral presentation. **Online Learning** Research Methods for Medical Imaging Professional Course
Monitoring and Review	DoT Review every six months. CSF with a minimum of 6 responses every 6 months. One MSF assessment. Trainees must complete the TATS every six months.

Examination	The Phase 2 written examinations consist of the following:
	• Pathology Examination (three hours duration)
	• Clinical Radiology Examination
	  ○ MCQ (two hours duration)
	  ○ Case Reporting Examination (three hours duration).
	
	Trainees must complete a minimum of 24 months FTE (irrespective of time spent in Phase 1) before sitting the Clinical Radiology Written Examination.
	
	Both Written Examinations must be successfully completed for trainees to be eligible to sit for the Objective Structured Clinical Examination in Radiology (OSCER).

Progression to Phase 3	Upon completion of all Phase 2 training requirements, trainees may request a portfolio review after a minimum of 48 months of accredited training (Phase 1 and 2).

Phase 3

Anticipated Completion of Phase 3	**Minimum time:** 12 months accredited training time FTE Trainees are required to spend at least 50% of their training time in Phase 3 in rotations within their training network in systems areas of interest, such as neuroradiology, abdominal, breast imaging etc. Trainees can spend no more than six months in a broad sub-specialty topic area. Trainees interested in sub-specialty rotations in supervised research or artificial intelligence can submit a request to Clinical Radiology Curriculum and Assessment Committee (CRCAC) for approval. When planning for Phase 3, the following general guiding principles should be followed to account for variations in availability of sub-specialty rotations in different jurisdictions and to also account of individual trainee interests and learning needs. • At least 50% of Phase 3 training time should be in sub-specialty rotations i.e. at least 6 months FTE. • There is some flexibility in how the rotations can be arranged to achieve at least 50% of Phase 3 in sub-specialty rotations. • The maintenance of general reporting skills, including on-call work, alongside sub-specialty training is crucial for Phase 3 trainees to further develop their general skills for future consultant roles.

	• It is appropriate to include rotations of general radiology along sub-specialty rotations in Phase 3 to meet the interests and learning needs of trainees. Those trainees wishing to partake in the new specialty of interventional radiology (IR) or interventional neuroradiology (INR) for the whole of Phase 3, will need to wait for the outcome of the IR Committee for process and policy.
Learning Outcomes Primary Focus	**Section 1 – Intrinsic Roles** **Section 5 – Pathology** **Section 6 – Diagnostic Radiology** **Section 7 – Procedural Radiology**
Structured Learning Experiences	**Experiential Training Requirements** By the end of Phase 3, trainees must have completed the following as a minimum: • 10,000 General X-rays • 5,000 CT studies (including 20 CTC studies and 50 CTCA studies) • 750 MRI studies • 200 nuclear medicine studies • 50 bone mineral density (BMD) studies • 600 mammograms • 100 breast ultrasounds
Work-Based Assessments	**Reporting Assessment** During Phase 3, trainees must complete 10 imaging interpretation and reporting sessions per six-month period. By the end of Phase 3, trainees must have completed the following as a minimum: **Performed Ultrasound Assessment** • 50 paediatric ultrasounds, with 1 in 5 assessed and the remainder to be logged and demonstrating that the trainee can perform the procedure with minimal direct supervision (Level 3). • 50 obstetric or gynaecological ultrasounds, with 1 in 5 assessed and the remainder to be logged and demonstrating that the trainee can perform the procedure with minimal direct supervision (Level 3). **Fluoroscopy Procedures Assessment** • 25 general fluoroscopic procedures, with 1 in 5 assessed and the remainder to be logged and demonstrating that the trainee can perform the procedure and direct supervision is no longer required (Level 4). • 10 additional paediatric fluoroscopic procedures, with 1 in 5 assessed and the remainder to be logged and demonstrating that the trainee can perform the procedure with minimal direct supervision (Level 3). **Procedural Radiology Assessment** Trainees must perform 100 core skills across four categories, with 1 in 5 assessed and the remainder to be logged and demonstrating that direct supervision is not required (Level 4). **Clinical Radiology/Multidisciplinary Meeting Assessment** Trainees must prepare for and present at 10 Clinical Radiology/Multidisciplinary meetings and have each one assessed. Trainees must demonstrate that they can independently prepare and present all aspects of the meeting (Level 4). Attendance alone is not sufficient.

Research	Two CATs must be completed during Phase 3. Trainees must complete their research project and submit a manuscript of their project and notify the College that it has been accepted for publication or peer review. Trainees must present their research orally at a local branch or network meeting, if not presented in Phase 2.
Monitoring and Review	DoT Review every six months. CSF with a minimum of 6 responses every 6 months. One MSF assessment. One TATS every six months.
Progression to Completion of Training	After completing all training requirements and a minimum of 12 months accredited training in Phase 3, trainees can request a portfolio review to determine Completion of Training.
Admission to Fellowship	When the College is notified that the LGC/NGC has approved the completion of training, a fellowship application pack will be sent to the trainee to complete and return. The completed application, including the outcome letter from the Network Portfolio Review Committee, will be sent to the Chief Censor for ratification and to the Board for approval.

Trainee Checklists

Checklists for Competencies of Early Training and training requirements for Phase 1-3 of the Training Program have been developed as a resource for trainees. The aim of the checklists is to support trainees by condensing the core components of the Competencies of Early Training and training requirements in a visually engaging way that is quick and easy to reference.

Refer to the Competencies of Early Training Checklist.

Refer to the Phase 1 Trainee Checklist.

Refer to the Phase 2 Trainee Checklist.

Refer to the Phase 3 Trainee Checklist.

Changes to the Clinical Radiology Training Program

The Clinical Radiology Training Program including its assessments and examinations are frequently reviewed. To ensure all trainees are well-informed and supported through the process, notice of any proposed changes will be published in College newsletters and on the website and emailed to all trainees and DoTs.

RECOGNITION OF PRIOR LEARNING

Eligibility

Applications for recognition of prior learning will be accepted from trainees who have met the standard eligibility criteria for entry to the Clinical Radiology Training Program and have successfully obtained an accredited training position. Applications will be accepted up until six months after the applicant has commenced accredited training.

Applications for RPL or experience will be considered for accredited training time and/or one or more training program requirements such as research.

Applications for RPL will not be considered for examinations or Work-Based Assessments.

Trainees Re-entering the Training Program

Trainees permitted to re-enter the Clinical Radiology Training Program may apply for recognition of prior learning before securing a RANZCR accredited training position. These trainees will be assessed on an individual basis for recognition of accredited training time, assessments, examinations and other training program requirements.

Application

Applications must be made in writing to the Chief Censor, Clinical Radiology, including a RPL application form and cover letter which specifies the learning, experience or training requirement that the trainee is applying for recognition and the outcome being sought. The onus is on the applicant to demonstrate how the previous achievement is commensurate with the Clinical Radiology Training Program requirement and attach evidence (certified documentation, extracts from training program handbooks etc) which supports the application.

Applications will be assessed by the Clinical Radiology Education and Training Committee (CRETC) (and/or their delegated body/Committee) at their next meeting.

Trainees will be advised of the outcome in writing, within 28 calendar days (where reasonably practicable) following the consideration by the CRETC (and/or their delegated body/Committee).

Refer to the Recognition of Prior Learning Application Form.

Refer to the Recognition of Prior Learning Policy.

FLEXIBLE TRAINING

Trainees can apply to the College for variations to their training whilst maintaining their:

- Professional obligations
- Ongoing commitment to training
- Clinical knowledge and procedural skills
- Currency of training
- Recency of practice.

Part-Time Training

Trainees may complete the training program on a part-time basis. They must have a clinical load of at least 50% of a full-time equivalent (0.5 FTE) position. If any accredited training position is less than 0.5 FTE, it will not be counted as accredited training time.

While training part-time, trainees are expected to have DoT Reviews after every six-month period, obtain Clinical Supervisor Feedback and complete the Trainee Assessment of Training Site (TATS).

The recommended frequency and timing of Work-Based Assessments remains unchanged for trainees completing the program part-time.

Trainees have protected time (pro-rata) and should try to attend local education activities.

The maximum time for completion of the training program is **10 calendar years** regardless of the full-time equivalent status of the trainee across the training program.

Requesting part-time training status

Requests for part-time training must be discussed and approved by the DoT.

The request to the College must be made at least 14 calendar days prior to the change in training status. Requests must be made via the ePortfolio by creating a 'CR FTE Status Change Notification'. The trainee indicates whether the request is for an increase or decrease in FTE, enters the FTE value and then selects their DoT and submits the form. The DoT considers the request by approving or otherwise, and then submits the form to RANZCR Specialty Training for processing.

For more information on Part-Time Training, refer to the Interrupted and Part-Time Training Policy.

College fees

Trainees are eligible for a reduction in the College Annual Membership Subscription Fee and Annual training Fee when undertaking part-time training which is less than 0.65 FTE. Payments already made will not be reimbursed.

For current fees, refer to the Fees webpage on the College website.

For more information regarding fees, refer to the RANZCR Fees Policy.

Interrupted Training

Interrupted training is when a trainee takes consecutive leave in excess of six weeks (including all eligible leave entitlements). Interrupted training is usually applied for when trainees need to temporarily stop training for parental leave, to support a sick relative, to manage their own health or to complete full-time research.

Trainees may request a period of interrupted training for up to 12 months.

Requesting a period of interrupted training

A period of interrupted training must initially be discussed and approved by the DoT and the period of leave (with or without pay) approved by the employer. The trainee must maintain continuity of service with the employer.

The request to the College must be made at least 14 calendar days prior to the commencement of the interruption (where reasonably practicable). The request must be made via the ePortfolio by creating a 'CR Break in Training' form. Trainees enter the proposed dates, duration and circumstances for the request. In addition, documentation must be attached to support the request (for example, a medical certificate, bereavement notice, statutory declaration). The trainee then selects their DoT and submits the form. The DoT considers the request by approving or otherwise and then submits the form to RANZCR Specialty Training for processing.

Should the trainee need to extend the period of interrupted training, a request must be made in writing by email, to the College via the email CRTraining@ranzcr.edu.au. The request must be accompanied by supporting documentation. The maximum continuous period of interrupted training must comply with recency of practice requirements as mandated by regulatory authorities.

If the Trainee is absent from the training program for an extended period of time, the Chief Censor will determine currency of knowledge and skills. An extended absence from the training program is considered to be 12 months or more of continual absence from the program.

A trainee who is absent for an extended period of time may be considered for withdrawal from the Clinical Radiology Training Program.

For more information on interrupted training refer, to the Interrupted and Part-Time Training Policy.

College fees

Trainees are not required to pay the College Membership Fee and Annual Training Fee while on interrupted training, however, payments already made may be credited or refunded on a pro-rata basis following the receipt of a request.

For more information regarding fees refer to the RANZCR Fees Policy.

Non-consecutive Leave

Trainees who take non-consecutive leave in excess of 10 weeks in any 12 month training year (pro-rata for shorter training periods), may have this training time unaccredited. Training time may be unaccredited should the DoT believe that the amount of non-consecutive leave has had a detrimental impact on the trainee's performance or progression within the Clinical Radiology Training Program. DoTs should advise the College by email at CRTraining@ranzcr.edu.au.

For more information on interrupted training, refer to the Interrupted and Part-Time Training Policy.

Maximum Duration of Training for the Training Program

The maximum duration of training for completion of the Clinical Radiology Training Program is ten calendar years from the commencement of the Clinical Radiology Training Program, regardless of any period of training which may have been unaccredited by the College due to reasons associated with excessive non-consecutive leave.

FELLOWSHIP

Completion of Training

Applications for progression need to be submitted once all training requirements are complete. Before applying for Fellowship, trainees must have their portfolio reviewed and approved for completion of training by the College and the Network Portfolio Review Committee. Trainees can apply to have their portfolio reviewed up to two months before completion of training. A Completion of Training form must accompany the portfolio for network review.

For information relating to completion of training, refer to **Section 11 – Trainee Progression**.

Admission to Fellowship

When the College is notified that the Network Governance Committee or Local Governance Committee have approved completion of training, a fellowship application pack will be sent to the trainee.

To apply:

1. The trainee completes the completion of training form and arranges for the form to be signed by their Director of Training. The form must include a list of **all** rotations completed by the trainee including 12 months away from their main site. This form will go to the network as part of the review as well as remain in the Fellowship pack.
2. The trainee completes their section of the Fellowship form and arranges for the application to be certified by two current Fellows of the College. Trainees can apply up to two months prior to completion of training date.
3. The trainee completes a Fellowship Fee form. An Admission to Fellowship fee is payable at the time of trainees submitting their application. The Admission to Fellowship fee is a one-off fee which can be paid in full or in monthly instalments. A 10% up-front payment discount is available to trainees who have paid their fee in full by the invoice due date.
4. Trainees in Australia will also be sent a medical practitioner form to complete.

Trainees must submit their completed Fellowship Application Pack to fellowship@ranzcr.edu.au.

For more information, refer to Becoming a Fellow.

For Fellowship fees, refer to Fees.

Section Three
CURRICULUM LEARNING OUTCOMES

OVERVIEW

The Clinical Radiology Curriculum Learning Outcomes (Learning Outcomes) outline the knowledge, skills and attitudes trainees are expected to develop during the course of the Clinical Radiology Training Program. These competencies are essential to providing the highest possible quality of service to meet the relevant health care needs of all communities in Australia and New Zealand, including the health care needs of Aboriginal and Torres Strait Islander and Māori peoples.

The competencies articulated in the Learning Outcomes document guide:

- Self-directed learning
- Content of mandatory workshops and courses
- Structured learning experiences during the training program
- The focus on work-based assessments to prompt learning and feedback on trainees' application of knowledge and skills in the clinical setting
- The emphasis on assessments such as the Phase 1 and Phase 2 Examinations which assess the learning which has occurred
- Accreditation of training networks and training sites to ensure trainees obtain the breadth of practice and experience required during the program.

Competencies articulate the level expected at the completion of training

A list of learning outcomes is generally prefaced by the common stem 'The trainee is able to'. Together, they combine to create competencies that apply to the clinical radiologist who is about to commence independent clinical practice, i.e., at the completion of training.

The competencies articulate the minimum expectations of a clinical radiology specialist. High level sub-specialist knowledge is not expected. It is anticipated that the core competencies acquired during the training program can be extended through continuing professional development as a Fellow, which may then lead to sub-specialty practice.

Assessment is directly aligned to the curriculum

The College has developed a longitudinal assessment strategy so that trainees are assessed at multiple points throughout the training program, in a variety of formats. Specific assessment methods, that are most suitable to assessing the different types of competencies, have been selected.

Knowledge outcomes tend to be assessed by Phase 1 and 2 Written Examinations. The application of this knowledge is assessed during the Objective Structured Clinical Examination in Radiology (OSCER) or in the workplace when providing care to patients.

Work-Based Assessments have been custom designed to ensure trainees obtain feedback in relation to the core competencies of a clinical radiologist. Assessment tools include items relevant to medical expertise and the intrinsic roles, as it is the integration of these competencies which is vital to providing quality care.

ASSESSMENT FRAMEWORK

Curriculum Section	Anatomy Exam	AIT Exam	Reporting Assessment	Performed Ultrasound Assessment	Fluoroscopic Procedures Assessment	Procedural Radiology Assessment	Clinical/ MDM	Multi-source Feedback	Pathology Exam	Clinical Radiology Exam and OSCER	Research Requirements
Intrinsic Roles											
Communicator				✓	✓	✓	✓	✓		✓	
Collaborator							✓	✓			
Leader							✓	✓			
Health Advocate							✓	✓		✓	
Professional				✓	✓	✓		✓		✓	
Scholar								✓		✓	✓
Cultural Competency								✓		✓	
Medical Expert											
Applied Imaging Technology		✓	✓	✓	✓					✓	
Artificial Intelligence										✓	
Anatomy	✓		✓	✓	✓	✓				✓	
Pathology			✓	✓	✓	✓	✓		✓	✓	
Diagnostic Radiology	✓	✓	✓	✓	✓	✓	✓		✓	✓	
Procedural Radiology					✓	✓	✓			✓	

LEARNING OUTCOMES SECTIONS

The Royal College of Physicians and Surgeons of Canada described the seven roles of a doctor as: Medical Expert, Communicator, Collaborator, Manager, Health Advocate, Scholar and Professional. These were named the Canadian Medical Education Directives for Specialists (CanMEDS).

The Clinical Radiology Curriculum Learning Outcomes document is structured around the general CanMEDS concepts and is organised around the seven key roles. Section 1 focusses on competencies of the intrinsic roles whereas sections 2-7 pertain to the Medical Expert role.

The following is a summary of the Clinical Radiology Learning Outcomes. To see the complete list of learning outcomes refer to the Curriculum Learning Outcomes.

Section 1 – Intrinsic Roles

Learning outcomes within this section focus on the non-medical expert roles of the clinical radiologist that are as important as their medical expertise.

Communicator:

- Communicate effectively with patients, navigating challenging communication scenarios.
- Adjust communication to suit the level of understanding of patients and other health professionals, to convey expert opinion.
- Share patient information in an effective manner, including in written and electronic formats, to optimise clinical decision making, patient safety, confidentiality and privacy.

Collaborator:

- Develop and maintain working relationships with other health professionals, engaging in respectful shared decision making and ensuring continuity of care.
- Contribute to multidisciplinary team meetings, facilitating the discussion of investigative options and the results of imaging to guide the development of patient management plans.

Leader:

- Display leadership in local and wider healthcare systems, initiating and implementing quality improvements, and exhibiting responsible stewardship of healthcare resources.
- Manage elements of professional practice, career development and personal life to balance wellbeing.

Health Advocate:

- Advocate for individual patients, groups of people and the general community in relation to minimising risk, allocation of resources and service delivery for optimal patient outcomes.

Professional:

- Consistently demonstrate professional behaviour, in accordance with the RANZCR Code of Ethics, reflecting the values of the specialty and the medical profession.

Scholar:

- Critically appraise scientific literature and adapt clinical practice according to the best available evidence.
- Design and engage in research to address a clinical question and disseminate findings to contribute to the advancement of the specialty.
- Apply a lifelong learning approach to professional development and participate in the education of

students, peers, patients and other health professionals.

Cultural Competency:

- Discuss how conscious and unconscious bias of health professionals may influence the care of patients.
- Promote cultural safety and tailor care according to patients' diverse needs, including religious and personal beliefs and values.

Section 2 – Applied Imaging Technology

This section focuses on the ability of a clinical radiologist to demonstrate foundation knowledge of imaging technology including the physical principles associated with image acquisition, quality and display of various imaging modalities, and radiation protection and patient safety.

Section 3 – Artificial Intelligence

It is acknowledged that artificial intelligence (AI) is a rapidly developing field. This section includes learning outcomes that address the concepts around machine learning, the ethics of AI relevant to medical imaging and how AI can be incorporated to provide high quality care.

Section 4 – Anatomy

The emphasis of Section 4 is on radiological anatomy and the trainee's ability to identify and describe anatomical structures on relevant imaging modalities. For each of the topic areas, trainees are also required to demonstrate knowledge of the embryological development of specific structures and describe normal anatomical variants.

Section 5 – Pathology

Trainees are expected to have a thorough knowledge of general pathology as it relates to the identification of disease and conditions using imaging. In addition, trainees will be able to recognise the pathological consequences and describe the morphological changes associated with therapies and occupational exposures.

Appendix 1 provides a guide to the clinical conditions that the trainee should become familiar with in relation to pathology. Clinical conditions are organised into three categories.

Category 1 conditions are typically common conditions or conditions in which the radiologist plays a vital role for diagnosis. These are essential conditions all graduating radiologists must be able to confidently discuss and diagnose.

Category 2 conditions are typically conditions which may have less urgency in diagnosis. The graduating radiologist must have comprehensive knowledge of these conditions.

Category 3 conditions are typically rare conditions that a graduating radiologist must broadly know of, including relevant detail to include them in a differential diagnosis.

Section 6 – Diagnostic Radiology

This section of the curriculum defines the competencies that trainees are expected to attain in relation to the daily practice of diagnostic and clinical radiology.

It represents a culmination of skills, knowledge and attitudes that enable the trainee to facilitate the safe practice of diagnostic radiology. This should span the continuum of patient care from receipt of an imaging referral to the diagnostic report and any subsequent role in patient management.

The general diagnostic learning outcomes refer to radiological modalities, including:

- X-ray
- Ultrasound (US)
- Computed Tomography (CT) scan

- Magnetic Resonance Imaging (MRI) scan
- Nuclear Medicine scans
- Mammography
- Bone Mineral Densitometry (BMD)

Learning outcomes on the imaging and interpretation of studies specific to topic areas (e.g. Brain, Cardiothoracic) are listed.

Appendix 1 of the Learning Outcomes document provides a guide to the clinical conditions that the trainee should become familiar with for each topic area. Clinical conditions are organised into three categories based on how common they are and the urgency of diagnosis.

For all conditions listed the trainee will be able to:

- Describe the typical clinical presentation.
- Outline the most appropriate imaging pathway to diagnose or exclude the condition.
- Manage and supervise the provision of the clinical imaging study.
- Accurately identify the condition on imaging studies across all relevant modalities.
- Discuss the key radiological features including relevant radiological and variant anatomy.
- Outline differential diagnoses where appropriate.
- List and identify the possible complications associated with the condition.
- Recommend additional imaging studies or procedures that may be necessary for diagnosis or management.
- Communicate results and management options to the referring practitioner in a manner that addresses the clinical urgency of the condition.

Section 7 – Procedural Radiology

This section of the curriculum defines the competencies trainees are expected to attain in relation to performing diagnostic and therapeutic procedures under radiological guidance, including:

- Fluoroscopy
- Ultrasound
- Computed Tomography
- Magnetic Resonance Imaging
- Mammography
- Angiography

General procedural radiology learning outcomes relate to risk assessment and informed consent, infection control, performing image guided interventions (including post-procedural care) and safe sedation. Further learning outcomes are listed under each topic area. Within the topic areas, there are a range of procedures that trainees must have knowledge of and others that the trainee must be able to perform competently.

For further information, refer to the Curriculum Learning Outcomes.

Section Four
COMPETENCIES OF EARLY TRAINING

The following activities have been grouped together as they are the focus of learning in the early stages of the training program. These stages are outlined below.

Completed within the first six months of training:

- Radiography Attachment
- Report Writing Module
- Safety and Quality

Completed within the first twelve months:

- Key Conditions Assessment

The Key Conditions assessment is required to be attempted within the first six months of training and must be successfully completed before a trainee can be placed on the after-hours and on-call roster.

The first two Director of Training (DoT) Reviews are check points to document a trainee's progress towards meeting these requirements, and if required, an opportunity to discuss a plan to complete the training requirements.

Refer to the Competencies of Early Training Checklist.

Radiography Attachment

It is expected that in the first six months of training all trainees spend one week / 10 sessions rostered with the radiographer staff across a range of modalities (radiographs, computed tomography (CT), ultrasound, magnetic resonance imaging (MRI), fluoroscopy, intervention). The purpose of the attachment is to gain an understanding of the performance of a radiographic procedure, including:

- Imaging protocols
- Radiation and MRI safety protocols
- Patient positioning
- Shielding protocols

Process

Trainees should discuss the radiographer attachment with their DoT, who can advise on scheduling sessions and first points of contact with the radiographer (team/ staff).

Recording Completion

On the ePortfolio, the trainee creates a 'CR Radiography Attachment' form. The trainee then enters the number of sessions completed, any comments or feedback and submits the form. Sessions can be added individually as they are completed or all at the one time. Submissions will tally to a total number of sessions.

Report Writing Module

It is expected that trainees complete the RANZCR module *Effective Communication and Writing High Quality Clinical Radiology Reports* in the first six months of training.

The written radiology report is the primary method that radiologists use to communicate their interpretation of imaging findings. It is the core of a radiologist's professional presence and a key product of radiology as a medical specialty.

The module aims to review the important factors that impact on report quality. Module material is drawn from several clinical practice guidelines, including the 2017 revised RANZCR Written Report Guideline as well as publications in the literature.

Process

The module is freely available to RANZCR members, to access the module follow the below steps:

1. From the College website click on "MyRANZCR Login"
2. Enter member login details
3. Navigate to the MyRANZCR Learn menu
4. Click the link "Learning Modules"
5. From the "Learning Modules" page, select "Click here to launch module". You will be directed to the RANZCR Report Writing Module.

The module should take approximately 30-45 minutes to complete. Progress through the module is automatically saved so the trainee can close the module and return to it at a later time.

Recording Completion

When the trainee has completed the module, including correctly completing the included activities, the trainee will be provided with an electronic certificate of completion to use as evidence of completion.

On the ePortfolio, the trainee creates a 'CR Report Writing Module' form. The trainee indicates they have completed the module and then attaches the evidence of completion.

Note: The Report Writing Module must be completed within the first six months of training. To record this on the trainee timeline correctly the “Date Occurred On” must be within the trainee’s timeframe “To be complete within in the first six months of training”. Should this be completed outside the trainee’s time period completion progress will not be captured in the “Competencies of Early Training Goal”.

Safety and Quality

MRI Safety

It is expected that prior to working in an MRI suite the trainee has completed site-based MRI safety education.

Within the training site orientation, trainees will be advised on how to access the MRI safety education delivered at their site.

Incident Reporting

It is expected the trainee is educated in the use of the incident reporting system relevant to their training site and develops knowledge and skills such that they are able to report incidents on the local jurisdictional *Adverse Events Register* as required.

MRI safety and Incident Reporting education must be completed within the first 6 months of training. DoTs must indicate on the DoT Review form when the trainee has completed this quality and safety education.

Recording Completion

When the trainee and their DoT complete their first DoT Review, at the start of the Phase 1 DoT Review the DoT is asked if this is the trainee’s first DoT Review. The DoT then clicks the Yes/No slider to generate the MRI Safety and Incident Reporting section.

In the mandatory fields asking the DoT to affirm completion of the MRI Safety and Incident Reporting tasks the DoT makes the selection “Yes”

The DoT Review must be complete / Date Occurred On must be within the trainee’s timeframe “To be complete within the first six months of training” in order for this to mark progress towards the Competencies of Early Training Goal.

Key Conditions Assessment

The Key Conditions Assessment refers to an assessment of competence in radiological diagnosis of clinical conditions which may be life threatening if undiagnosed over a period of 12 hours. Training sites are required to ensure trainees have had adequate teaching and exposure to these conditions prior to participating in the after-hours and on call roster. Key conditions are listed in Appendix One of the Clinical Radiology Curriculum Learning Outcomes. A yellow star in the ‘KC’ column of the appendix identifies the key conditions. All key conditions are in Category 1.

The key conditions assessment provides sites with a standardised tool for assessing trainee readiness and provides a clear benchmark for measuring trainee progression in Year 1 of training.

This assessment is usually undertaken between four and six months after the commencement of training to assess readiness for after-hours work and on call duties. Trainees cannot be assessed at fewer than four months into training.

Trainees are not to be placed on the after-hours and on-call roster until they have reached an entrustability level commensurate with the level of consultant supervision at the site. It is recognised that some training sites have on-site consultant availability after-hours and this should be considered when making decisions regarding the trainee’s participation in the after-hours roster.

The entrustability scale for the Key Conditions Assessment is as follows:

- Constant Direct Supervision – Conditions reported in conjunction with consultant
- Direct Supervision – Consultant is on site, study and reports reviewed within 4 hours
- Minimal Direct Supervision – Direct and timely access to a consultant, study and reports reviewed within 24 hours
- Direct Supervision Not Required – Consultant is available if needed, study and reports are reviewed within 24 hours

Process

The assessment is to be conducted locally, preferably at the training site where the trainee will first start after hours or on call duties. The assessment should therefore reflect the case mix and conditions of the after-hours environment that the trainee will experience.

Clinical Supervisors (CSs) and/or DoTs select a case from each of the key condition categories (listed below), and then additional cases which reflect the training site case-mix and modality usage to create a 'mock list'. A total of 16 cases are required to be presented to the trainee for a valid assessment.

The key conditions categories are as follows:

- Brain
- Head and Neck
- Spine
- Cardiothoracic
- Abdomen and Pelvis
- Musculoskeletal System
- Obstetrics and Gynaecology
- Paediatric

Conducting the assessment on the in-house RIS/PACS system the trainee will use after hours, allows for an evaluation of familiarities with the system as well as with Key Conditions knowledge.

The format for the assessment may vary between training sites, depending on geography and functioning of departments. An Objective Structured Clinical Examination in Radiology (OSCER) type setup is perhaps the easiest to administer, with candidates 'reporting' the cases within a two-hour timeframe.

For two of the scenarios, a 'live station' should be considered, whereby the trainee is to answer questions posed by a clinician and demonstrate how they would manage emergency situations, such as a contrast reaction. This enables assessment of communication skills and decision making in addition to knowledge.

A question and answer session immediately afterwards, which could be conducted as a group, provides an opportunity to debrief and discuss feedback on performance.

Key Conditions Assessment Form Completion

Via the ePortfolio, the trainee creates a 'CR Key Conditions Assessment' and selects 'Yes' for the CS/DoT to fill in the assessment form within their profile or submits the form and the CS/DoT can then log in on their device.

The CS/DoT completes the Key Conditions Assessment Form. The CS/DoT documents the case number, selects the key condition category for that case and selects the descriptor which best describes the trainee's performance for findings, diagnosis and management. For findings, more than one descriptor may be relevant, i.e. the trainee may detect all relevant findings and but also detect non-existent findings.

After rating the trainee for each case, the CS/DoT then considers the overall performance of the trainee and determines the amount of supervision the trainee requires when performing on call and after-hours duties. They select the entrustability level and adds any comments in the overall feedback field.

The CS should encourage the trainee to reflect on their own performance by talking with them about the areas the trainee did well and the areas in which the trainee feels they need improvement. The CS should then provide their perspective and summarise areas in which the trainee performed well and those areas that require improvement, by writing comments under relevant items on the form. The CS/DoT should aim to document key feedback on the form that would be most helpful to the trainee at their stage of learning.

If the CS/DoT indicates that the trainee still needs constant direct supervision (Level 1) or direct supervision (Level 2), the trainee will need to complete the assessment again and cannot be allocated to after hours or on call duties without the required level of supervision.

The CS/DoT and trainee will plan learning sessions to assist the trainee improve their ability to identify key conditions. The trainee is able to repeat the assessment after no less than four weeks. On the assessment form the CS/DoT can indicate a work plan and a proposed date for the next assessment

Key Conditions Assessment and Progression

Trainees must attempt this assessment within the first six months of training. An action plan may be developed for Trainees who require additional support to achieve a rating of Level 3 on the entrustability scale.

For more information, refer to the Performance and Progression Policy.

Trainees who do not achieve Level 3 on the entrustability scale (minimal direct supervision) within 12 months of the commencement of training, should be managed under the Remediation in Training Policy, with development of a Remediation Plan, and suspension of training time for a minimum period of 6 months.

Trainees must have achieved Level 3 on the entrustability scale before progressing to Phase 2.

For more information, refer to the Remediation in Training Policy.

Section Five
STRUCTURED LEARNING EXPERIENCES

ATTACHMENTS

Attachments provide trainees with the opportunity to complete a minimum allocation of time on specific topics/modalities to support their learning within the training program. One session is a half day of approximately four hours.

Trainees can complete Attachments in the following formats:

1. All in one allocated time period e.g. 4 week block
2. Separated into individual sessions e.g. 40 x 4 hour sessions
3. Or a mixture of both e.g. 2 week block and 20 x 4 hour sessions

It is expected that by the end of Phase 2 all trainees will complete the following attachments:

Modality/Topic Area	Details (minimum number of weeks/sessions)
Nuclear Medicine	4 weeks / 40 sessions
Breast	8 weeks / 80 sessions in a diagnostic department or in a breast screen and assessment unit.
Obstetrics and Gynaecology	8 weeks / 80 sessions
Paediatrics	12 weeks / 120 sessions A paediatric "session" must be a minimum of 4 hours work. There must be a minimum component of 50% in paediatric imaging within the session, irrespective of modality. A paediatric patient is defined by the College as a person aged 16 years or younger (prior to 17th birthday). For trainees to meet paediatric training requirements, the College understands that each network is different and may not have access to paediatric teaching or a traditional 12 week attachment in a children' hospital. Networks can develop a mixed/alternative training model to ensure trainees have adequate exposure, training and learning opportunities. For the network to be eligible they must meet the requirements below. Options are: • One or more rotations in a dedicated paediatric hospital. • A combination of rotations, including a rotation in a dedicated paediatric radiology department and a general department with appropriately qualified Paediatric/Children's radiologist • Rotations in a non-dedicated paediatric hospital where there is a significant paediatric workload.

	The primary radiology department responsible must be in a hospital setting that has the following: • Inpatient paediatric services • Paediatric medical specialists • An emergency department that has regular paediatric patients • X-rays, ultrasound, CT and MRI onsite • Access to enough cases that trainees can meet paediatric specific experiential training requirements for X-ray, ultrasound, CT and MRI over the course of training • Regular paediatric radiology MDMs (minimum fortnightly) • Be part of a network structured teaching program that includes a satisfactory paediatric radiology component • A minimum of one named, College approved, supervising radiologist responsible for paediatric radiology training. This radiologist should be part of the Network Governance Committee if paediatric radiology training is completed outside of a training hospital. All sessions must be supervised by a paediatric radiologist or equivalent to qualify as a paediatric session. A paediatric radiologist responsible for teaching the paediatric radiology syllabus in the Curriculum Learning Outcomes must be either: • An accredited fellowship trained paediatric radiologist, OR • A radiologist whose major commitment to clinical practice is in paediatric radiology for at least five years, OR • A clinical radiologist who has at least 25% of their clinical work in paediatrics.
Procedural Radiology	12 weeks / 120 sessions, ideally 6 months

Process

Trainees should discuss completion of the various attachments with their Director of Training (DoT), who can advise on scheduling sessions and first points of contact.

Recording Completion

On the ePortfolio, the trainee creates a 'CR Structured Learning Experiences – Attachments' form. The trainee then enters the number of sessions completed for each modality or topic area. Sessions can be added individually as they are completed or all at the one time. Submissions will tally to a total number of sessions.

EXPERIENTIAL TRAINING REQUIREMENTS

Diagnostic Radiology

Throughout the training program, trainees are required to progressively complete Experiential Training Requirements (ETRs). The ETRs are designed as a practical activity to enable the trainee to study different types of studies and procedures across a wide range of topic areas and imaging modalities. They also provide opportunities for trainees to understand the role and interactions of the radiologist in multidisciplinary teams. Trainees are expected to meet certain entrustability levels at the various stages when completing the ETRs.

Throughout the tables below * indicates ideally live studies to be reported, which could include studies presented by the trainee at clinical radiology meetings or multi-disciplinary meetings while supervised or in teaching sessions (1:1 consultant/trainee) discussing current studies or reviewing archived studies.

	Phase 1	**Phase 2**	**Phase 3**
GENERAL X-RAY			
Type of examination	All plain x-rays including: • Chest • Abdomen • Axial skeleton • Extremities (upper and lower limbs)		
Number of Examinations	8,000 plain x-rays to be reported (recommended)		Total of 10,000 plain x-rays to be reported

	Phase 1	**Phase 2**	**Phase 3**
GENERAL ULTRASOUND PERFORMED			
Type of examination	General ultrasound studies including: • Neck • Abdomen • Renal • Doppler • Venous • Musculoskeletal • Scrotal		
Number of examinations	50 studies to be performed with 1 in 5 to supervised by a sonographer or sonologist *(Not logged in ETRs – to be captured in the WBA Performed Ultrasound Assessment)*		

	Phase 1	Phase 2	Phase 3
COMPUTED TOMOGRAPHY (CT)			
Type of examination	A broad range of studies including: • Abdomen and Pelvis • Chest including cardiovascular • Head and Neck • Brain • Spine • Musculoskeletal • CT colonography (CTC) • CT coronary angiography (CTCA)		Studies specific to the rotation.
Number of examinations	2,000 studies protocolled and reported (recommended)	Additional 2,000 studies protocolled and reported (recommended)	Total 5,000 studies
	20 CTC studies* supervised by a radiologist credentialed by RANZCR CTC assessment panel. At least 10 live studies. 50 CTCA studies* supervised by a radiologist (credentialed to Level A by the Conjoint Committee for Recognition of Training in CTCA). At least 10 live studies.		

	Phase 1	Phase 2	Phase 3
MAGNETIC RESONANCE IMAGING (MRI)			
Type of examination	A broad range of studies including: • Abdomen and pelvis (including liver, MRCP, rectum, cervix, uterus, prostate) • Chest including cardiovascular • Head and neck • Brain • Spine • Musculoskeletal • Breast • Paediatrics		Studies specific to the rotation.
Number of examinations	100 studies protocolled and reported (recommended)	Additional 300 studies protocolled and reported (recommended)	Total 750 studies protocolled and reported. Suggested range: • Abdomen and pelvis: 100 • Chest (including cardiovascular): 30 • Head and neck: 50 • Brain: 200 • Spine: 150 • Musculoskeletal: 150 • Breast: 20 • Paediatrics: 50

	Phase 1	Phase 2	Phase 3
NUCLEAR MEDICINE			
Type of examination	A broad range of studies including: • Bone scan • Thyroid scan • Sestamibi Parathyroid scan • Lung scan – ventilation / perfusion (V/Q) • GI bleed scan • Renal: MAG 3, DTPA, DSMA Brain: Dementia, epilepsy (SPECT and PET) • Cardiac – performing exercise and pharmacological stress tests under supervision • Sentinel lymph node mapping • White Cell / Gallium • Paediatric Nuclear Medicine: renal (obstruction, infection, reflux), bone (fracture, non-accidental injury, infection), liver (biliary atresia versus neonatal hepatitis), thyroid (congenital hypothyroidism), oncology (PET, MIBG) • PET/CT or PET/MRI Therapy: • Iodine-131 for thyrotoxicosis and thyroid cancer Peptide receptor radionuclide therapy (PRRT) for neuroendocrine tumours and prostate carcinoma.		
Number of examinations	200 studies to be observed and examined* At least 50 must be PET/CT or PET/MRI* The cardiac cases must be correlated with an anatomical modality such as CTCA or catheter angiography.		

	Phase 1	Phase 2	Phase 3
BONE MINERAL DENSITY (BMD)			
Type of examination	N/A		
Number of examinations	50 studies to be examined*		

	Phase 1	Phase 2	Phase 3
GENERAL FLUOROSCOPY			
Type of examination	Contrast GI studies • Swallow • Follow-through • Enema Other fluoroscopic procedures may include: • Naso-gastric tube (NGT) and Naso-enteric tube (NET) placement • Barium Meal • Cystogram • Urethrogram • Hysterosalpingogram • T-tubogram		
Number of examinations	25 fluoroscopic procedures to be performed and reported with 1 in 5 assessed and the remainder to be logged. *(not logged in ETRs – to be captured in the Fluoroscopic Procedures Assessment)*		

Procedural Radiology

	Phase 1	Phase 2	Phase 3

Type of procedure	Perform procedures utilising the following core skills under image guidance (ultrasound, CT or fluoroscopic):
	1. Injection (needles, catheters)
	2. Drainage (percutaneous drain insertion, fixation, monitoring, maintenance and removal)
	3. Biopsy
	4. Vascular access (performance of vascular punctures and insertion of lines, including management of vascular puncture sites and related complications)
	
	This may include the following:
	• Fluoroscopic guided procedures, e.g.
	  ○ Fluoroscopic joint injections
	  ○ Spinal procedures e.g. lumbar puncture, myelography, epidural/nerve root sleeve/facet blocks
	• Ultrasound guided procedures, e.g.
	  ○ Needle placement and aspiration
	  ○ Drain insertion e.g. pleural, peritoneal, abscess
	  ○ Venous puncture and line placements, e.g. PICC insertion
	  ○ Musculoskeletal injections, including steroid injections and nerve blocks
	  ○ Solid organ fine needle aspirations and biopsy
	• CT guided procedures, e.g.
	  ○ Needle placement and aspiration
	  ○ Drain insertion
	  ○ Musculoskeletal injection, including steroid injections and nerve blocks
	  ○ Spinal injections (at all levels)		

Number of procedures	Perform and record 100 interventional procedures under radiological guidance with 1 in 5 assessed and the remainder to be logged. At least 15 of each of the four core skills is required, ideally maintaining an even spread across the core skills for the remaining procedures. (*not logged in ETRs – to be captured in the Procedural Radiology Assessment)*		

Specific Topic Areas

	Phase 1	Phase 2	Phase 3
BREAST			

Type of examinations or procedures	Including:
	• Mammography, diagnostic and screening, including special views
	  ○ Extended craniocaudal (CC)
	  ○ Lateral
	  ○ Cleopatra
	  ○ Spot compression
	  ○ Magnification
	• Ultrasound
	• MRI
	• Breast procedures may include:
	  ○ Ultrasound guided biopsies
	  ○ Stereotactic guided biopsies
	  ○ Cyst aspiration		

Number of examinations and procedures	• 100 diagnostic mammograms examined* • 500 screening mammograms examined* • 100 breast ultrasounds observed and reported • 20 MRIs protocolled and reported or examined* • (to be logged under MRI – Breast MRI) • 10 breast procedures performed and reported • (not logged in ETRs – to be captured in the Procedural Radiology Assessment)		

	Phase 1	Phase 2	Phase 3
OBSTETRICS AND GYNAECOLOGY			
Type of examinations	Including: • Pelvic scans – transabdominal (TA) and transvaginal (TV) • Early pregnancy and complication scans • Nuchal translucency scans • Obstetric morphology scans • Obstetric growth scans • Relevant MRI (ovarian and uterine, may include fetal, placental) • Relevant body CT		
Number of examinations	50 O and G ultrasounds to be performed with 1 in 5 assessed under sonographer or sonologist supervision and the remainder to be logged including: • Pelvic scans (minimum 10) • First trimester scans (minimum 10) • Second and third trimester scans – fetal biometry (minimum 10) *(not logged in ETRs – to be captured in the Performed Ultrasound Assessment)* Fetal MRI experience desirable.		

	Phase 1	Phase 2	Phase 3
PAEDIATRICS			
Type of examinations	Including: • X-rays – chest, abdomen, extremity, skeletal survey for NAI • GI contrast studies – swallow, meal, enema • Other fluoroscopy – transpyloric tube placement (TTP), micturating cystourethrogram (MCU) • Ultrasound – abdominal, neonatal head US, hip • CT • MRI		
Number of examinations	• 10 fluoroscopy procedures performed and reported with 1 in 5 assessed *(to be captured as Fluoroscopic Procedures Assessments)* • 50 supervised ultrasounds performed including 10 cranial ultrasounds with 1 in 5 assessed *(to be captured as Performed Ultrasound Assessments)* • Minimum 300 plain x-rays to be reported *(to be logged under X-Ray – Paediatric X-Ray)* • 50 CT to be protocolled and reported *(to be logged under CT – Paediatric CT)* • 50 MRI protocolled and reported *(to be logged under MRI – Paediatric MRI)*		

Recording Completion

On the ePortfolio, the trainee creates a 'CR Structured Learning Experiences – Experiential Training Requirements' form. The trainee then enters the number of examinations for each modality and/or topic area. Submissions will tally to a total number of studies. The trainee then attaches an electronic copy of the RIS/PAC print out as evidence that the examinations were completed.

ONLINE LEARNING

Cultural Competence and Cultural Safety

All trainees must complete the Royal Australasian College of Physicians (RACP) Australian Aboriginal, Torres Strait Islander and Maori Cultural Competence and Cultural Safety resource by the end of Phase 2.

The resource includes in-depth content, video scenarios, reflection and discussion activities and recommended further resources. The online module allows participants to work through different content topics and covers:

- Reflection on how your own cultures and belief systems influence your professional practice
- An understanding of your own cultural competence and cultural safety within social, cultural and clinical environments
- An awareness of how cultural competence and safety principles may be applied to improve patient health outcomes and experience of care.

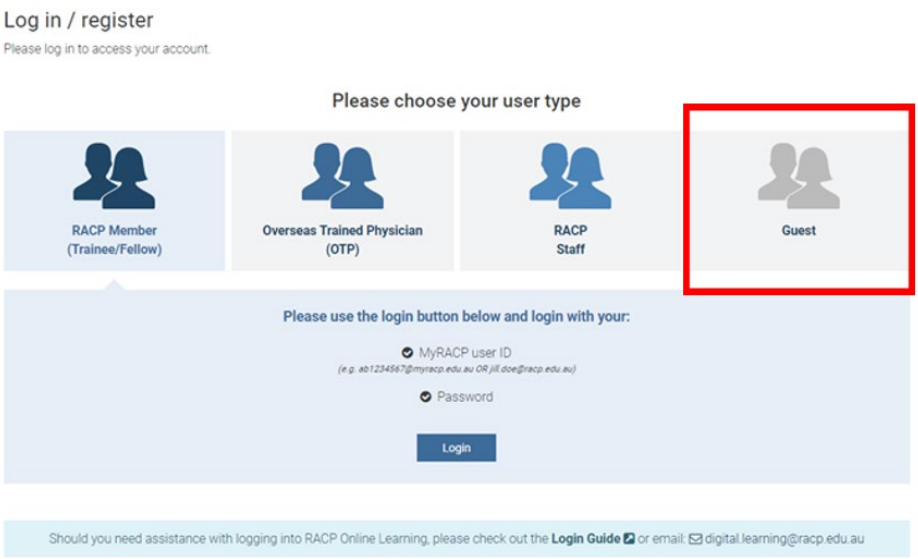
Access the course via RACP Online Learning.

Refer to **Online Resources – Section 13 Training Resources** for further information on Cultural Safety.

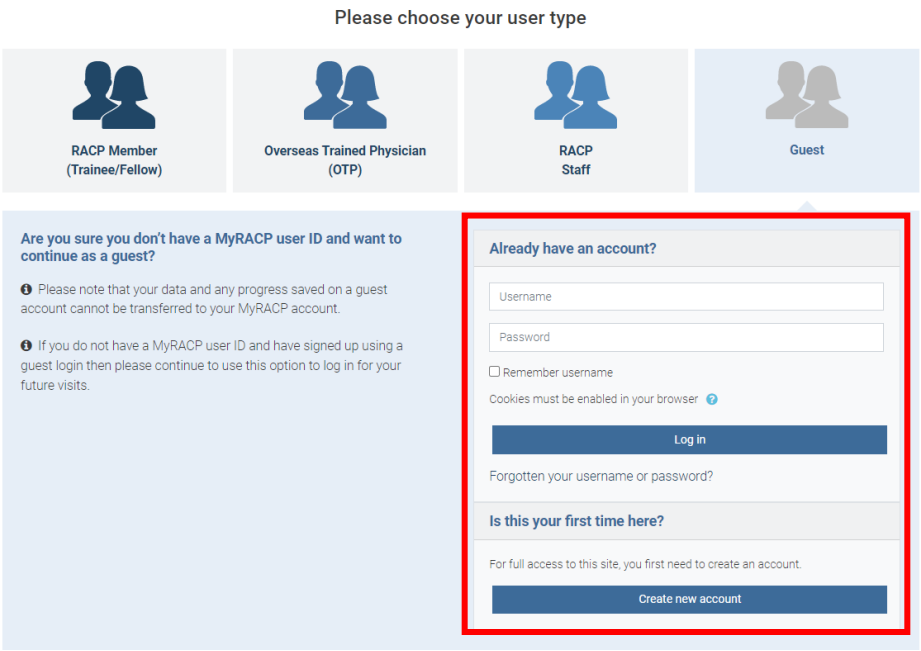
Process

The Cultural Competence and Cultural Safety online module is freely available to RANZCR members, to access the module follow the below steps:

1. From the College website click on “MyRANZCR Login”
2. Enter member login details
3. Navigate to the MyRANZCR Learn menu and click the link “Learning Modules”
4. From the “Learning Modules” page, select “Click here to launch module” for the RACP Australian Aboriginal, Torres Strait Islander and Maori Cultural Competence and Cultural Safety resource.
5. Once directed to the login screen (as represented in the image below) please click on ‘guest’.



6. If entering for the first time create a new account as indicated below, otherwise please log in using existing details.



7. Upon entry to the module, commence the Cultural Competency and Cultural Safety course.

Trainees are able to progress through the module with the ability to save progress, close the module and return to it at a later time.

Recording Completion

When the trainee has completed the module, including correctly completing the included activities, the trainee will be provided with an electronic certificate of completion to use as evidence of completion.

On the ePortfolio, the trainee creates a 'CR Cultural Competence and Cultural Safety form'. The trainee indicates they have completed the module and then attaches the evidence of completion.

Section Six
WORK-BASED ASSESSMENT

OVERVIEW

The Clinical Radiology Training Program has a comprehensive approach to Work-Based Assessments (WBA) of trainee competence. A number of assessment tools have been implemented to guide trainees in learning clinical skills across the three phases of the training program.

Work-Based Assessments includes the following tools:

- Reporting Assessment
- Performed Ultrasound Assessment
- Fluoroscopic Procedures Assessment
- Procedural Radiology Assessment
- Multidisciplinary/Clinical Radiology Meetings Assessment.

The onus is on trainees to select patient cases and initiate Work-Based Assessments with Clinical Supervisors (CSs). However, CSs can direct trainees to complete assessments on specific topic areas in order for the trainee to obtain feedback on particular clinical skills competencies.

Competency based training acknowledges that each trainee may take a variable amount of time to develop and demonstrate certain abilities or all expected competencies to the required standard.

Direct observation and regular feedback

Assessment methods need to be 'fit for purpose' or aligned to the type of competencies they are aiming to assess. For example, clinical skills such as interacting with a patient while completing a procedure are best assessed by direct observation. A written examination paper only assesses knowledge associated with these skills. The frequency of Work-Based Assessments in the enhanced training program promotes the role and importance of direct observation with real patient cases in everyday clinical settings, feedback from senior colleagues, and deliberate practice.

The value of multiple assessors

Any attempt to standardise Work-Based Assessments may reduce the quality of data on trainee performance that the assessments provide. Multiple assessors are valued as they each provide a different perspective on performance and may compensate for assessor shortcomings such as unconscious biases, leniency or halo effects and other confirmation bias.

To ensure assessment reliability, data is collected from a number of assessments and across the different types of assessment methods.

Active engagement by the learner

Work-Based Assessments requires active engagement by trainees.

1. As adult learners, trainees should determine their learning needs and select patients and cases which will be most beneficial to their learning.
2. Trainees should identify specific areas in which they would appreciate feedback and communicate these to the CS.
3. Self-assessment and the ability of a trainee to reflect on their own performance is a powerful catalyst to professional growth. Prior to the CS volunteering their thoughts, trainees should be encouraged to consider their own performance, including what they did well and where they feel they need more practice.

Entrustability scale

The entrustability scale on assessment forms is a criterion referenced scale. It incorporates the need for supervised practice to ensure safety, with CSs providing input to elevate the trainee's practice to an optimal level. As the trainee improves, with learning and experience, their performance will reflect the decreasing need for input from CSs to provide the same standard of optimal care.

Clinical Radiology Entrustability Scale

Entrustability Level	Description	
Level 1	Constant Direct Supervision	Study is reported in conjunction with consultant. Procedure or ultrasound is performed in conjunction with the consultant/sonographer.
Level 2	Direct Supervision	Consultant is on site. Study and report are reviewed within 4 hours. Consultant/sonographer observes trainee performing the procedure or ultrasound.
Level 3	Minimal Direct Supervision	Direct and timely access to a consultant or sonographer. Study and report are reviewed within 24 hours. Trainee performs procedure or ultrasound.
Level 4	Direct Supervision Not Required	Consultant or sonographer is available if needed. Study and report are reviewed within 24 hours. Trainee performs procedure or ultrasound.

Assessment for learning

The WBAs have been designed to support trainees' learning. Individual assessments are not intended to be a pass/fail assessment of trainees' knowledge and skills.

WBAs are completed multiple times. Based on feedback obtained, revised approaches should be practised, followed by re-assessment to refine the approach. As trainees continue through the training program they progress toward competence.

Each trainee's ePortfolio will include assessments with a range of ratings on the entrustability scale. Trainees who have recently commenced the training program are not expected to be rated as Level 4 on the entrustability scale as it is likely they require a higher level of guidance early on. As they progress through the training program, it is expected that they demonstrate improvement in their ratings on the entrustability scale, moving toward Level 4 and independent practice.

The number recommended for each WBA type is the minimum number required and more may need to be completed to reach the level of entrustability required. Directors of Training, Network Training Directors, Network Governance Committees, and Local Governance Committees may ask trainees to complete additional assessed WBAs to ensure that competencies have been met.

For WBAs where 1 in 5 must be assessed, it is expected that four cases will be logged and then every fifth will be assessed. It will not be acceptable for trainees to log the majority of their WBAs early in a phase and leave all the assessed WBAs to the end of a phase. This decision aligns with the principles of continual feedback and assessment for learning.

Assessment is not only about detecting deficiencies, it also recognises achievement

Typically, people think about assessment as a way to prevent trainees who are not at the expected standard, from continuing through the program or entering independent practice.

Work-Based Assessment is about identifying aspects of performance that require improvement and lead trainees toward a continual learning mindset.

This approach allows trainees to feel a sense of achievement when they reach a training milestone.

Even when a trainee has mastered a skill to a level of competence, there may still be ways in which they could expand their expertise. Selecting more challenging cases and taking the opportunity to be observed by senior colleagues (during the time trainees are in the training program), assists trainees to become proficient clinical radiologists.

Assessment encounters across the breadth of the curriculum

When reviewing trainees' ePortfolio, the Director of Training (during DoT Reviews) and the Local Governance Committee (LGC) (when making progression decisions), will take into account the variety of modalities and topic areas the trainee has been involved with. The DoT or LGC may request additional assessments to be conducted if those completed do not reflect the breadth of topic areas within the learning outcomes.

In the ePortfolio, trainees must indicate in the WBA forms if the assessment is to be logged or assessed. Assessments that are logged do not require sign off by a Clinical Supervisor, while assessed WBAs must be assigned to a Clinical Supervisor to be given an entrustability rating.

Reporting Assessment

Diagnostic radiology forms a key component of the Clinical Radiology Learning Outcomes. To ensure that trainees are provided with regular face to face sessions with a supervising radiologist, the Reporting Assessment WBA was developed. There are two broad objectives of this assessment:

1. Document a trainee's continual development throughout the training program in the development of competence to practise in various modalities of diagnostic radiology, including:
    - X-ray
    - CT
    - MRI
    - Ultrasound
    - Mammography
    - Nuclear Medicine
    - Interpretation of fluoroscopic and angiographic studies.
2. Provide regular feedback to trainees on their report writing, detection of findings, providing correct diagnosis and recommendation on management, as detailed below:
    - Report writing: what to include/exclude and the format length, terminology, clarity etc.
    - Ability to detect findings: relevant imaging findings and the description as well as noting of normal findings
    - Identifying diagnosis: addressing the clinical question/identifying correct differential diagnosis
    - Management: recommendation of appropriate management.

The Reporting Assessment is designed to allow flexibility with case load of each session and should include five cases. Each case will be allocated an entrustability rating which may be used when making decisions regarding borderline performance in formal examinations.

Process

The trainee approaches the CS and requests them to complete the Reporting Assessment after reviewing all the studies reported by the trainee during a session. The number of studies assessed in the session will be variable, depending on the seniority of the trainee, the modality and the complexity of studies. The assessment should include a representative selection of studies from that session.

Across the training program, the collated Reporting Assessments should include a wide variety of studies.

Reporting Assessment Completion in the ePortfolio

Via the ePortfolio, the trainee creates a 'CR Work-based Assessment – Reporting' for the session. The trainee inputs the individual cases, the modalities and the topic area/body system for each case assessed in the session.

When the trainee's section of the form is complete, the trainee will assign the 'CR Work-based Assessment – Reporting' the case details and complete the supervisor assessor session for each case including the entrustability level for the case and any feedback if applicable.

Reporting Assessments and Progression

Trainees must complete a minimum of 10 sessions every six months, regardless of the full-time equivalent (FTE) status of the trainee, across all phases of the training program.

DoTs will review collated data of all assessments during DoT Reviews.

Expected level of independence (based on the entrustability level)

	Phase 1	Phase 2	Phase 3
General X-Ray	*Progress toward required entrustability levels for the various modalities*		Level 4
Computed Tomography (CT)			Level 4 Level 2 for CTC and CTCA
Magnetic Resonance Imaging (MRI)			Level 4 Level 2 for fetal, cardiac and breast MRI
Ultrasound			Level 4
Mammography			Level 4
Nuclear Medicine			Level 2
Bone Mineral Density (BMD)			Level 2

Required sequence of completion for specific WBAs

For specific WBAs, trainees must follow a sequence of completion of 1 in 5 assessed. This means that trainees should log four WBAs and every fifth WBA should be assessed.

Assessments that are logged do not require sign off by a Clinical Supervisor, while assessed WBAs must be assigned to a Clinical Supervisor and given an entrustability rating.

The following WBAs should be completed with the sequence of 1 in 5 assessed:

- Performed Ultrasound Assessment
- Fluoroscopic Procedures Assessment
- Procedural Radiology Assessment

In the ePortfolio, trainees must indicate in the WBA form if the assessment is to be logged or assessed.

Performed Ultrasound Assessment

Trainees are required to perform and record:

- 50 general ultrasound scans by the end of Phase 1 of training, with 1 in 5 assessed and the remainder to be logged.
- 50 additional paediatric ultrasound scans, including 10 neonatal heads by the end of Phase 3 of training, with 1 in 5 assessed and the remainder to be logged.
- 50 additional gynaecological and obstetric ultrasound scans by the end of Phase 3 of training, with 1 in 5 assessed and the remainder to be logged.

Radiologists are imaging interpretation experts who take the ultrasound images captured by sonographers and interpret them in the context of a patient's clinical picture, prior history and correlate them with concurrent and prior *multimodality* imaging. It is important that clinical radiologists can critically appraise and interrogate the acquired ultrasound image taking into account technical factors and technological limitations of this modality. To do this appropriately trainees require understanding and exposure to real time scanning, taking on the role of ultrasound operator/sonographer.

The performed ultrasound logic and assessment aims to achieve this goal. For example, in real time clinical practice, if a sonographer has difficulty or questions around image acquisition, the clinical radiologist is able to assist (including performing parts of the study) in a meaningful way to problem solve.

Refer to the table below for further details.

Performed Ultrasound Assessment Completion

Via the ePortfolio, the trainee creates a 'CR Work-based Assessment – Performed Ultrasound'. The trainee enters the patient's initials, the type of scan, ultrasound findings and diagnosis for each ultrasound performed.

The trainee requests the supervising radiologist, sonographer or sonologist to consider their performance on each ultrasound. The assessing supervisor uses the entrustability scale to rate the trainee's performance according to how much supervision the trainee requires to perform the ultrasound. The scale is a spectrum from providing constant direct supervision (the ultrasound would need to be performed in conjunction with the sonographer or sonologist) to direct supervision not being required (the sonographer or sonologist is available, if needed). Comments and feedback may also be added.

In assigning a rating, the sonographer should consider both knowledge and skills-based competencies, as well as intrinsic roles, including:

- Appropriate communication with the patient
- Patient consent
- Identification of relevant anatomical structures

The assessing supervisor then enters their name and email and electronically signs the form.

Performed Ultrasound Assessments and Progression

DoTs will review collated data of ultrasound assessments during DoT Reviews.

<table>
<tr><th></th><th>Phase 1</th><th>Phase 2</th><th>Phase 3</th></tr>
<tr><td>General Ultrasound including:
Neck
Abdomen
Renal
Doppler
Venous
Musculoskeletal
Scrotal</td><td>Level 4</td><td></td><td></td></tr>
<tr><td>Paediatric Ultrasound, including cranial ultrasound</td><td colspan="2" rowspan="2">Progress toward required entrustability levels</td><td>Level 3</td></tr>
<tr><td>Obstetrics and Gynaecology Ultrasound including:
Pelvic scans (minimum 10)
First trimester scans (minimum 10)
Second and third trimester scans – fetal biometry (minimum 10)</td><td>Level 3</td></tr>
</table>

Fluoroscopic Procedures Assessment

Trainees are required to perform and record:

- 25 general fluoroscopic procedures by the end of Phase 3 of training, with 1 in 5 assessed and the remainder to be logged.
- 10 additional paediatric fluoroscopic procedures by the end of Phase 3 of training, with 1 in 5 assessed and the remainder to be logged.

The Fluoroscopic Procedures Logbook is designed to document a trainee's progress over time in the development of competence to practice in fluoroscopic procedures. These should include:

- Upper GI Contrast studies
- Contrast Enema
- Nasogastric tube (NGT) and Nasoenteric tube (NET) placement
- Transpyloric tube (TPT) placement
- Cystogram
- Micturating Cystourethrogram (MCU)
- Urethrogram
- Hysterosalpingogram
- T-tubogram

Fluoroscopic Procedures Assessment Completion

Via the ePortfolio the trainee creates a 'CR Work-based Assessment – Fluoroscopic Procedures'.

The trainee records the patient's initials, procedure, case details (general or paediatric) and diagnosis for each fluoroscopic procedure they perform. Then the trainee selects 'Yes' for the CS/DoT to fill in the assessment form within their profile or selects the CS/DoT and submits the form so the CS/DoT can then log in on their device to conduct the assessment.

The trainee requests the CS consider their performance on each procedure. The CS uses the entrustability scale to rate the trainee's performance according to how much supervision the trainee requires to perform and report on the case. The scale is a spectrum from providing constant direct supervision (the procedure would need to be performed in conjunction with a consultant) to direct supervision not being required (the consultant is available, and the study and report are reviewed within 24 hours). Comments and feedback may also be added.

In assigning a rating the CS should consider both knowledge and skills-based competencies, as well as intrinsic roles, including:

- Appropriate communication with other health professionals
- Appropriate case selection
- Informed consent
- Infection control
- Image guided intervention
- Safe sedation
- Identification of relevant anatomical structures
- Appropriate post-procedural care including provision of clear documentation and management of post-procedural complications

Fluoroscopic Procedures Assessments and Progression

DoTs will review collated data of fluoroscopic procedure assessments during DoT Reviews.

	Phase 1	Phase 2	Phase 3
General Fluoroscopy	*Progress toward required entrustability levels*		Level 4
Paediatric Fluoroscopy			Level 3

Procedural Radiology Assessment

Trainees are required to perform and record 100 interventional procedures under radiological guidance across the three phases of training, with 1 in 5 procedures assessed and the remainder to be logged. At least 15 of each of the following core skills is required:

- Injection
- Drainage
- Biopsy
- Vascular access

Examples of vascular access:

- Insertion of a PICC line
- Insertion of a tunnelled central line (e.g., dialysis or central line)
- Insertion of a non-tunnelled central line
- Arterial puncture and placement of a vascular sheath

Ideally, maintaining an even spread across the four core skills for the remaining procedures is desired.

Insertion of a peripheral IV cannula is not considered suitable. Procedures can only be recorded if the trainee has a primary role in the performance of the procedure. Observing procedures is not sufficient.

Procedural Radiology Assessment Completion

Via the ePortfolio the trainee creates a ‘CR Work-based Assessment – Procedural Radiology’.

The trainee records the patient’s initials, the case presentation/diagnosis that the procedure is to address, the procedure they performed and then selects the major procedure category. Then the trainee selects ‘Yes’ for the CS/DoT to fill in the assessment form within their profile or selects the CS/DoT and submits the form so the CS/DoT can then log in on their device to conduct the assessment.

The trainee requests the CS consider their performance on each procedure. The CS uses the entrustability scale to rate the trainee’s performance according to how much supervision the trainee requires to report on the case. The scale is a spectrum from providing constant direct supervision (the procedure would need to be performed in conjunction with a consultant) to direct supervision not being required (the consultant is available, and the study and report are reviewed within 24 hours).

In assigning a rating the CS should consider both knowledge and skills-based competencies, as well as intrinsic roles, including:

- Appropriate communication with other health professionals
- Appropriate case selection
- Informed consent
- Infection control
- Safe sedation

- Identification of relevant anatomical structures
- Image guided intervention
- Appropriate post-procedural care including provision of clear documentation and management of post-procedural complications

Comments and feedback may also be added.

Procedural Radiology Assessment and Progression

To meet progress requirements, the trainee needs to demonstrate satisfactory progress towards demonstrating Level 4 on interventional procedures, across the four core skills, by the end of Phase 3.

DoTs review collated interventional procedures assessment data during DoT Reviews. Trainees should ensure the procedures they choose to perform are spread across the four main categories.

	Phase 1	Phase 2	Phase 3
Injection	*Progress toward required entrustability levels*		Level 4
Drainage			Level 4
Biopsy			Level 4
Vascular access			Level 4

Clinical Radiology/Multi-Disciplinary Meeting (MDM) Assessment

Clinical Radiologists have a critical role in both clinical radiology meetings and multidisciplinary meetings (MDMs). Clinical radiology trainees are expected to develop skills required to become valuable members of such meetings.

In clinical radiology meetings and MDMs, trainees are expected to present radiological findings and work collaboratively with other team members correlating clinical, radiological and pathological findings to optimise patient care.

An assessment can only be recorded if the trainee assists in the preparation or presents at meetings. Attendance alone is not sufficient.

Assessment Completion

The trainee approaches a CS and requests they attend the meeting. Via the ePortfolio the trainee creates a 'CR Work-based Assessment – Clinical Radiology/Multidisciplinary Meeting'.

The trainee records the meeting name, type of the meeting (Clinical or MDM) and whether a pathologist is present and selects 'Yes' for the CS/DoT to fill in the assessment form within their profile or selects the CS/DoT and submits the form so the CS/DoT can then log in on their device to conduct the assessment.

The trainee requests the CS consider their performance at the meeting. The CS uses the entrustability scale to rate the trainee's performance according to how much supervision the trainee requires to prepare for and present at a meeting. The scale is a spectrum from providing constant direct supervision (assists the consultant prepare) to direct supervision not being required (the trainee prepares and presents to the meeting independently).

In assigning a rating, the CS should consider knowledge and skills-based competencies, as well as intrinsic roles, including:

- Meeting preparation
- Clear and concise communication
- Recommendations for appropriate management/follow-up/further investigation
- Constructive contribution to MDM discussion including answering questions appropriately.

Comments and feedback may also be added to guide future performance.

Clinical Radiology/MDM Assessment and Progression

Phase 1	Trainees are required to attend and log 10 meetings. Attendance is sufficient in Phase 1.
Phase 2	Trainees are required to attend and participate in 30 meetings, 15 of which must be MDMs with a pathologist present. All meetings in Phase 2 must be assessed*. Attendance alone is not sufficient.
Phase 3	Trainees are required to attend and participate in 10 meetings. All meetings in Phase 3 must be assessed*. Attendance alone is not sufficient. By the end of Phase 3, trainees must demonstrate Level 4 on the entrustability scale on these assessments.

*An assessment can only be recorded if the trainee assists in the preparation or presents at meetings. Attendance alone is not sufficient.

DoTs will review the collated clinical radiology/MDM meeting assessments during DoT Reviews.

Section Seven
MONITORING AND REVIEW

OVERVIEW

The Clinical Radiology Training Program has been designed to provide the trainee with both breadth and depth of radiological knowledge. During their training, trainees are required to fulfil learning activities and Work-Based Assessments which will drive learning across all areas of the training program.

To guide and support trainees as they work towards competence across all areas of radiology, trainees are required to participate in regular review meetings with Directors of Training (DoTs). These meetings provide a valuable opportunity for the trainee to reflect on both their learning and progression within the training program.

Outside of these formal meetings, it is the responsibility of the trainee to initiate discussions with their DoT in relation to clinical training experience and expectations of performance. Clinical Supervisors (CSs) and DoTs may assist trainees by guiding them to relevant resources either at local sites or within the wider training network.

Multi-Source Feedback (MSF)

The Multi-Source Feedback tool (MSF) utilises feedback from both the trainee and a range of co-workers on intrinsic roles and other competencies. It provides a learning opportunity to guide behavioural change and improve the performance of a trainee.

Clinical Supervisor Feedback Form (CSF)

The Clinical Supervisor Feedback Form utilises information from the trainee's Clinical Supervisor to provide an important part of trainee feedback guiding trainee performance and progression, particularly with regard to trainee medical skills and knowledge, as well as non-medical competencies.

Director of Training Review

DoT Reviews consider trainee performance and progression over the last six months, utilising a wide range of resources including Experiential Training Requirements (ETRs), MSF and Clinical Supervisor Feedback forms. They provide an important opportunity for trainee feedback.

These meetings are in person and occur every six months in Phase 1 and 2, and at the end of every sub-specialty rotation in Phase 3, for every trainee regardless of the trainee's full-time equivalent (FTE) status.

MULTI-SOURCE FEEDBACK

The Multi-Source Feedback (MSF) is a method of assessing the professional competence of a trainee within the scope of their daily practice. It is a valuable tool for assessing trainee performance. Clinical radiologists work as part of a multidisciplinary team. How other team members perceive their skills in delivering patient care can provide valuable input on all intrinsic roles.

Feedback is provided from a range of co-workers who have direct experience with the trainee and can be used to both aid trainee learning and guide the DoT to better support and remediate trainees experiencing difficulties.

In addition, as part of the MSF, the trainee completes a self-assessment, the ratings of which can be compared to ratings of co-workers.

During the training program, the trainee must complete a MSF for every phase of their training. It is recommended to complete the MSF towards the end of the training phase period, prior to the final DoT Review, as it will provide feedback on how the trainee performed within the current phase of training.

Process

Approximately six weeks prior to the DoT Review, the trainee identifies assessors with whom they have worked reasonably regularly over the past 3-6 months. It is suggested that assessors from a variety of medical and non-medical roles are identified to respond. This should include:

- Radiology Registrars (a maximum of two registrars can be included in each MSF)
- Radiographers
- Sonographers or Sonologist
- Other medical specialists
- Nurses
- Administrative staff

The trainee initiates the process by creating a new CR Multi-Sources Feedback form. The trainee rates themselves on all the items of the Self-Assessment, selects the DoT and submits the form.

A minimum of six responses is required for a valid assessment. Once six responses are received, the MSF will then be complete.

MSF Feedback During DoT Review

Once completed, a meeting should be organised between the DoT and trainee to discuss the collated feedback. The recommended time for this is as part of the trainee's regular DoT review.

Trainees will be able to see the completed MSF on their timeline, however, they will not be able to see the responses provided by individual assessors.

Prior to the MSF meeting, the DoT should review the trainee's self-assessment together with the summary feedback and identify the main areas to be discussed. Resources or actions the trainee could take to address any deficiencies could also be considered in advance of the meeting with the trainee.

The trainee should be encouraged to reflect on their own performance on each of the roles. If there is significant discrepancy between the trainee's self-assessment and the summary feedback, this should be explored further. The trainee should also be asked to consider why they may have received particularly low ratings (if any) and how they may change their behaviour in the future.

CLINICAL SUPERVISOR FEEDBACK FORMS

Feedback from Clinical Supervisors is a mandatory and very valuable component of the Training Program. Such feedback should encompass medical skills and knowledge, as well as non-medical competencies.

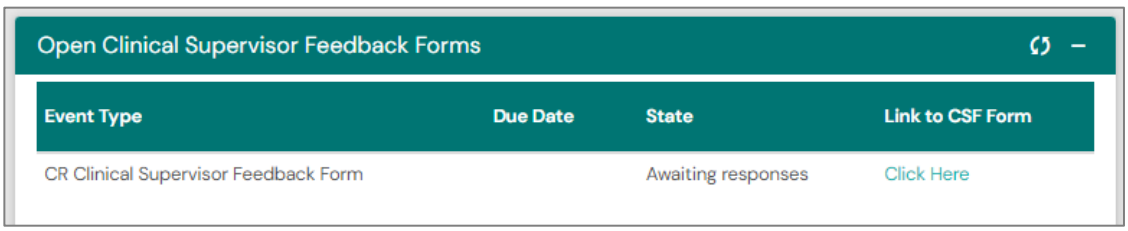
During the training program, Clinical Supervisor Feedback Forms (CSF) must be completed every six months and recommended to be completed prior to the DoT Review.

ePortfolio Process

To provide timely feedback, approximately six weeks prior to the DoT Review, the trainee distributes the Clinical Supervisor Feedback Forms to all CSs at the site/s who have worked with the trainee in the preceding six months.

In the ePortfolio, the trainee creates a new activity by selecting a 'CR Clinical Supervisor Feedback Form'. The trainee should include the six-month date range in the 'Date Occurred' and 'End Date' sections of the form. The trainee should also include a due date before the DoT Review for the Clinical Supervisor to submit their feedback. The Trainee should enter in the Clinical Supervisors' names or email addresses under "Who would you like to fill in the next section of the form?". Multiple names or email address may be included. The Trainee sends the invitations by clicking submit.

While the CSF is awaiting all responses, it will appear in the Open Clinical Supervisor Feedback forms widget on the trainee dashboard.



Once six responses have been received, the CSF form will automatically close and further responses will not be accepted.

If trainees find it difficult to meet the minimum of six responses, they should invite new Clinical Supervisors to the existing CSF rather than create a new CSF.

Trainees will be able to see the completed feedback on their timeline, however they will not be able to see the individual responses provided by their Clinical Supervisors.

When conducting the DoT Review, the Clinical Supervisor Feedback section will show the de-identified comments and average scores for each question. The DoT should review the completed assessments and identify the main areas to be discussed with the trainee. Resources or actions the trainee could take to address any deficiencies could also be considered in advance of meeting with the trainee.

For more information refer to the Clinical Supervisor Feedback Form (CSF) Process.

DIRECTOR OF TRAINING REVIEW

The purpose of this review is for the DoT and the trainee to jointly evaluate the trainee's progress with regards to both learning and assessment requirements for each phase of the training program. For trainees who are meeting or exceeding expectations, this assessment provides an opportunity to identify new areas for achievement and for further development. For trainees who are yet to achieve requirements as expected, this provides an opportunity to organise additional support and/or resources as required.

DoT Reviews are in person and occur every six months in Phase 1 and 2, and at the end of every sub-specialty rotation in Phase 3, regardless of the trainee's FTE status.

In preparation for the meeting, the trainee should ensure their trainee portfolio is up to date and all completed requirements have been uploaded and/or finalised.

As the requirements for training differ with the Phase of Training, DoT Review requirements should include:

Phase 1

All Phase 1 DoT Reviews

Review each trainee's portfolio and achievements in the past six months.

The review should include:

- Key conditions assessment
- Attachments
- Experiential Training Requirements (ETRs)
- 10 reporting sessions per 6 months and assessment of entrustment levels
- Performed Ultrasound Assessments
- Progress with other Work-Based Assessments (WBAs)
- Critically Appraised Topics (CATs)
- Research project proposal
- Part 1 Examinations
- Clinical Supervisor Feedback
- Multi-Source Feedback (MSF)
- Trainee Assessment of Training Sites (TATS)

The first DoT Review is unique as it also includes the following competencies of early training:

- Radiography attachment
- Report Writing Module
- MRI safety
- Incident reporting

Phase 2

Review each trainee's portfolio and achievements in the past six months.

During Phase 2, reviews should include:

- ETRs
- 10 reporting sessions per 6 months with both assessment of entrustment levels and progress of entrustability levels

- WBAs
- CATs
- Progress with research project
- Oral presentation of research
- Phase 2 Examinations
- Clinical Supervisor Feedback
- MSF
- Research Methodology Course
- Cultural Competence and Cultural Safety Course
- TATS

Phase 3

During Phase 3, trainees are required to spend at least 50% of their training time in sub-specialty rotations within their training network in areas of interest, such as neuroradiology, abdominal, breast imaging etc.

Trainees can spend no more than six months in a broad sub-specialty topic area.

Trainees interested in sub-specialty rotations in supervised research or artificial intelligence can submit a request to the Clinical Radiology Curriculum and Assessment Committee for approval.

Training networks will be progressively establishing sub-specialty rotations to ensure trainees that Commenced Clinical Radiology Training from February 2022 will enter Phase 3 with the sub-specialty rotation requirements.

During these rotations, trainees will:

- Undertake reporting and procedural activities in a sub-specialty area
- Participate in relevant administrative duties, clinical and multi-disciplinary meetings and/or other training activities
- Maintain general skills and knowledge by participating in after hours and on call activities on an equitable basis.

Phase 3 DoT Reviews should occur upon completion of every sub-specialty rotation. These DoT Reviews should include the following training requirements:

- ETRs
- 10 reporting sessions per 6 months with both assessment of entrustment levels and progress of entrustability levels
- Progression to final entrustment levels on WBAs
- Research project completion
- Clinical Supervisor Feedback
- MSF
- TATS

Director of Training Preparation

The DoT creates a new DoT Review for the trainee in the ePortfolio. Under ‘Trainee Details’, the DoT notes the trainee’s start date in the relevant phase and uses this date to generate reports for each of the items on the form.

ETRs and WBAs

Consider the ETRs and Work-Based Assessments completed during this Phase. Items that should be considered include:

- Has the trainee been completing sessions toward the required attachments?
- Is the trainee on track to complete the minimum number of ETRs for this phase?
- Do the entrustment ratings signal progress?
- What feedback has the trainee received from the CSs? Has it been actioned by the trainee?
- Of the assessments completed, have they reached or are they progressing consistently toward the required level for Phase? Trainees should be encouraged to complete Work-Based Assessments regularly and implement feedback to demonstrate improvement on subsequent similar assessments.

As part of the review the DoT checks the CS Feedback received. Items that should be considered include:

- Is there a particular competency that multiple CSs have commented on, which needs to be addressed by the trainee?
- Do the CSs need to be contacted to clarify comments?

Review Meeting

The review meeting between the DoT and the trainee must occur face to face (or by video conference). It is often helpful to open feedback conversations by asking the trainee how they feel they have been performing across the time and if the assessments have raised any important learning points for them.

The DoT and trainee discuss the trainee's experience and assessments across the previous six months, including the feedback received and how they have improved their clinical practice.

All comments should only be documented on the form after they have been discussed with the trainee.

The DoT confirms completed requirements for the Phase and prompts discussion on any outstanding requirements and how the trainee intends to achieve them. The focus of the review meeting is on the trainee's progress in completing requirements of the current phase and ensuring assistance and resources are made available.

The review meeting is also a good opportunity to discuss any concerns the trainee may be having in relation to progress through the training program and any barriers that may be preventing them from achieving requirements. Issues raised could be related to:

- Expectations of the training program and timing of requirements
- Difficulties in completing specific training requirements at the training site
- Availability of Clinical Supervisors to engage in Work-Based Assessments
- The variety of cases, level of supervision etc.
- Other opportunities which may help to accelerate learning
- Trainee wellbeing, including workload or family commitments and personal issues putting temporary undue pressure on the trainee.

The DoT may also offer suggestions on areas the trainee should prioritise.

Performance and Progression

If the DoT determines that:

- The trainee's performance does not meet the expectations of the College; and/or
- Progress has been reviewed and found to be at a level less than that expected by the College; and/or

- Behaviour is not reflective of the competencies (including 'intrinsic roles') outlined within the Clinical Radiology Learning Outcomes; and/or
- Circumstances are such that they may need additional support to assist in their performance and/or progress with training.

There should be a discussion about whether the trainee needs to be supported under the Performance and Progression Policy with the creation of an action plan.

If necessary, a separate meeting with the trainee should be scheduled dedicated to developing an action plan.

The DoT indicates this using the checkbox on the review form.

For more detail regarding trainee management under the Performance and Progression Policy, refer to **Section 12 – Additional Trainee Support.**

Review Form Submission

The DoT then submits the form.

To finalise, the trainee adds any comments regarding the review and activities they intend to complete prior to finalising.

The finalised appraisal will appear of the trainee's timeline and included as a completed training requirement within 'Monitoring and Review'.

Director of Training Phase Checklists

Checklists for Phases 1-3 of the Training Program have been developed as a resource for DoTs. These checklists aim to support DoTs by condensing the core components of the DoT review and other aspects of training in a visually engaging way so that DoTs can support and facilitate trainees through the Training Program.

Refer to the Phase 1 Director of Training Checklist.

Refer to the Phase 2 Director of Training Checklist.

Refer to the Phase 3 Director of Training Checklist.

TRAINEE ASSESSMENT OF TRAINING SITE

The College is also committed to improving the program and addressing issues at a systemic level to support trainees through their training. Reports are conducted regularly to identify issues that need to be addressed and challenges that may require a pathway or process to be streamlined.

The Trainee Assessment of Training Site (TATS) assessment is a confidential assessment where a trainee rates their training site based on their training experience across a range of areas. Trainees are also invited to comment on their training site's strengths and/or weaknesses.

The TATS assessment provides valuable information about a training site which may be taken into account when accrediting a training site and training network. This methodology has been found to be a predictor of subsequent difficulties in training and is used by the College to improve and guide future training and accreditation requirements.

Trainees are asked to rate the categories below:

- Clinical Supervision
- Directors of Training
- Teaching and Learning
- Trainee Wellbeing
- Protected Time
- Clinical Work
- Learning Opportunities
- Facilities and Equipment
- Resources
- Administrative Workload
- Network

Trainees are required to complete one TATS every six months, regardless of full-time equivalent (FTE) status.

Completion of TATS

The trainee initiates the process by creating a 'CR Trainee Assessment of Training Site (TATS)' in the ePortfolio and provides a rating and comments on the various elements.

All TATS remains confidential in the trainee's ePortfolio.

Please note if trainees have specific concerns about their site, they should tick the low rating (e.g. *1. Poor* or *2. Less than adequate*) in their TATS form and include a comment. Alternatively, the trainee should contact the Trainee Liaison Officer (TLO) directly to discuss the matter via email tlo@ranzcr.edu.au.

Section Eight
EXAMINATIONS

PHASE 1 EXAMINATION

The objective of the Phase 1 Examinations is to assess a trainee's competency and required level of knowledge and understanding of Anatomy and Applied Imaging Technology (AIT) as they relate to clinical radiology. Each examination has a unique and targeted approach to assessing a candidate's knowledge and ability.

Trainees may apply to sit the Anatomy and AIT examinations together, or independent of each other. Irrespective of whether they sit the examinations together or separately, trainees have a maximum of four attempts to successfully complete both of the Phase 1 Examinations from the date of commencement of training and within the 24-month timeframe.

This rule applies regardless of the trainee's full-time equivalent (FTE) status, or the number of examinations sat at an attempt. Once an examination has been successfully passed, only the remaining examination needs to be completed.

Trainees who are unable to successfully pass the 'Phase 1 Examinations' within the stipulated maximum number of attempts will be withdrawn from the training program.

Eligibility

To be eligible for the Phase 1 Examinations, the candidate must be:

- within Phase 1 of training (at time of sitting the examination),
- a trainee in a RANZCR accredited training position,
- a financial member of the College,

For more information on Phase 1 Examinations, refer to the Phase 1 Examinations (Clinical Radiology) Policy.

Examination Format and Structure

The Phase 1 Examination consists of two separate written examinations that are delivered in an electronic format.

The Phase 1 Examinations include:

1. Anatomy
2. Applied Imaging Technology

Both must be successfully completed to progress to Phase 2 of the training program.

Anatomy

One three-hour paper to assess trainee knowledge of radiologic anatomy:

- Labelling, 120 Labels worth .25 marks each, across six body regions.
- Multiple Choice Questions (MCQs),
- 60 MCQs worth one mark per question
- Very Short Answer Questions (VSAs), 30 VSAs worth one mark per question
- Short Answer Questions (SAQ), 20 SAQs worth three marks per question

There are six topic areas covered in the examination:

1. Brain
2. Head and Neck
3. Spine
4. Thorax

5. Abdomen and Pelvis
6. Limbs

Applied Imaging Technology

One three-hour paper to assess trainee knowledge on imaging technology, quality and safety:

- Constructed Response Questions (CRQ), nine CRQs worth 10 marks per question
- Multiple Choice Questions (MCQs). 60 MCQs worth one mark per question

There are three topic areas covered in the examination:

1. Theoretical principles
2. Imaging technology
3. Radiation protection and patient safety

Examination Schedule

Summary of Examination Timetable (commencing in 2024)

Anatomy and Applied Imaging Technology Examinations		
	Sitting 1	**Sitting 2**
Applications Open / Close	January/February	July
Examinations Held	April	October
Release of Results	End May	End November

For detailed information on upcoming Phase 1 Examinations, refer to Clinical Radiology Examinations on the College website.

Resources to support trainees' preparation for examinations are also available on the website.

Application

Trainees must complete the online Phase 1 Application Form or download the PDF version of the application form. Trainees are required to select the examinations they intend to sit and sign the declaration.

When completing the form, it is important that trainees have a conversation with their Director of Training about whether they are ready to present for the Phase 1 Examinations. Confirmation that this conversation has taken place is to be confirmed on the form.

Trainees must submit the following documentation by email to CRtraining@ranzcr.edu.au:

- The completed PDF application form signed by the Director of Training (DoT), Head of Department (HoD), or Network Training Director (NTD)
- Required documentation including a passport photo
- Payment of Examination fees.

The application must be received by the College no later than 4.00pm (AEST/AEDT) on the relevant closing date. Late applications will not be accepted.

An acknowledgement of receipt of applications will be emailed within 10 business days of the application being received by the College (where reasonably practical). Confirmation of receipt of application will not be provided via phone.

Contact the College immediately if you have not received an acknowledgement within 10 business days.

During the application period, the Phase 1 Examination application form is available to download from the College website.

For information on examination fees, refer to the Fees section on the College website.

Notification of Phase 1 Examination Results

Results of written examinations will be uploaded to the ePortfolio for viewing. Email notification will be sent to trainees when results are uploaded.

General feedback on the examinations will be provided in the Clinical Radiology Examination Reports which are available on the College website.

The College does not provide personal examination material (which includes any breakdown of marks or feedback on a trainee's response to specific questions/cases) or a copy of the marking criteria.

PHASE 2 EXAMINATIONS

The information on the Phase 2 Examinations in this section refers to the Phase 2 Examinations as applicable to trainees who commenced in the training program from February 2022.

Information for trainees that transitioned to the Training Program refer to transition arrangements information provided to them and also available within **Appendix 2.**

For information on examination changes for International Medical Graduates refer to **Appendix 3**.

For clarity on terms used in this section:

- The College facilitates two examination sittings per year.
- Trainees may have up to a maximum of three attempts for each examination from the commencement of their first sitting.

The Phase 2 Examinations include:

- Pathology Examination
- Clinical Radiology Examinations, made up of the following:
  - Radiology MCQ Examination
  - Case Reporting Examination
- Objective Structured Clinical Examination in Radiology (OSCER).

Trainees must successfully pass the Pathology Examination and the Clinical Radiology Examinations (collectively, 'the Phase 2 Clinical Radiology Written Examinations') before they can present to sit the OSCER examination.

Trainees may apply to sit both the Pathology Examination and Clinical Radiology Examinations together or independent of each other. The Radiology MCQ Examination and the Case Reporting Examination (which together form the Clinical Radiology Examinations), must be sat together.

Trainees must have completed a minimum of 24 months FTE accredited training time to be eligible to sit the Phase 2 Clinical Radiology Written Examinations (Case Reporting and Radiology MCQ Examinations).

Trainees have a maximum of three attempts to complete each of the Phase 2 Examinations (Pathology, Clinical Radiology and OSCER).

- Pathology Written Examinations – maximum three attempts
- Clinical Radiology Written Examinations – maximum three attempts
- OSCER – maximum three attempts

This rule will start from a trainee's first sitting in Phase 2 of training and applies regardless of the trainee's FTE status. Candidates have a maximum of 48 months FTE in Phase 2 to complete all examination requirements regardless of time spent in Phase 1.

Trainees who are unable to successfully pass the 'Phase 2 Clinical Radiology Written Examinations' within the stipulated maximum number of attempts will not be able to present for the OSCER Examination component of the Phase 2 Examinations and will be withdrawn from the training program.

Trainees who have been unable to successfully pass the OSCER Examination component of the Phase 2 Examinations, within the maximum number of opportunities, will be withdrawn from the training program.

For more information on Phase 2 Examinations, refer to the Phase 2 Examination (Clinical Radiology) Policy.

Eligibility

To be eligible to apply for the Phase 2 Examinations candidates must:

- Have submitted an eligible Phase 2 progression application and received an 'Approved to Progress'
- Be within Phase 2 of training (at time of sitting the examination),
- Be a trainee in a RANZCR accredited training position,
- 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).

All Phase 2 Written Examinations (Pathology and Clinical Radiology Written Examinations) must be successfully completed before a trainee is eligible to present for the OSCER Examination.

Trainees must complete 24 months FTE accredited training time before sitting the Clinical Radiology Written Examinations and 12 months FTE to sit the Pathology Examination.

Refer to **Appendix 2** for eligibility requirements for transitioning trainees.

Phase 2 Written Examinations

Examination Format and Structure

The Phase 2 Written Examinations are held at examinations centres across Australia and New Zealand.

The Phase 2 Written Examinations include:

- Pathology Examination
- Clinical Radiology Examinations
    - Radiology MCQ Examination
    - Case Reporting Examination

Pathology Examination

One three-hour examination to assess trainee's core and advanced knowledge of pathology as applied to current radiological practise.

There are two item formats (styles of question):

- Multiple Choice Questions (MCQs) (100 MCQs, 1 mark per question, total 100 marks
- Short Answer Questions (SAQs) (10 SAQs, 6 marks per question, total 60 marks)

Clinical Radiology Examination

Radiology MCQ Examination

One two-hour examination to assess trainee's core and advanced knowledge of diagnostic and interventional radiology as applied to current radiological practise.

- Multiple Choice Questions (MCQs) (100 MCQs, 1 mark per question, total 100 marks).

There are 9 topic areas covered in the examination aligned to the Learning Outcomes:

- General Radiology (inc. Safety)
- Brain/Head and Neck/Spine
- Cardiothoracic
- Abdominal (Gastrointestinal, Genitourinary, Hepato-Pancreato-Biliary)
- Musculoskeletal System

- Breast
- Obstetrics and Gynaecology
- Paediatric
- Interventional Radiology

Case Reporting Examination

One three-hour examination to assess trainee's competencies in perception, interpretation, diagnosis and communication via the written report.

- Short Cases (20 questions, 3 marks per question, total 60 marks)
- Medium Cases (10 questions, 6 marks per question, total 60 marks)
- Long Cases (5 questions, 12 marks per question, total 60 marks)

The cases cover content across seven topic areas, aligned to the Learning Outcomes:

- Abdominal
- Breast
- Musculoskeletal System
- Neuroradiology / Head and Neck
- Obstetrics and Gynaecology
- Paediatrics
- Thoracic and Cardiovascular

For each case, candidates are provided with a clinical history and relevant plain films, MRI, CT, US, mammography, nuclear medicine, fluoroscopic or DSA images.

Objective Structured Clinical Examination in Radiology

Examination Format and Structure

The Objective Structured Clinical Examination in Radiology (OSCER) is a capstone assessment to assess a candidate's competence to practice autonomously as a clinical radiologist, incorporating clinical reasoning, clinical judgement, medical skills and knowledge as well as broader intrinsic roles including communication and professionalism.

It's important to think of the OSCER as a brand new singular exam, rather than as a new incarnation of the former seven Vivas.

There will be seven OSCER stations across seven topic areas. The stations are:

- Abdominal
- Breast
- Musculoskeletal
- Neuroradiology/Head and Neck
- Obstetrics and Gynaecology
- Paediatrics
- Thoracic and Cardiovascular

Standardised digital cases will be used to align with the contemporary practice. Structured and standardised questions will be presented to ensure candidates have the same opportunity to display proficiency.

The format:

- Each station will be 25 minutes long
- Each station will have 8 cases
- Each case will have a maximum of 10 marks
- Each station will have a maximum of 80 marks
- The whole exam will have a maximum of 560 marks (seven stations x 80 marks)
- Candidates will receive percentage scores
- Candidates will be assessed by two examiners at each station

Trainees have three attempts at the OSCER.

Candidates who pass fewer than five of the seven OSCER topic areas will be required to undertake a further full OSCER across all topic areas at a subsequent sitting. Any passed stations will not be carried forward.

Candidates who fail one or two stations will be required to repeat those failed at a subsequent sitting.

For more information, refer to the Phase 2 Examination (Clinical Radiology) Policy.

Examination Schedule

Summary of Examination Timetable (commencing from 2024)

Phase 2 Written Examinations		
	Sitting 1	**Sitting 2**
Applications Open / Close	December (the year prior)/ January	April/May
Examinations Held	March	July
Release of Results	April	September

Phase 2 OSCER Examinations		
	Sitting 1	**Sitting 2**
Applications Open / Close (Intention to sit)	February/March	July/August
Examinations Held	June	November
Release of Results	July	December

For detailed information on upcoming Phase 2 Examinations, refer to Clinical Radiology Examinations on the College website.

Application

Trainees must complete the online Phase 2 application form. Trainees are required to select the examinations they intend to sit and sign the declaration.

When completing the form, it is important that trainees have a conversation with their DoT about whether they are ready to present for the Phase 2 Examinations. Confirmation that this conversation has taken place is to

be confirmed on the form.

Trainees must submit the following documentation by email to crtraining@ranzcr.edu.au:

- The completed PDF application form, signed by the DoT, HoD or NTD
- Required documentation including a passport photo
- Payment of examination fees.

The application must be received by the College no later than 4.00pm (AEST/AEDT) on the relevant closing date. Late applications will not be accepted.

An acknowledgement of receipt of application will be emailed within 10 business days of the application being received by the College (where reasonably practical). Confirmation of receipt of application will NOT be provided via phone. Contact the College immediately if you have not received an acknowledgement within 10 business days.

During the application period, the application is available on the Clinical Radiology Examinations webpage.

For more information on examination fees, refer to Fees.

There will be a separate application form for Phase 2 written examinations and Phase 2 OSCER. Candidates planning to sit the Written examinations and OSCER at one sitting will be required to complete two application forms

Trainees transitioning from Phase 1 to Phase 2 will be permitted to submit Phase 2 Examination applications, but trainees must be within Phase 2 of Training to be eligible to sit.

Notification of Phase 2 Examination Results

Results of examinations will be uploaded to the ePortfolio for viewing. An email will be sent to trainees when results are uploaded.

General feedback on the examinations will be provided in the Clinical Radiology Examination Report.

The College does not provide personal examination material (which includes any breakdown of marks or feedback on a trainee's response to specific questions/cases), a copy of the marking criteria, scoresheets or any information on the cases the trainee was unsuccessful within the OSCER.

GENERAL INFORMATION

Special Circumstances

Trainees who believe that their circumstances have the potential to impact on their performance, should consider 'deferment' or 'withdrawal' of the examination.

Trainees who have applied for an examination have the option of withdrawing from the examination (within the current timelines stipulated in the Consideration of Special Circumstances Policy).

For more information, refer to **Section 13 – Training Policies.**

Withdrawal from Examinations

Trainees who need to withdraw from the Phase 1 or 2 Examinations and have already submitted payment for the examination must complete and have approved the required application form, as per the Consideration of Special Circumstances Policy, and submit to the College via email.

Candidates may withdraw from the Phase 1 or Phase 2 Examinations without financial penalty if they do so not less than 4 weeks in advance of the examination date. Candidates who withdraw within four weeks of the exam will receive a 50% refund of the fees paid.

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

Fulfillment of Examination Requirements

Trainees are required to complete Phases 1 and 2 of training within 72 months of accredited training time. Trainees who are not able to fulfil the examination requirements within the 72 months of accredited training time (FTE) will be withdrawn from the training program.

For more information, refer to Phase 2 Examination (Clinical Radiology) Policy.

Online Resources and Sample Examination Papers

The Clinical Radiology Phase 1 and Clinical Radiology Phase 2 Examination webpages on the College website have several examination resources for trainees to access, including:

- Reading lists
- Sample questions
- Frequently Asked Questions (FAQs)

Digital Examination Demonstration Site

The Clinical Radiology examinations are delivered on a digital examination platform. Instructional videos are provided so that candidates can familiarise themselves with the examination platform before sitting the examinations.

For more information, refer to the Demonstration Site and Online Practice Exam Instructional Videos on the College Website (accessed through the preparing for examinations dropdown menu)

Online Practice Exam (OPE)

Practice examinations are also provided to demonstrate the types of questions candidates can expect during the examination. The examination will include a countdown timer, which for the purposes of demonstration has been disabled for the demonstration so that candidates can spend as much time as needed in the demonstration examination. The online practice examination replicates the real examination with use of tools and question navigation.

For more information, refer to the Clinical Radiology Phase 1 and Clinical Radiology Phase 2 Examination webpages on the College website.

Examination Prizes

Prizes are awarded for performance in both Phase 1 and Phase 2 Examinations.

For more information, refer to the Examination Prizes section within the Clinical Radiology Phase 1 and Clinical Radiology Phase 2 Examination webpages on the College website.

Section Nine
RESEARCH

OVERVIEW

Clinical Radiologists must be able to critically appraise scientific literature and adapt their clinical practice according to best available evidence. They also need the skills to understand and participate in clinical radiology related research and therefore, as part of the training program, trainees are required to design and engage in research to address a clinical question and then disseminate their findings.

Section 1 of the Clinical Radiology Learning Outcomes document, specifically the Scholar role, articulates the expected competencies in relation to research concepts, evidence appraisal and application to practice. For more information on the learning outcomes, refer to **Section 3 – Learning Outcomes** within this handbook.

Research Requirements

There are three main components to the Clinical Radiology research requirements:

- Critically Appraised Topics (CATs) – six in total, two in each phase of training. For each CAT, trainees must:
    - Complete the relevant CAT form
    - Present the CAT to a group of colleagues, including two Clinical Supervisors
- Research Project in Clinical Radiology
    - A proposal/plan submitted to the College for approval by the end of Phase 1
    - The research project to be completed by the end of Phase 3. Trainees should aim to have it completed halfway through Phase 3 (six months prior to the end of training)
    - Oral presentation of the research project
- Research Methods for Medical Imaging Professionals Course
    - Complete the online course and upload course completion certificate.

Research is a vital component of all medical professions. The pace of change in medical knowledge is progressing rapidly. Every year thousands of journal articles relevant to radiology are published. It is an important skill to be able to critically appraise new research and determine if the results are valid and appropriate to apply to clinical practice. Over the professional lifetime of a radiologist, skills in evidence-based medicine and critical appraisal of literature are essential to refresh and update knowledge and ensure continuing safe practice.

Engaging in a research project during training enables trainees to gain experience in interpretation of research literature in a specific area, research methods, and the application of investigative and ethical principles.

Transitioning trainees must complete the research requirements of the old training program.

For instructions on the completion of Research Project 1 and Research Project 2, refer to the Transitioning Trainees page on the College website.

Recognition of Prior Research

Trainees may apply for recognition of research completed prior to entry into the Clinical Radiology Training Program. Such applications must be submitted **within the first six months** of the trainee commencing in an accredited training position.

For more information on eligibility and application, please refer to **Section 2 – Overview of the Training Program,** *Recognition of Prior Learning.*

For more information refer to the Recognition of Prior Learning Policy.

Resources

There are a number of resources available to trainees to assist with the development of research related competencies.

The Centre for Evidence-Based Medicine website includes a range of research topic areas such as study designs, critical appraisal tools etc.

Research Grants and Prizes

There are several research awards and grants available to support research projects and to promote a culture of research at the College.

RANZCR Research Grant – Clinical Radiology

Research grants for sums between $5,000 and $30,000 provide financial support for trainees to complete research if they are supervised by a Fellow.

Early Career Researchers Prize

This prize recognises a clinical radiology trainee or junior Fellow (up to two years post-Fellowship) who is the first author of a paper accepted for publication by the Journal of Medical Imaging and Radiation Oncology (JMIRO) or another Medline Indexed peer-reviewed journal. The value of the prize is AU$1,500.

Indigenous Health Research Prize

The purpose of the Indigenous Health Research Prize is to promote research and publication to increase awareness and understanding of Indigenous Health being published in a peer- reviewed journal. The prize is AU $2,000 and the recipient will be recognised at the RANZCR ASM.

For more information on applying for grants and prizes, including guidelines and terms and conditions, refer to the Research Awards and Grants page on the College website.

CRITICALLY APPRAISED TOPICS (CATS)

What is a Critically Appraised Topic?

There are different ways to interpret the term *Critically Appraised Topic* (CAT). Within the Clinical Radiology Training Program, the term CAT applies to critical analysis of one research article based on a specific clinical question, with the express aims of:

- Deciding if the appraised article has been well-performed
- Analysing the results presented in the article using a structured methodology
- Concluding if the article provides believable results
- Determining whether such results can and should be translated into clinical practice.

This makes a CAT very different to a Review, Systematic Review or Meta-analysis, all of which require considerably more work, expertise and judgement to perform and analyse. Such detailed analysis of a theme or full topic is usually the subject of months or years of work, requires the support of a clinical epidemiologist, and would be appropriate for an advanced project.

Why are CATs important?

The pace of change in medical knowledge is progressing more and more rapidly. Every year, thousands of journal articles relevant to radiology and hundreds relevant to a specific subspecialty are published.

However, trainees acquire 'received wisdom' as axiomatic facts that are current at a certain point in time in their training, in order to get through their work and to pass the examinations.

Trainees rarely critically analyse or even check the source of such knowledge, other than in a textbook or website; such 'facts' may be inappropriate, out-dated, or even plain wrong.

Over the professional lifetime of the radiologist, skills in evidence-based medicine and critical appraisal of literature are essential in order to refresh and update knowledge and to ensure continuing safe clinical practice.

Purpose of Critically Appraised Topics

The purpose of CATs in the Clinical Radiology Training Program is:

- Demystify and develop the use of Evidence-Based Medicine (EBM) in training and clinical practice in diagnostic and interventional radiology
- Familiarise trainees with EBM and its application to radiology questions
- Assist trainees in learning to analyse, explain and present the findings of a journal article using CATs methodology, and thus appraise the quality and relevance of the published results
- Promote the incorporation of CATs conclusions into routine clinical practice.

Types of Critically Appraised Topics

CAT analysis has been applied to many different types of journal articles, with a variety of formats that typically include treatment, diagnosis, systematic reviews, harm and prognosis. There are very few available systematic reviews of diagnostic and interventional radiology; partly because in general radiology as a discipline has conducted so few controlled trials of any type.

Consequently, the College has elected to focus the CAT exercise on three specific formats: treatment, diagnosis and harm.

Treatment CAT

The treatment CAT is conceptually the simplest and the most familiar format. It is aimed at answering a specific question: *which of two (or more) therapeutic interventions will result in a superior outcome for most patients?*

The fundamental aims of a treatment CAT are to determine whether one treatment is superior to another, to evaluate the efficacy of the treatment, and to judge whether the cost and practicality of implementing the treatment are justified.

In general, such CATs require randomised controlled trials (RCTs) to answer the clinical question, because only through such trials can inherent self-selection and other baseline biases be adequately compensated for. However, in clinical radiology, situations often arise where there are no adequate RCTs to address the issue (e.g. is RF ablation superior to surgical resection for metastatic colorectal carcinoma in the liver?) for such questions case controlled or retrospective studies may warrant analysis and presentation if these comprise the best available evidence.

Diagnosis CAT

The diagnosis CAT appears initially simple but is conceptually sophisticated. Superficially, it appears to ask a simple question: is diagnostic test A superior to diagnostic test B?

However, the answer depends on the clinical context. For example, the answer to the question, “What is the best test for diagnosing pulmonary embolus?” differs depending on multiple factors, including the clinical presentation, patient population, age and clinical history of the patient, acuity and severity of the disease, clinical setting, and the clinical impact of not making the diagnosis, or of making a different diagnosis.

Therefore, the research question must be framed specifically to account for differences in the clinical practice environment, differences in clinical presentation, differences between patients, etc.

Harm CAT

The Harm CAT is used to evaluate treatments and interventions that may increase or decrease patient harm. The aim of this CAT is to ask: w*hich treatment, intervention or technique results in a greater incidence of harm or adverse events in this patient group?*

Examples of relevant topics include adverse outcomes from radiation exposure, contrast-induced nephropathy and contrast-related reactions. They can also include adverse events arising from interventions, such as infection or thrombosis rates from central line insertions, bleeding and false aneurysm formation rates at puncture sites, and complications from percutaneous biopsies.

The research question must be specific and relevant to the study population, the intervention and the outcome measures. An appropriately matched control group is essential.

Completing a Critically Appraised Topic

Completing a CAT should be a stepwise process aimed at answering a specific research question that arises from a clinical scenario, using a carefully selected research article.

The supervisor is any radiologist involved in the training of the trainee. He/she can be a staff radiologist or visiting medical officer (VMO), and ideally should NOT be either the DoT or the Clinical Director of Radiology.

The trainee should initiate each step, with advice and support from a Clinical Supervisor (CS) where appropriate.

The relevant CAT form is completed online and the trainee presents the CAT to a group of colleagues, including two CSs who provide feedback to the trainee verbally and by using the CAT assessment score sheet.

Ideally, the supervisor should encourage all clinical supervisors to be involved in the assessment of CATs. Trainees and CSs may seek advice from the Research Mentor.

Clinical Scenario

The CAT starts with a clinical scenario, which can be hypothetical or an example from clinical practice. It should be succinct and raise a specific clinical problem that is relevant and that can potentially be answered through research.

Research Question

The CAT should pose a specific research question arising from the scenario that an EBM approach may be able to answer. This will usually be a direct comparison between one test or intervention and another, ideally in the form of a prospective RCT.

Although a RCT is always preferred, case-controlled series or retrospective studies may be the only evidence available for some questions. It is still relevant to analyse and present such studies, if for no other reason than to highlight their deficiencies and weaknesses, and to show what research is required to properly address the problem. Such analysis can still help to inform current clinical practice and aid in decisions to improve practice.

Selecting and Obtaining an Article

Trainees should use a structured electronic search of databases such as Ovid or PubMed to obtain an article to address the formulated research question.

On the CAT form, the trainee is asked to detail the study characteristics using the Patient, Intervention, Comparison, Outcome (PICO) format. This format can be used to search MEDLINE/PubMed for studies and articles using this link – Search via PICO

In some circumstances, a Clinical Supervisor may suggest the trainee completes a CAT on a specific article. In this instance the trainee must still determine a relevant clinical scenario and pose a research question, which would be answered by the pre-selected article.

Completing the CAT Form

There is specific form for each type of CAT, i.e. treatment, diagnosis and harm. Each form asks for a description of the clinical scenario, the research question, the study citation and the clinical characteristics (PICO format).

Via the ePortfolio the trainee creates a ‘CR Critically Appraised Topic’ form. The form guides the trainee through analysis of the article. For the majority of the questions, trainees should answer yes or no and then note aspects of the study which support the answer to the research question or clinical scenario. The trainee can save the form as a draft and then complete the remainder at a later time.

Presenting the CAT

The aim of presenting the CAT is to ensure that not only can trainees show how to analyse a specific article using a structured approach, but also to ensure that trainees can be openly quizzed and queried about the article presented, whether the numerical analysis presented appears correct, and whether the conclusions the trainee has drawn are sound and appropriate.

The trainee uses the completed CAT form to prepare for presentation of the CAT to a group of colleagues, such as, during a journal club or another educational meeting. Two CSs (Fellows of the College) must be in attendance to assess the trainee. The trainee should provide the CAT Assessment Score Sheet to the CSs in advance of the presentation.

The presentation should take approximately ten minutes plus at least an additional five minutes to allow the group to ask questions and discuss the trainee’s conclusions. The trainee may choose to create a brief slide set to convey key aspects of the CAT and/or to assist the group in understanding the results of the study. Generally, the trainee should be able to present the CAT relying on the completed CAT form as preparation.

CSs should open the discussion and guide it to focus on:

- Relevance of the selected article to the scenario and the research question
- Accuracy and appropriateness of the presented CAT analysis
- Validity of the conclusions presented

- Relevance and practical aspects of the article to clinical practice
- Whether the conclusions can be used to improve clinical practice.

The CSs in attendance may be different from the CS who provided guidance during completion of the CAT form.

Completing the CAT Assessor Score Sheet

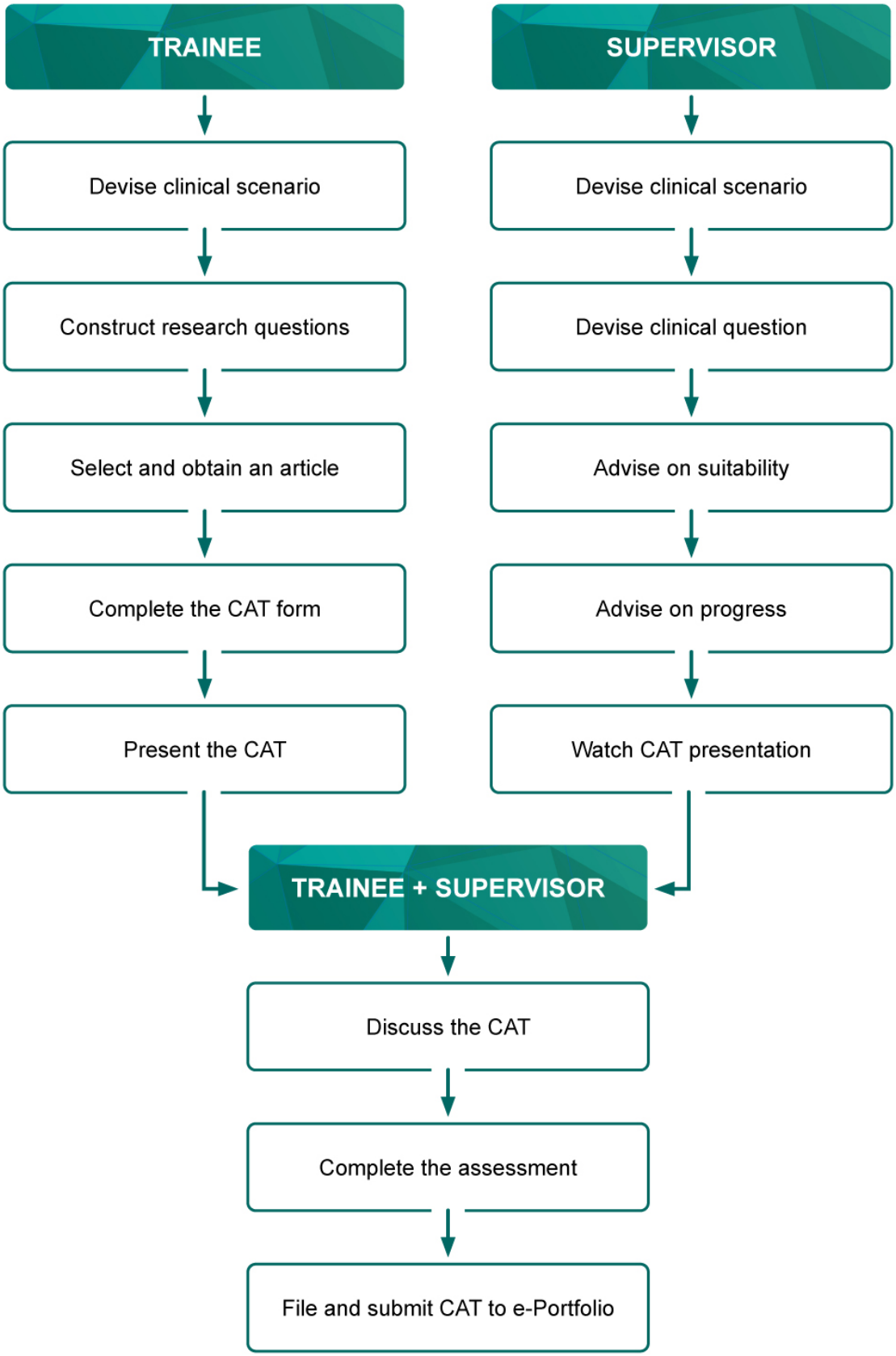
The trainee selects 'Yes' for the CS to fill in the assessor score sheet within their profile or selects one of the CSs and submits the form so the CS/DoT can then log in on their device to complete the assessor score sheet.

The CSs consider the trainee's performance in relation to the clinical scenario, research questions, analysis of the study and conclusions. They also provide feedback on the trainee's presentation skills, including their ability to articulate the key elements of the study, their analysis and their ability to answer any questions raised by the group.

The supervisor who has been assigned the form enters the names and emails of both supervisors and signs the form on behalf of both supervisors.

Responsibilities

The process diagram below describes an idealised workflow for the CAT exercises. The bulk of the responsibility for conducting the CAT lies with the trainee. The supervisor is to act as a guide, facilitator and mentor, not as a teacher.



RESEARCH PROJECT

These instructions do not apply to transitioning trainees.

For instructions on the completion of Research Project 1 and Research Project 2 of the previous program, refer to the Transitioning Trainees section on the College website.

Trainees are strongly encouraged to consider their research project and how they plan to carry out their research activities soon after the commencement of training.

Research Supervisor: All trainees require a research supervisor who will guide them with their research project. Any Clinical Supervisor can be a research supervisor, but each research supervisor should be familiar with these research guidelines and requirements for the successful completion of the project. The research project must be in the field of Clinical Radiology.

Authorship:

- The trainee is to be the primary author and must have been involved in all aspects of the research and a statement should accompany the distribution of work.
- The trainee can be second author if the primary author is from a different specialty.
- A second RANZCR trainee may be involved in the same project, however, only one trainee can claim this as their research project for the purpose of meeting the requirements of the training program.

Note: Allowing for the above, multiple authors are permissible.

Some Training Networks and Training Sites have Research Mentors. Research Mentors are available to provide advice, encouragement, local knowledge, networking and research skill development to trainees, research project supervisors and DoTs. The mentor may provide advice on suitability of research project proposals, facilitate appropriate research contacts, provide feedback on research performed, and promote awareness of research grants and presentational opportunities.

Purpose

The purpose of the research project is to:

- Foster an interest in research activities
- Promote an understanding of research methods and their applications to clinical radiology practice
- Develop an appreciation of the responsibility to contribute towards the generation of new knowledge
- Encourage independence in medical research, evaluating evidence, learning and exploration of ideas
- Promote application of ethical principles and practice to clinical research.

Research process

Below are the steps required for successful completion of a research project:

- Select a research supervisor
- Identify a gap in the research literature
- Develop a research question
- Conduct a literature review
- Design the research method
- Determine collaboration and authorship
- Submit application for ethics approval

- Collect and analyse data
- Write the research paper
- Manuscript submitted and accepted to a peer-reviewed radiology journal with an impact factor greater than 1.0, for either peer review or publication.
- Oral presentation, that has been formally assess by two radiologists.

Trainees are encouraged to reflect on research outcomes and apply their research to the workplace and clinical practice.

Types of Research Projects

Acceptable types of research to meet the research project requirement can broadly be grouped into three categories:

- Research in human subjects or populations, and laboratory research
- Audits
- Systematic reviews.

Case reports or case series do not meet the requirement for the research project.

Research in human subjects or populations, and laboratory research

Radiology research, including but not limited to:

- Randomised controlled trials
- Cross-sectional studies
- Prospective cohort studies
- Retrospective cohort studies
- Case-control studies
- Epidemiological studies
- Qualitative studies.

Research on medical education and artificial intelligence may also be conducted.

Audits

An audit project aims to assess, evaluate and improve the quality of health care through the review of practice. The audit cycle involves:

- Identifying a problem or issue
- Establishing protocols or standards
- Measuring current practice
- Comparing results to the defined standard
- Developing and implementing a change plan
- Re-audit/sustaining improvements.

The trainee must demonstrate a clear understanding of the audit cycle with evidence of how their work will lead to an improvement in clinical practice.

Clinical audits that only focus on outcomes do not satisfy the research project requirement.

Systematic review

A systematic review is a rigorous appraisal and synthesis of primary research papers using a clearly

documented methodology/protocol. It requires:

- The development of a review question
- Reproducible literature searches
- Strict inclusion/exclusion criteria for studies
- Assessments of quality and biases in studies
- Analysis of all the available data from these studies to determine the best evidence to answer the review question.

Completing the Research Project

There are three components that trainees must complete to satisfy the research project requirements of the training program. They are:

1. A Project Proposal that is approved and submitted; **to be completed by the end of Phase1**.
2. Manuscript accepted for peer review or publication in a radiology journal with an impact factor of greater than 1.0; **to be completed by the end of Phase 3**.
3. An Oral Presentation at a suitable meeting/conference; **to be completed by the end of Phase 3**.

Project Proposal

A project proposal must be developed and approved by the trainee's research supervisor and signed off by the Director of Training.

Things to consider for the project proposal and when designing the project:

- The aims of the study are described clearly
- The hypothesis to be tested is clearly stated
- Ethics approval is obtained (there will likely be considerable overlap between local institution ethics committee applications and this project proposal)
- Current key findings in the literature are identified
- An appropriate study design is outlined
- Appropriate methods are outlined
- Limitations of design and methods are recognised and stated
- Appropriate methods of statistical analysis are outlined
- Details of selection criteria for research participants are provided
- The research provides reasonable training in primary research methods.

Trainees can download the research proposal form from the College website or from the ePortfolio resource menu.

The approval is a two-step process:

1. The trainee completes the proposal form, including obtaining a signature from the research supervisor.
2. Via the ePortfolio, the trainee creates a 'CR Research Project – Proposal' form. The trainee enters the project title, expected start date, expected completion date and attaches an electronic version of the proposal template.

Manuscript Submission

- The complete research project manuscript must be submitted to a radiology journal with an impact factor of greater than 1.0.

- In the event that a trainee's manuscript is declined from two different journals (for publication or peer review), the trainee may submit a research report for review and marking by the Clinical Radiology Curriculum Assessment Committee (CRCAC).
- Before the end of Phase 3, the trainee must notify the College that their manuscript has been accepted for publication or peer review.

Via the ePortfolio, the trainee:

- creates a 'CR Research Project – Completion' form
- selects the research type and enters in the manuscript title, publication date, the journal name and the impact factor.
- attaches the following evidence:
    - email received from the journal (indicating **acceptance** for peer review) OR
    - a copy of the published article, showing the trainee as the first author
    - the impact factor of the radiology journal is greater than 1.0.

Note: an email receipt acknowledging that the manuscript has been **submitted** for peer review cannot be accepted as evidence.

Oral Presentation

During the training program, trainees must present their research project at one of the following:

- RANZCR Annual Scientific Meeting or international conferences (e.g. RSNA)
- RANZCR Special Interest Group meetings (e.g. ARGANZ, OGSIG).
- A local network (LAN/WAN) or branch meeting of the College, with formal assessment for inclusion in the 'Branch of Origin' competition.

The oral presentation must be completed by the end of Phase 3.

Ideally, trainees will present their project after publication, however, they may present on their research progress if necessary.

All oral presentations are to be assessed by two radiologists at the time of their presentation. The trainee is responsible for downloading and providing the assessor score sheet / rubric for presentations to the assessors. The score sheet is available on the College website or from the ePortfolio resource menu. The rubric gives an indication of expectations in relation to presentation content and skills. Two score sheets must be completed.

Non-oral presentations such as posters are not accepted.

'Branch of Origin' Competition

Trainees may participate in the 'Branch of Origin' competition offered as part of the RANZCR ASM program. To participate, trainees should present at the Trainee Presentation Evenings held by their Network or Branch. The most outstanding presentation will advance the trainee to present at the 'Branch of Origin' session, as part of the Trainee Learning Day. At the ASM, trainees will compete for a prize and recognition on a perpetual shield.

The presentations will be judged on several criteria, including but not limited to:

- Clearly stated and valid purpose research
- Appropriate and valid method description
- Scientific impact
- Clear and concise presentation
- Overall visual style of the presentation.

For more information about the Trainee Presentation Evening, contact your Local Branch.

The oral presentation must be completed by the end of Phase 3.

Presentation Submission

Via the ePortfolio the trainee creates a ‘CR Oral Presentation’. The trainee types in the network or branch meeting name, presentation title, date of presentation and the score awarded by each assessor. The trainee then attaches the assessor scoresheets as evidence of completion and submits the form.

ONLINE LEARNING

Research Methods for Medical Imaging Professionals Course

All new trainees must complete the online Monash University 'Research Methods for Medical Imaging Professionals Course", which is an introductory research course, and initiative aligned to the Curriculum Learning Outcomes. The course will support trainees with research skill development. Trainees must complete the course by the end of Phase 2, although it is strongly recommended that trainees complete the course in Phase 1, to better assist them with the completion of their research project.

The course is delivered online, in a self-paced asynchronous learning environment. All trainees are enrolled within their first year and have six months to complete the course free of charge. Any additional enrolments will be direct with Monash University and at the trainee's expense.

The introductory course will provide tutorials on topics such as:

- Introduction to research methods
- How to write a study protocol
- Searching the literature efficiently
- Critical appraisal
    - Tools for critical appraisal of a journal article
    - Practice exercise using QUADAS to appraise a diagnostic accuracy study
- Levels of evidence and GRADE methodology for guideline development
- Epidemiological study designs
    - Observational
    - Randomised trials
- Statistics in health
- Confidence intervals and sample size calculation
- Evaluating statistical significance
- Statistical tests
- Interobserver agreement
- Ethics in research
- Visual design for researchers

Learning Objectives

After completing this course participants will be able to:

- Write a study protocol that can be executed
- Formulate an answerable clinical question
- Choose an appropriate study design to answer a clinical question
- Know what data are needed to perform sample size calculation
- Interpret statistical data
- Critically appraise research evidence
- Understand the principles of evidence-based practice guideline development
- Appreciate the ethical implications of their research

Recording Completion in the ePortfolio

When the trainee has completed the online module, the trainee will be provided with a certificate of completion.

- When the trainee has completed the online module and received their certificate of completion, they will create the CR Research Methods Course form from the available list of forms in the ePortfolio.
- The trainee then affirms completion of the module and attaches the certificate of completion as evidence of completion.

For more information, refer to the Learning Modules within the member login on the College website.

Section Ten
ePORTFOLIO SUPPORT

OVERVIEW OF ePORTFOLIO

The ePortfolio is the online platform (risr/advance) that is used to record trainee's completed Work-Based Assessments and Training Activities throughout their training. All Clinical Radiology training program requirements are to be completed in the ePortfolio.

The following section will provide basic information on how to log into and navigate the ePortfolio.

MyRANZCR

Access to the ePortfolio is through the College website via the MyRANZCR portal.

A Trainee Member profile is created for all new trainees as part of the application to training process. Once an application is determined to be "complete" access to MyRANZCR is issued.

The MyRANZCR member profile for Clinical Supervisors and DoTs is synced to their CPD member profile.

To access the MyRANZCR from the RANZCR website:

1. Go to www.ranzcr.com
2. On the top right corner, click the link "**Member Login**"
3. This will take you to the login page of the MyRANZCR.
4. First time users will need to select and follow the "**Forgot your password?**" instructions**.**

   The login details are:

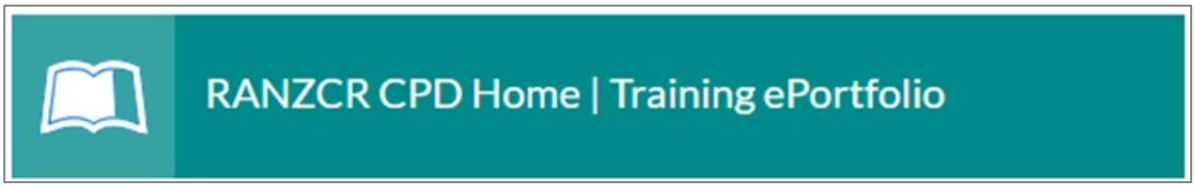
   Email: the primary email address registered with the College

   Password: Created by user
5. Enter your email and password and click "**Sign In**"
6. Follow the instructions to authenticate your account. An access code is sent via SMS or phone using the mobile number registered with the College.
7. Select "Send Code" or "Call Me" (When using the Call Me option, please press the hash (#) symbol when promoted for the pound key.)
8. Enter the six-digit verification code, to be directed to the Home page of MyRANZCR.
9. On the Home page of MyRANZCR, select **"RANZCR CPD Home | ePortfolio".**

For assistance or more information, refer to MyRANZCR Help.

RANZCR ePortfolio – Trainee Perspective

On the Home page of MyRANZCR, select “RANZCR CPD Home | ePortfolio”.



Profile

The profile widget displays the trainee’s name and role in the ePortfolio. By clicking on “View profile’ more information is provided including the trainee’s RANZCR member ID, prefix, program, practice location, branch, member type, mobile number, and email address.

Location Information

The location information widget contains the trainee’s commencement site, current site and network.

When trainees update their current site it will be shown in this widget. Previous site connections can be found under “Previous Information”.

Phase Information

The phase information widget displays the trainee’s current phase of training, current training year, and six month periods associated with DoT Reviews.

Training Time Information

The training time widget displays the trainee’s current training status or FTE value.

Trainees can apply to change their training status or FTE value by creating an “FTE Status Change Notification or Application for Interrupted Training form in the ePortfolio”. After the application is approved, College staff will update the trainee’s status.

Saved Drafts and To Do List

When the trainee creates a new activity or assessment, it can be saved as a draft before submission. All saved drafts remain private.

To continue working on a draft, the trainee can click on the activity or assessment in the ‘Saved Drafts and To Do List’. The draft can be saved multiple times and submitted when complete.

Items that require trainee action also appear on this list, such as appraisals and reviews which need trainee approval to finalise.

Create a New Activity or Assessment

Trainees create new activities via the ‘create’ button in the widget in the centre of the dashboard.

For more information and to view a video demonstration of how to create and submit all the various activities and assessments, refer to the ePortfolio Resources page on the College website.

Inbox

The inbox is where newly posted announcements will be listed.

Announcements will be posted by the College to communicate with ePortfolio users to inform about new updates, improvements to the system as well as known issues or outages.

Training Program Requirements

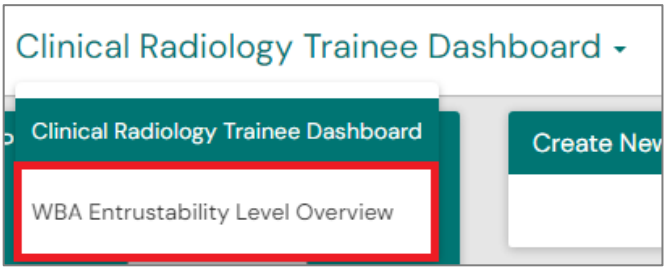
The trainee dashboard shows the trainee's progress towards their training program requirements for the current phase as a percentage. From here, the trainee can click on any of the individual requirements for more detail on the activities or assessments (events) that contribute to the target. The "Overview of Training Requirements' on the top bar menu links to this dashboard summary and provides a list of progress with all requirements and the option to expand individual events for more information.

For a more detailed description of the user dashboards, please refer to the ePortfolio User Manual.

Work-Based Assessments (WBA) Overview Dashboard

Trainees have access to a secondary dashboard which tracks their progression of entrustability for each assessment, modality and topic area over time.

This dashboard can be accessed by clicking the 'Clinical Radiology Trainee Dashboard' text and selecting the WBA entrustability level overview option from the drop down menu.



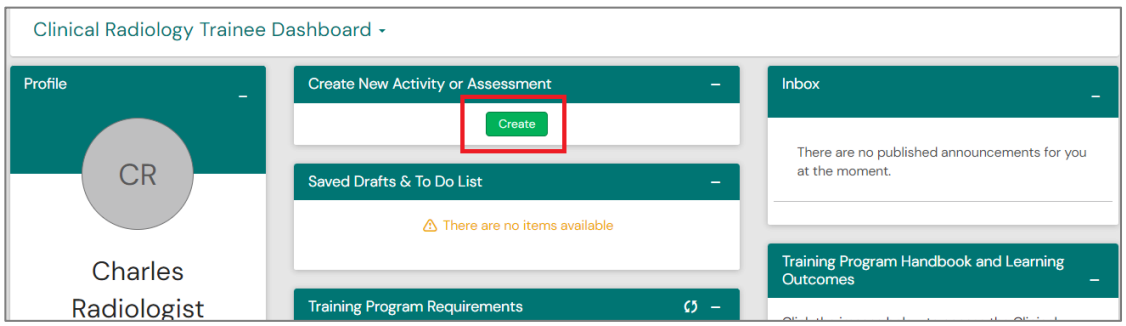
Selecting a Training Site

Trainees must keep an accurate record of the time spent at their training sites in the ePortfolio.

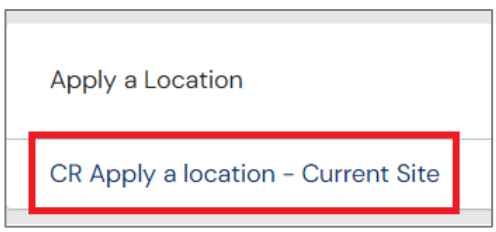
The 'Apply a Location – Current Site' form serves a dual purpose. The primary purpose is to connect trainees and Directors of Training (DoT). This connection must be established for trainees to be able to complete certain training requirements that require DoT sign off, as well as to allow the DoT access to the trainee's profile to monitor and to create new DoT Review forms.

The secondary purpose of the 'Apply a Location – Current Site' form is to create a history of the trainee's rotations.

To create a new 'Apply a Location – Current Site' form from the Clinical Radiology Trainee Dashboard click the green 'Create' button inside the "Create a New Activity of Assessment" widget in the centre of the Dashboard.



Trainees must then select 'CR Apply a location – Current Site'.



The trainee then enters the training start date and the expected end date of the rotation. It is important that the date occurred on and end date are entered with a range of time into the future, as these dates dictate the time that this current site will be active.

Once the End Date has passed, this Current Site will no longer be active and the connection to the Director of Training at this site will be ended.

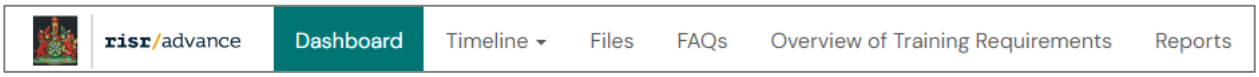
When selecting a site, trainees are restricted to only be able to select a Current Site from the list of sites that are present in their LAN. Trainees who must perform a rotation outside of their Local Area Network must contact the College to have this rotation reflected.

Alternatively, the site can be typed into the search bar.

ePortfolio Navigation

The navigation ribbon allows the user to navigate to sections of the ePortfolio including 'Dashboard', 'Timeline', 'Files', FAQs', 'Overview of Training Requirements' and 'Reports'.

Dashboards

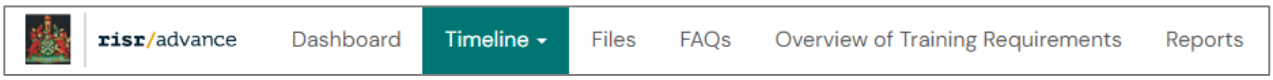


When logging into the ePortfolio users will see their ePortfolio dashboards. Trainees have two dashboards available.

The Trainee Dashboard is where training information such as location, phase and training time information is show.

The WBA Entrustability Dashboard shows the trainee's WBA entrustability graphs for each WBA.

Timeline



The timeline records all activities within the user's profile. From the timeline users can search for previously completed events such as Work-Based Assessments, DoT Reviews and Structured Learning Experiences. The timeline will also show an audit log for all completed events.

To view the timeline, click timeline from the navigation menu. This will create a drop down with multiple options.

The options given are broken down into Training Program topic area.

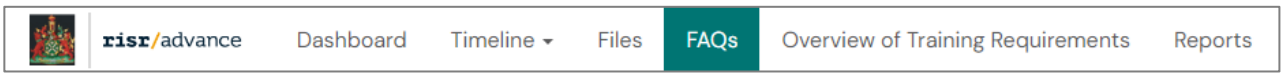
To view Monitoring and Review events such as DoT Reviews, Clinical Supervisor Feedback, and Multi-Source Feedback click the Monitoring and Review option.

To view WBAs such as Reporting Assessment and Performed Ultrasound Assessment, click the Work-Based Assessments option.

Files

When trainees attach a file to an ePortfolio form a copy of the file is saved to the files library, Files saved to this library are available for download, as well as including a link to the form that it was originally attached to.

FAQs



The FAQ tab provides answers to many of the frequently asked questions.

Overview of Training Requirements

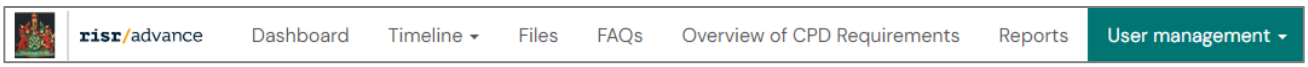
The Overview of Training Requirements page is where trainees can view their progress towards their current phase goals. When trainees are progressed into the next phase of training, the goals from the previous phase will be closed and new phase goals generated by College staff.

Reports

The reports tab provides access to dashboard reports, allowing trainees to track their training program requirements, such as viewing WBA progress.

Note: As a trainee progresses through the training program the volume of training data increase, therefore the response time for the report generating increases, as such expect that reports for trainees nearing completion of training will require addition time to generate.

User Management



Directors of Training, Network Training Directors and Education Support Officers are able to view their full list of connected trainees by their User Management tab.

ePORTFOLIO SUPPORT

To support trainees, Clinical Supervisors and Directors of Training, a range of resources have been developed including an ePortfolio user manual, a library of 'how to' videos, frequently asked questions, and an ePortfolio webinar recording.

ePortfolio User Manual

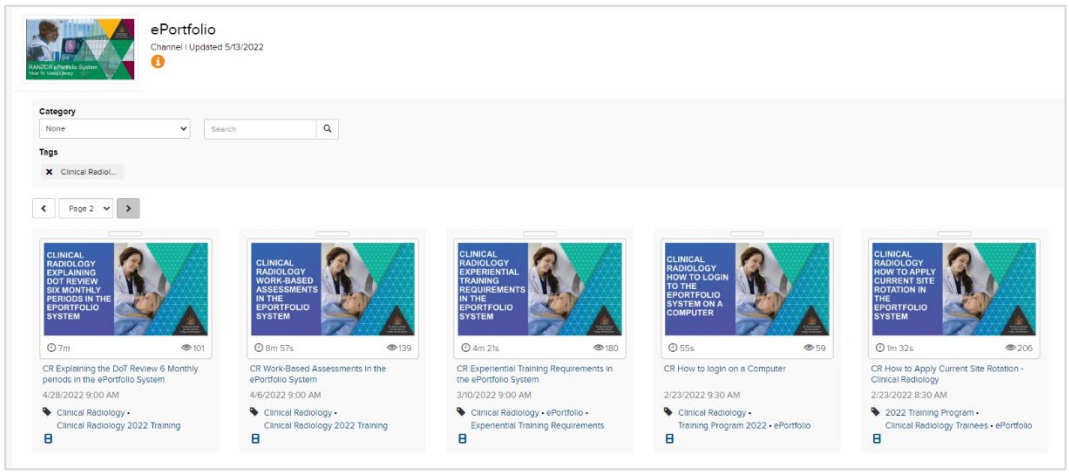
User manuals have been developed to provide detailed information on how to use the ePortfolio.

Refer to the ePortfolio User Manual.

How to Video Library

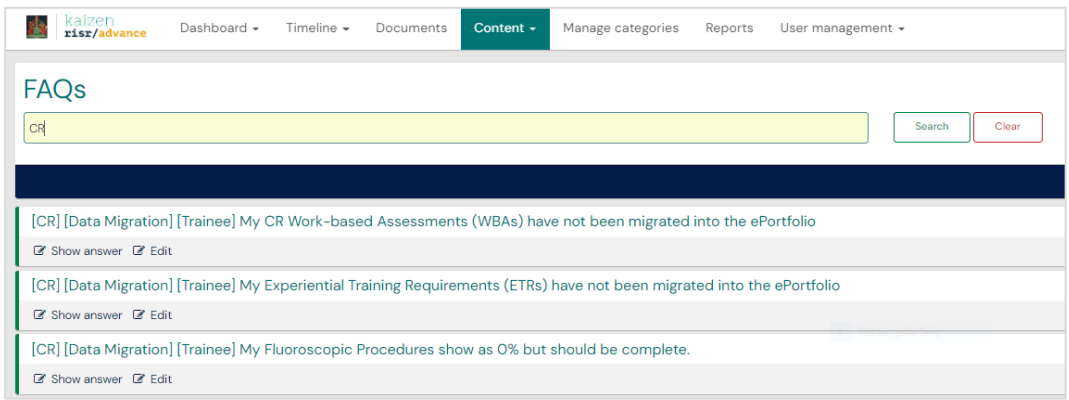
A library of 'how to' videos have been recorded on range of topics including how to complete WBAs, DoT reviews and ETRs in the ePortfolio. This library is updated regularly.

To view the videos, please visit the ePortfolio channel on the College webcast library.



ePortfolio FAQs

For a list of frequently asked questions on the ePortfolio, please view the FAQ section of the ePortfolio.



ePortfolio Webpage

The College website also has links to additional resources and support.

Refer to view the ePortfolio webpage.

Additional Support

Further support is available by email:

Technical assistance: ePortfolio@ranzcr.edu.au

Training program related queries: CRTraining@ranzcr.edu.au

Section Eleven
TRAINEE PROGRESSION

PROGRESSION BETWEEN PROGRAM PHASES

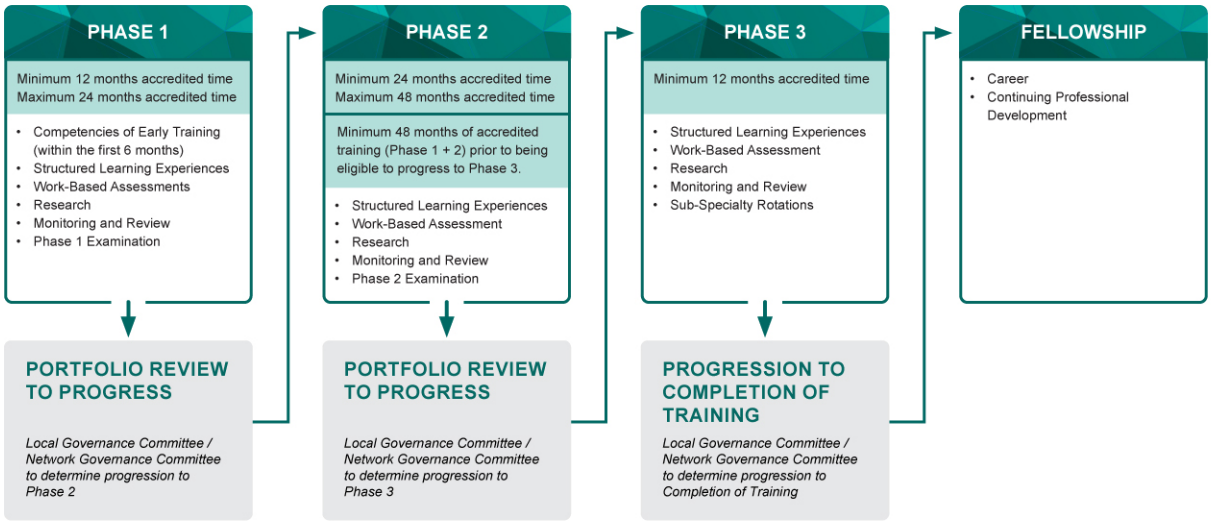
There are three decision-making points for progression in the Clinical Radiology Training Program.

1. Progression from Phase 1 to Phase 2
2. Progression from Phase 2 to Phase 3
3. Progression from Phase 3 to Completion of Training

Progression from Phase 1 to Phase 2, and from Phase 2 to Phase 3 will be decided by the Local Governance Committee (LGC). In jurisdictions where there is only one Network, the Network Governance Committee (NGC) will perform this function.

Recommendation about Completion of Training will be decided by the LGC, to be ratified to the Chief Censor (CC). The Chief Censor, at his or her discretion, may refer the recommendation to the Clinical Radiology Education and Training Committee (CRETC) for discussion.

The image below outlines the minimum and maximum accredited training time and training requirements in relation to the portfolio review progress points.



Note that within Phase 2, there are two decision points regarding eligibility for the Phase 2 examinations:

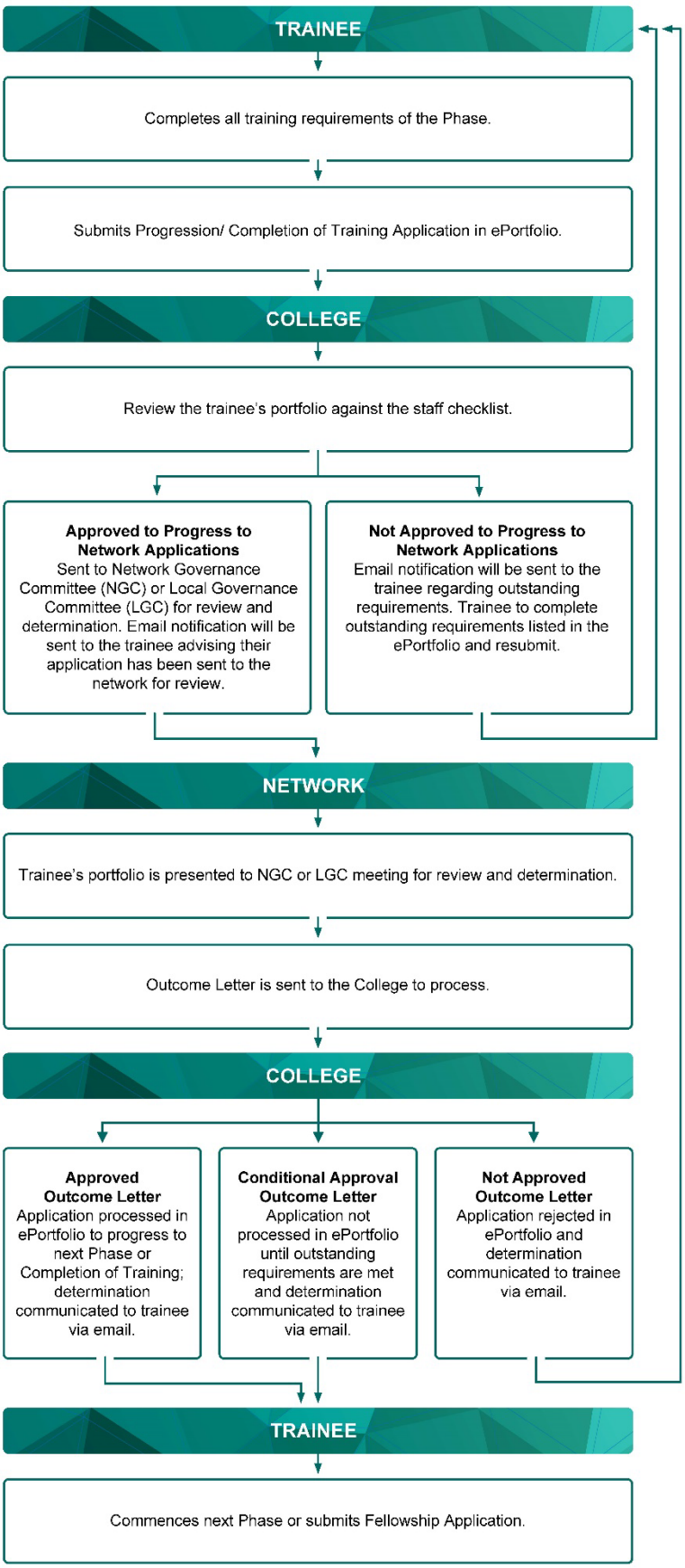
1. Eligibility to sit written examinations
2. Eligibility to sit OSCER

For more information, refer to **Section 8 - Examinations**.

Trainees are unable to submit a request for a portfolio review to progress to Phase 2, Phase 3 or Completion of Training if they are completing a remediation plan.

Progression Process

The process for trainee progression as well as the completion of training requests is initiated by trainees and processed by the College and Networks. This is highlighted in the below diagram:



Applying for Progression in the ePortfolio

To apply for Phase or Completion of Training progression in the ePortfolio, trainees must create a new Progression Application form and assign this form to RANZCR Specialty Training in the ePortfolio. There are three different forms to select depending on the type of progression request, as outlined below:

- For trainees who are applying to progress into Phase 2, select the "*CR Phase 2 Progression Application*".
- For trainees who are applying to progress into Phase 3, select the "*CR Phase 3 Progression Application*".
- For trainees who are applying to complete training, select the "*CR Training Completion Application*".

Eligibility for Progression

Progression from Phase 1 to Phase 2

Trainees can request a portfolio review when they have completed a minimum of 12 months' full-time equivalent (FTE) of accredited training time and when they have completed the following Phase 1 requirements:

- Competencies of Early Training
- Completion of Work-Based Assessments (WBAs)
    - 10 Reporting Assessments for each six month period, demonstrating the appropriate level on the entrustability scale for various studies
    - Performed Ultrasound Assessments which indicate completion of 50 performed ultrasounds to entrustability Level 4 and progress with other WBAs.
- Director of Training (DoT) Reviews for every six months of training completed
- Clinical Supervisor Feedback (CSF) for every six months of training completed
- Trainee Assessment of Training Site (TATS) for every six months of training completed
- One Multi-Source Feedback (MSF)
- Completion of two Critically Appraised Topics (CATs)
- Submission of research proposal
- Successful completion of the Phase 1 Examinations
    - Anatomy
    - Applied Imaging and Technology

For more information, refer to **Section 2 – Overview of the Training Program**.

The trainee portfolio review is to determine whether the portfolio evidence demonstrates that the trainee has successfully completed Phase 1 and is ready to commence Phase 2 of the training program.

Progression from Phase 2 to Phase 3

Trainees must have completed a minimum of 48 months FTE of accredited training time (Phase 1 and Phase 2 combined) to progress to Phase 3 and may request a portfolio review when they have completed the following Phase 2 requirements:

- Completion of Structured Learning Experiences
    - Attachments
- Completion of WBAs
    - 10 Reporting Assessments for each six month period, demonstrating the appropriate level on the entrustability scale for various studies

- DoT reviews for every six months of training completed
- CSF for every six months of training completed
- TATS for every six months of training completed
- One MSF
- Completion of two CATs
- Research Methodology Course
- Cultural Competence and Cultural Safety Course
- Successful completion of the Phase 2 Examinations
    - Pathology
    - Clinical Radiology
        - Multiple Choice Question
        - Case Reporting
    - Objective Structured Clinical Examination in Radiology (OCSER).

For more information, refer to **Section 2 – Overview of the Training Program**.

The trainee portfolio review is to determine whether the portfolio evidence demonstrates that the trainee has successfully completed Phase 2 and is ready to commence Phase 3 of the training program.

Completion of Training

Trainees must have completed a minimum of 60 months' FTE of accredited training time and the following Phase 3 requirements for completion of training and to be eligible for Fellowship:

- Completion of Phase 3 sub-specialty rotations
- Completion of Structured Learning Experiences
    - Experiential Training Requirements (ETRs)
- Completion of WBAs and Logbooks
    - 10 image interpretation and reporting assessments for each six month period, demonstrating the appropriate level on the entrustability scale for various studies
    - Performed Ultrasound Assessments, Fluoroscopic Procedures Assessment, Procedural Radiology Assessment and Clinical Radiology Multidisciplinary Meetings Assessment to the required levels on the entrustability scale.
- DoT reviews for each sub-specialty rotation completed
- CSF for every six months of training completed
- TATS for every six months of training completed
- One MSF
- Completion of two CATs
- Research project
- Research presentation

For more information, please refer to **Section 2 – Overview of the Training Program.**

Portfolio Review Guidelines

Features of a trainee portfolio that indicate the trainee is ready to progress to the next phase:

Work-Based Assessments (WBAs)

- Reporting Assessments include cases from a range of topic areas and modalities and is progressing toward competence
- Multiple assessors have completed the WBAs
- Case complexity has been variable
- WBAs have been completed regularly during each training period
- When reviewing WBAs of each type in chronological order, the trainee is progressing and has implemented the feedback provided previously
- The trainee has completed at least the minimum number of ETRs and WBAs
- Trainees have reached the specified entrustability level for topic areas or modalities.

DoT Reviews

- Comments indicate feedback to further improve performance and are actioned by the trainee in the next training period
- The MSF assessment provides predominantly positive feedback
- Requests for specific WBAs by the DoT have been completed in a timely manner
- If an action plan was developed for a training period, the goals of the plan were achieved
- No significant ongoing deficiencies in intrinsic roles have been identified.

Any requirements (excluding examinations) that have been completed during period of interrupted training will not be counted toward completion of that phase of training.

Potential Portfolio Review Outcomes

The Committee must determine whether the trainee's portfolio includes enough evidence to confirm the trainee has met the required level of competence to progress.

Upon review of a trainee's portfolio, there are three potential outcomes:

1. **Approved**: Approval to progress to the next phase/completion of training and eligibility for Fellowship; or
2. **Conditional Approval**: Progression to next phase/ Completion of training conditional on clarification or additional information; or
3. **Not Approved**: Portfolio requires further requirements and must be resubmitted for review at a future meeting.

Approved

If approved, the trainee's portfolio will be updated to indicate the next phase or training has been completed. For the latter, the trainee will be invited to apply for Fellowship.

For more information on applying for Fellowship, please refer to **Section 2 – Overview of the Training Program,** *Fellowship.*

Conditional Approval

The Network Training Director (NTD), on behalf of the LGC, will advise on the conditions which must be met for the trainee to progress.

Not approved

If the Committee decides that the trainee has not met the requirements to progress, the trainee will be required to resubmit their portfolio for consideration upon completion of additional requirements, examples of activities a trainee may be advised to do include (but are not limited to):

- Complete a number of additional WBAs of a certain type, on specific additional topic areas and demonstrate the required entrustment level
- Complete a number of additional WBAs with assessors who are different to those who have already completed WBAs which are included in the portfolio
- Complete another MSF with different responders.

The NTD or delegate, on behalf of the Committee, will advise the College of the progression decision. Should the determination be that progression is conditional or not approved, the DoT will discuss issues raised by the Committee with the trainee. The College will notify all trainees of progression decisions in writing.

Trainees who have not successfully completed all phase requirements within the maximum accredited training time for each phase of the training program will be referred to the Chief Censor for consideration under the College's Withdrawal from Training policy.

Section Twelve
ADDITIONAL TRAINEE SUPPORT

OVERVIEW

The identification, support and management of trainees who are not performing and/or progressing at a rate reasonably expected of a trainee is integral to maintaining the high standard of training and to ensure that the training program produces highly skilled, competent and safety-conscious radiologists.

The supervision of trainees should encompass the monitoring and guidance of a trainee's personal, professional and educational development.

It is generally agreed that from time to time, trainees experience some difficulties during their training years. Most problems, when appropriately identified and managed, can be resolved with the support of their Clinical Supervisors (CSs) and the Directors of Training (DoT) working with the trainee.

A small number of trainees may have ongoing difficulties, requiring external intervention or referral to the College.

The following principles underpin the College's approach:

- The early identification of issues associated with a trainee's performance and/or progression;
- Issues of patient and person safety take precedence over all other issues;
- Fair and equitable treatment of trainees at all times; and
- Confidentiality is to be maintained.

PERFORMANCE AND PROGRESSION

Trainees requiring additional assistance to progress may be identified during the six monthly DoT Review or may be identified by the DoT or CS during the course of a rotation. Alternatively, trainees may self-identify as requiring additional support and may initiate communication with their DoT.

These trainees are managed according to the Performance and Progression Policy.

For more information, refer to the Performance and Progress Policy.

If a DoT determines that:

- The trainee's performance does not meet the expectations of the College
- Progress has been reviewed and found to be at a level less than that expected by the College; and/or
- Behaviour is not reflective of the competencies (including 'intrinsic roles') outlined within the Clinical Radiology Learning Outcomes, and/or
- Circumstances are such that they may need additional support to assist in their performance and/or progress with training,

Then a meeting with the trainee can be scheduled to develop an agreed action plan.

An action plan may also be developed when a trainee needs additional support and goals after unsuccessful exam sittings.

A variety of circumstances may lead to a DoT or CS identifying that a trainee requires additional support, including, but not limited to:

- The trainee has not been participating in Work-Based Assessments regularly
- There have been multiple occasions of Work-Based Assessments and Structured Learning Experiences not being completed appropriately (i.e. they have not been uploaded prior to the review and/or they have not been finalised with relevant signatures/submission).
- Multiple responders on the Multi-Source Feedback (MSF) raised similar concerns about the trainee's performance
- There are performance concern patterns across multiple Work-Based Assessments, identified by multiple assessors
- Feedback noted on previous DoT Review forms has not been implemented by the trainee
- The trainee lacks focus on achieving the requirements of the phase or training program and requires more targeted assistance for a period to improve progress
- There is a specific incident or circumstance that highlights the need for the trainee to focus on behaviour change and/or improvement in performance, and for closer monitoring to ensure that this occurs

Action Plan Meeting

Purpose

An action plan meeting provides the opportunity for the DoT and trainee to discuss the trainee's performance in more detail, including providing the trainee with the opportunity to explain their perspective.

The purpose of the action plan meeting is to collaboratively devise an action plan, and the DoT and trainee may:

- Consider any barriers to performance or progress
- Explore strategies that could be put in place to improve trainee performance and/or progress, including what might be required of the trainee, the training site, including those involved in supervisory roles within the training program

- Record and agree on the intended outcomes of such strategies
- Discuss the responsibilities of each party in the process
- Schedule a follow up meeting to monitor progress

Prior to the meeting

If the failure to progress is identified during a DoT Review meeting, the trainee will be notified that a meeting will be convened to discuss the trainee's performance or progress and develop an action plan. The meeting should be convened at a mutually convenient time, within 7 days and no later than 14 days.

The trainee may arrange for a support person to attend the action plan meeting. The support person must not be a practicing lawyer and cannot advocate for the trainee.

During the meeting

The action plan template is used as a guide to the conduct of the meeting and can be found in the appendices of the *Performance and Progression* policy.

The DoT and trainee discuss the reason for the action plan meeting and the specific performance areas that have been identified or the concern regarding progress. The training program requirements should be referred to, including the recommended timelines for completion, as detailed in this handbook.

Both the trainee and DoT sign the action plan and a copy is forwarded to the College and the Network Training Director (NTD) is advised of the development of the plan with the trainee.

The date of a meeting/s to follow up progress with the action plan should also be determined, no more than 6 weeks from commencement of the plan.

An agreed action plan is set at three months duration.

Agreed Action Plan Follow Up and Outcomes

At the action plan follow up meetings the DoT and trainee consider the trainee's achievement toward goals on the agreed action plan.

If the trainee has achieved the improvements as agreed after 3 months, the action plan can be deemed successfully completed and the trainee may proceed as usual with training.

If the agreed action plan has not been completed within three months of the commencement of the agreed action plan, the DoT may determine that the plan needs to be revised and/or extended. The DoT can also refer the trainee to remediation at this time.

Trainees who have achieved the goals of the revised and/or extended action plan may proceed as usual with their training.

Action plans must not exceed six months. If the goals on the agreed and/or revised action plan have not been achieved within this time, the DoT notes the details regarding the lack of change or progress and in discussion with the NGC, refers the trainee to remediation. The College should be notified of all outcomes by email at CRtraining@ranzcr.edu.au.

REMEDIATION

The Remediation in Training Policy is intended to assist in the support, management and evaluation of trainees who are not performing and/or progressing at a rate reasonably expected of a trainee within the Clinical Radiology Training Program.

The remediation process is initiated after the trainee has not achieved the goals of an agreed action plan under the performance and progression policy, or a situation arises of a serious nature and a DoT, after discussion with the Network Governance Committee (NGC), escalates directly to remediation. A trainee can also self-initiate a remediation process.

The remediation process within the Clinical Radiology Training Program focuses on ensuring that any trainee identified as experiencing difficulty with achieving training requirements or meeting the expected level of competence, will be supported to help address the recognised issues. A plan is then created to address the identified issues, which may include mobilising resources for the trainee, or considering a change to the training circumstances or environment.

Please note the remediation process is initiated to provide additional support to trainees who require it. The remediation process must NOT be initiated as:

- A punitive process;
- A disciplinary measure; or
- An avenue to manage serious professional misconduct or safety concerns.

This policy does not directly apply to those situations where a trainee is exhibiting notifiable conduct as defined by the relevant authority. In those circumstances, there exists an obligation to report the matter to the relevant authority. In the event of notifiable conduct, the College will be guided by conditions or undertakings (if any) stipulated by the relevant authority in determining whether the process outlined under this policy should be implemented.

Trainees who are identified as requiring remediation must enter into a written remediation plan, as soon as is reasonably practical, which will be referred to the Chief Censor for approval.

Accredited training time will be suspended while trainees are undergoing a period of remediation and trainees will not be eligible to sit for any College Examinations.

Trainees are unable to submit a request for a Portfolio review, progress to progress between phases or be eligible for Fellowship if they are currently completing a remediation plan.

Trainees who refuse to enter a remediation plan will be referred to the Chief Censor for consideration under the Withdrawal from Training policy. For more information on Withdrawal from Training, refer to **Section 14 – Other Training Policies.**

Remediation Plan Meeting

On the basis that both the DoT/s and the NGC agree that the trainee should be managed under the Remediation Policy, a remediation plan must be prepared by the DoT in collaboration with the trainee.

Purpose of the meeting

The purpose of the remediation plan meeting is to:

- Consider any barriers to performance or progress
- Explore strategies that could be put in place to improve trainee performance and/or progress, including what might be required of the trainee, the training site or those involved in supervisory roles within the training program
- Agree on the intended outcomes of such strategies
- Agree on the timeframe for completing various components of the plan
- Document the remediation plan
- For the trainee and DoT to verify that they agree to take responsibility for completion of the plan

Prior to the remediation plan meeting

The trainee will be notified that a remediation plan meeting will be convened to discuss the trainee's performance or progress and develop a remediation plan. It will occur at a mutually convenient time, as soon as is reasonably practical after identifying that a trainee is to be managed under this policy.

At least one other member of the NGC will also attend the meeting. A CS may attend the meeting.

The DoT should assist the trainee with access to independent pastoral care and/or peer support during the remediation process. The trainee is encouraged to bring a support person to the remediation plan meeting. The support person must not be a practicing lawyer and cannot advocate for the trainee.

During the remediation plan meeting

The remediation plan template is used as a guide to the conduct of the meeting and can be found in the appendices of the *Remediation in Training* policy.

The DoT and trainee discuss the reason for the remediation process and the specific performance areas that have been identified or the concern regarding progress. The training program requirements should be referred to, and the recommended timelines for completion, as detailed in this handbook.

A proposed remediation plan is devised collaboratively by the DoT and trainee, discussing each issue that has been identified, and outlining the respective responsibilities of the trainee, the DoT, and/or clinical supervisors, and the department (as applicable). The measurable outcome for each issue is also documented and who is responsible for its completion.

The Remediation Plan duration must be set to a minimum of six (6) months.

Both the trainee and DoT provide any additional comments and sign the plan.

Approval of a Remediation Plan

Remediation plans require Chief Censor approval prior to commencing remediation. Plans to be forwarded to CRtraining@ranzcr.edu.au for Chief Censor consideration.

Plans will be considered by the Chief Censor within 14 days of receipt, where reasonably practicable.

In collaboration with the Director of Training and the medical educationalist, the Chief Censor may suggest revision of the plan to improve the implementation and outcomes for both trainee and departments. Additionally, the Chief Censor may refer the remediation plan to CRETC for consideration.

Non approved plans will be returned to the trainee and DoT for further discussion and amendment, to be resubmitted for approval.

Following approval of the remediation plan

Following the approval of the plan by the Chief Censor, the trainee and the DoT will be notified by the College in writing of the approval of the plan and suspension of training time.

Remediation plans will commence on the day they were approved by the Chief Censor, or on the agreed date set out in the plan, whichever is sooner.

The Network Training Director (NTD), the Branch Education Officer (BEO) and the Clinical Radiology Education and Training Committee will be sent a copy of the approved plan for noting at their respective upcoming meetings.

Remediation Process Monitoring and Follow Up

Trainees must attend subsequent meetings with their DoT to discuss their progress and achievement of the intended outcomes documented in their remediation plan at no less than six-week intervals.

Remediation Plan Outcomes

The success of a remediation plan in meeting College expectations will be determined jointly by the DoT and the NGC.

Upon successful completion of the remediation plan, the DoT will advise the College and Chief Censor and the trainee will be notified that the accrual of accredited training time will be reactivated.

Trainees under this policy who do not complete the remediation plan (as required) may have a further period of remediation or will be referred to the Chief Censor for consideration under the College's Withdrawal from Training policy.

Trainees who have had two consecutive 6 month remediation periods or an unsuccessful third 6 month non-consecutive remediation periods, will be referred to the Chief Censor for consideration under the College's Withdrawal from Training Policy.

For more information, refer to the Remediation Policy.

ADDITIONAL SUPPORT

As a clinical radiologist specialist in training, it is important for you to prioritise your own health and wellbeing.

The College supports trainees' health and wellbeing in the following ways.

College Support

If a trainee requires additional support during the training program, in the first instance they should talk with their DoT. Should there be a particular issue at the local site level, the trainee could also contact the NTD.

Trainee Liaison Officer

The Trainee Liaison Officer (TLO) assists with the wellbeing of trainees and is a central point of contact for all trainees in the training program. The TLO delivers outreach to all accredited training sites, trainees, and Directors of Training (DoTs) with a particular focus on rural and regional areas.

TLO acts as conduit between the College and the trainees, providing support, updates on the training program, and clarification on training policies and processes.

The College's TLO is available for phone and video conference meetings and when possible, can visit trainees at their training sites.

Specific issues raised by trainees are kept confidential and only general feedback (which does not identify individual trainees and their circumstances) is shared.

Where issues are raised that have the potential to affect the wider cohort, the TLO will escalate concerns to the Education and Training Committees to consider.

To organise a confidential discussion with the TLO, please email tlo@ranzcr.edu.au. Alternatively, trainees may call or SMS +61 437 893 913 (Australia/Singapore) or +64 2 7434 8515 (New Zealand).

Trainee Wellbeing Officer

The Trainee Wellbeing Officer (TWO) position is held by a Fellow of the college. The role carries responsibility for concerns related to Clinical Radiology trainee well-being and the College's response to relevant issues. The TWO works with the Trainee Liaison Officer (TLO), the accreditation team and other college staff to identify issues and trends at training sites that impact on trainee well-being and provides guidance to address these issues. The TWO provides input into developing and reviewing policy and processes, advocates for trainee well-being within the college, engages external stakeholders, assists in education and support of Directors of Training, and provides direct support to trainees at jurisdictional, network and branch levels, when required.

First Nations Trainee Liaison Officer

The First Nations Trainee Liaison Officer (FNTLO) is funded by the Australian Federal Government's FATES program to support training in expanded settings and communities. This role is focused on engaging key Indigenous organisations and communities to enhance the College's Indigenous workforce.

The FN TLO is a point of contact for First Nations trainees and their training sites aiming to address issues that may be experienced at training sites.

To organise a confidential discussion with FNTLO, First Nations trainees can email FNTLO@ranzcr.edu.au or call +61 2 9268 9765.

International Medical Graduate Education Support Officer

The IMG ESO provides flexible and responsive outreach support to IMGs, particularly in the IMG AoN Upskilling Program, by connecting IMGs with external and internal resources. The IMG ESO also provides support, policy advice and assists IMGs to find solutions that may impact their upskilling and exam preparation.

The IMG ESO is available for confidential phone and video conference meeting. Issues that affect the wider cohort may be escalated for appropriate consideration.

IMGs may arrange a confidential discussion by emailing IMGESO@ranzcr.edu.au or calling +61 2 9268 9765.

Flexible training

Trainees are reminded that the College provides flexibility to trainees whose circumstances have changed, who need to reduce their workload by training less than full time or need to take a break from training for a short period while they attend to other aspects of their life.

Relevant policies have been referred to previously in this section.

For more information, refer to **Section 2 – Overview of the Training Program,** Flexible Training. To discuss options further, contact the specialty training team by email, CRTraining@ranzcr.edu.au.

Support for Māori, Aboriginal and Torres Strait Islander Trainees

The College Board and the Māori, Aboriginal and Torres Strait Islander Executive Committee, are committed to supporting Aboriginal, Torres Strait Islander and Māori Fellows and trainees as well as improving the overall health outcomes for all Indigenous patients and communities. The College is dedicated to providing respectful and appropriate support to Māori, Aboriginal and Torres Strait Islander trainees and Fellows. The College encourages trainees and members who identify as Māori, Aboriginal and/or Torres Strait Islander, to self-identify. Please note that this is entirely voluntary. Having accurate workforce data assists the College in workforce planning and providing appropriate support to trainees and members.

The College has a pivotal role in developing and supporting a culturally competent and culturally safe medical workforce. Supporting our Māori, Aboriginal and Torres Strait Islander trainees and ensuring you are able to work in culturally safe environments is of high priority to the College. If you require specific support, please contact the College.

Financial support

The RANZCR Annual Indigenous Scholarship is available for trainees who identify as Aboriginal, Torres Strait Islander or Māori to support them during their studies in either the Clinical Radiology or Radiation Oncology Training Program.

The scholarship can be used towards training expenses for educational activities such as training fees, examination sitting fees, training workshop or conference attendances, research projects or other professional development activities deemed appropriate by the College, or for an Indigenous doctor who has applied to and been accepted onto the training program.

Up to six individual scholarships are made available each year.

For more information, refer to the Annual Indigenous Scholarship.

Useful Resources for Doctors

The College website contains links to helpful resources.

External resources include 24/7 phone confidential helplines specifically for doctors. Phone lines are staffed by senior GPs and experienced counsellors trained in doctor's health.

Learning modules and information to read online or download focus on maintaining your wellbeing, practising self-care, recognising burnout and the importance of having your own GP.

For more information, refer to the Wellbeing for Trainees.

Section Thirteen
TRAINING RESOURCES

EDUCATION OPPORTUNITIES

Network Education Program

Accredited training networks and sites provide a range of training and teaching activities to support trainees completing the training program.

It is expected that the network provides a formal and structured education program throughout Phases 1 and 2 of the training program which:

- Is aligned with the requirements of the learning outcomes
- Covers the breadth of the learning outcomes, including Phase 1 requirements such as anatomy, applied imaging technology (AIT), and intrinsic roles outcomes
- Utilises the different learning opportunities across the training sites within the network
- Is planned, promoted and monitored for effectiveness.

Sites that cannot offer tutorials on anatomy, applied imaging technology and/or pathology should facilitate trainees' attendance at external courses.

Site-Based Activities

In addition to the Network Education Program, it is expected that the training site will provide regular formal and informal training tutorials covering the following:

- Key Conditions (for trainees who have recently commenced the training program and are preparing for the Key Conditions Assessment)
- Topic areas as defined in the Learning Outcomes document
- Fluoroscopic procedures
- Procedural radiology

Examples of training and teaching activities include:

- Supervised image interpretation and reporting with feedback
- Supervised fluoroscopic procedures with feedback
- Supervised procedural radiology with feedback
- Case review sessions
- Reviewing archived teaching cases
- Topic tutorials
- Lectures
- Grand Rounds
- Clinical radiology meetings and multidisciplinary meetings
- Peer review meetings
- Participation in morbidity and mortality meetings
- Participation in radiological error or "miss" meetings
- Participation in other quality improvement and quality assurance processes.

These activities should complement formal teaching sessions.

Formal Teaching Sessions

Trainees must have the opportunity to be engaged in a minimum of 1-2 hours per week of formal teaching. A formal teaching session is defined as a regularly scheduled teaching session in which the content has been planned, where the time, topic and presenter of the session have been notified to the trainee group ahead of time, and where trainees have protected time to attend the session.

Formal teaching sessions may be in the form of a didactic lecture, an interactive tutorial or another appropriate format. Formal teaching sessions may also be face-to-face or via video conferencing. A formal teaching program should encompass a range of formats and be linked to the Clinical Radiology Learning Outcomes document.

Training departments are encouraged to involve trainees in development and implementation of a teaching program. However, it should never be the sole responsibility of the trainees to plan topics or ensure that sessions occur.

Trainees who require assistance in specific areas are encouraged to seek informal tutorials. However, these do not constitute formal teaching time.

Teaching Sessions and Protected Time

It is acceptable for a formal teaching series to be held out of hours if a minimum of 2 hours of protected time is already provided for teaching sessions during normal working hours. It is understood that in most larger departments some formal teaching sessions will be missed from time to time due to night shift/on-call responsibilities etc.

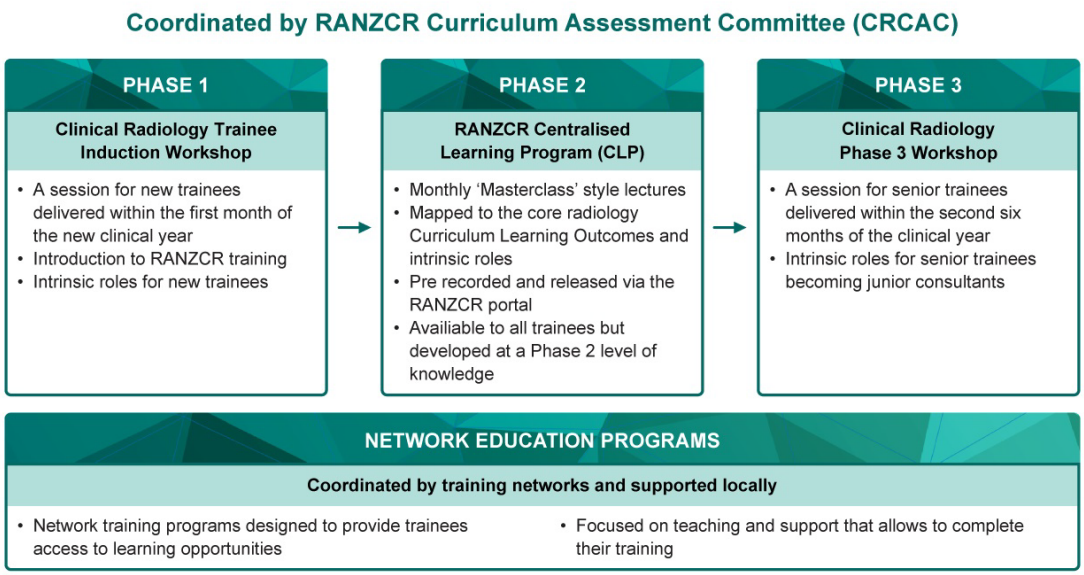
Centralised Learning Program

The Centralised Learning Program (CLP) is a monthly lecture program, where a new session is available each month via the RANZCR webcast library for all trainees to view on demand. Local sites will determine whether the content is viewed centrally, or by the trainee individually. Viewing of the lecture series is not compulsory, but highly recommended.

Each session is designed around a theme, for example ‘Neuroradiology’, and while content will be mapped to the Curriculum Learning Outcomes, lectures are not designed to be exhaustive or comprehensive. Themes range from systems-based clinical radiology, through procedural and interventional radiology, nuclear medicine and intrinsic roles. Lectures are designed to expand trainees' knowledge and give them access to expert educators who can help them explore selected topics in greater depth. This lecture series is designed to complement teaching programs that already occur at a Local Network or Branch level, aiming to provide high yield knowledge to equip trainees for successful post-Fellowship practice.

The content is aimed at the level of an early Phase 2 trainee, but available to all trainees, Fellows and IMGs.

For more information, refer to the Centralised Learning Program.



RANZCR Annual Scientific Meeting

Although not a mandatory requirement of the training program, trainees may find that attending the RANZCR Annual Scientific Meeting (ASM) is of educational value.

The ASM takes place in September-October each year, at a different location in Australia or New Zealand. In addition, the New Zealand Branch also runs an ASM, which normally takes place in August.

Training Learning Day

The Trainee Learning Day forms part of the College's Annual Scientific Meeting (usually Friday). The program for the day is determined by the Clinical Radiology Trainees Committee and usually includes teaching sessions, trainee presentations (Branch of Origin, Varian session), a discussion forum and dedicated topical sessions.

Branch of Origin

The RANZCR Branch of Origin was established to support the research requirements of Clinical Radiology Training Program.

Participating Branches of the College hold an annual Trainee Presentation Evening, where trainees present their research work in line with the training research requirements. The most outstanding presentation from each Branch then presents at the College's Annual Scientific Meeting in the 'Branch of Origin' session, as part of the Trainee Learning Day.

There are awards/prizes available to trainees at a Branch level and at the national level, including a perpetual shield.

For further information, refer to **Section 9 – Research, Oral Presentation.**

For more information, refer to Annual Scientific Meetings.

ONLINE RESOURCES

RANZCR Website

Resources are linked to the Curriculum Learning Outcomes document, including recommended reading for applied imaging technology and anatomy. There are also multiple local and international general radiology resources. Resources include case studies, Apps, podcasts and videos.

RANZCR Webcast Library

The College has made available recorded sessions from some of the former scientific meetings and local Branch events through a webcast library.

Cultural Safety

Australian Definition

'Cultural safety is determined by Aboriginal and Torres Strait Islander individuals, families and communities. Culturally safe practice is the ongoing critical reflection of health practitioner knowledge, skills, attitudes, practicing behaviours and power differentials in delivering safe, accessible and responsive healthcare free of racism.' (AHPRA, 2020)

New Zealand Definition

'The awareness that cultural safety encompasses a critical consciousness where healthcare professionals and healthcare organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities'. (MCNZ, 2019)

RANZCR Statement of Intent for Māori, Aboriginal and Torres Strait Islander Health

The College is committed to supporting the professions of clinical radiology and radiation oncology to contribute to equitable health outcomes for Māori, Aboriginal and Torres Strait Islander Peoples. This work is central to the strategic objectives of the College and is reflected in the College's Strategic Plan.

This is supported by the Māori, Aboriginal and Torres Strait Islander Executive Committee (MATEC). MATEC is a bi-national peak committee to provide authoritative advice to the Board, the Faculty of Radiation Oncology, the Faculty of Clinical Radiology, and other key committees, on how to significantly reduce disparities in health outcomes for Māori, Aboriginal and Torres Strait Islander Peoples.

To view the *RANZCR Statement of Intent* in its entirety, refer to the Indigenous Health and Engagement.

Online Trainee Resources

Throughout the Training Program, trainees are encouraged to develop their cultural competency and reflect on their own practice of cultural safety. To support trainees, the College has developed a suite of Cultural Safety resources available on the College website providing access to a range of learning modules, podcasts, articles and websites.

For more information, refer to Cultural Safety Resources.

As part of the training program, trainees are required to complete the Royal Australasian College of Physicians (RACP) Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource by the end of Phase 2

Refer to **Online Learning - Section 5 Structured Learning Experiences** for further information on the Cultural Safety training requirement.

Artificial Intelligence

Artificial Intelligence (AI) can help clinicians to better diagnose illness, coordinate treatment plans and increase the efficiency of care delivery across healthcare. It allows for a more efficient and accessible healthcare system that delivers improved outcomes for patients.

The College has reinforced Australia and New Zealand at the forefront of the application of AI in healthcare with the release of world-leading AI Standards of Practice. The Standards provide a risk-management framework to ensure the safe application of AI in radiology practice.

To provide Clinical Radiology trainees with the opportunity to increase their awareness and understanding of AI, an online resources page has been developed exploring the following topics:

- Principles of AI
- Ethical principles
- AI in Clinical Radiology
- Bias in AI
- Neural networks and deep learning

For more information, refer to Artificial Intelligence.

InsideRadiology

InsideRadiology aims to be the leading Australasian resource on clinical radiology tests, procedures, and interventions, providing up-to-date information to health consumers and health professionals and improving doctor-patient communication.

InsideRadiology has two key audiences:

- Health consumers (patients, their families and friends); and
- Health professionals (referring clinicians and allied health professionals).

InsideRadiology is a conduit of communication between RANZCR, health consumers, and health professionals; further promoting the role and value of clinical radiology and clinical radiologists in patient care.

For more information, refer to InsideRadiology.

Peer Review Online Courses

Trainees have the opportunity to be trainee reviewers for JMIRO. Trainees who are interested in being involved must provide evidence of completing one of the following courses.

Web of Science Academy

The Web of Science Academy (previously Publons Academy) is a practical peer review training course developed together with expert reviewers and editors to teach the core competencies and skills needed in peer review.

For more information, refer to the Web of Science Academy website.

Wiley Review Academy

The Wiley Reviewer Academy is an online peer review training course to guide trainees through the essentials of peer review.

For more information, refer to the Wiley website.

For more information on how to become a trainee reviewer, or if you have any queries, please contact research@ranzcr.edu.au.

Section Fourteen
TRAINING POLICIES

LIST OF COLLEGE POLICIES

Clinical Radiology Policies

The following policies apply to the Faculty of Clinical Radiology:

Accreditation Standards for Education, Training and Supervision of Clinical Radiology Trainees

Accreditation of Training Time for Trainees Working After Hours or On Call Policy

Supervision, Training and Teaching of Clinical Radiology Trainees - Protected Time Policy

Trainees and Unaccredited Sites Policy – Radiology

Phase 1 Examinations (Clinical Radiology) Policy

Phase 2 Examinations (Clinical Radiology) Policy

Part 2 Examination (Clinical Radiology) Policy

Training Policies

The following policies apply to the Faculty of Clinical Radiology and the Faculty of Radiation Oncology:

Training Requirements (Clinical Radiology) Policy

Recognition of Prior Learning Policy

Interrupted and Part-Time Training Policy

Performance and Progression Policy

Remediation in Training Policy

Consideration of Special Circumstances Policy

Withdrawal from Training Policy

Re-entry into the Training Program Policy

Selection into Specialty Training Policy

College Wide Policies

The following policies apply to College activities, including training:

Reconsideration, Review and Appeal of Decisions Policy

RANZCR Privacy Policy (which includes the Confidential Information Policy)

RANZCR Conflict of Interest Policy

RANZCR Grievance Policy

Whistleblower Policy

RANZCR Fees Policy

BULLYING, DISCRIMINATION AND HARASSMENT

The College is committed to ensuring equality of opportunity and that the training environment is free from bullying, discrimination and harassment.

The College's Grievance Policy:

- Clearly defines bullying, discrimination and harassment and the related offenses of victimisation and defamation;
- Identifies the responsibilities of the College and College stakeholders, including trainees; and
- Outlines the process for raising a grievance in relation to bullying, discrimination and/or harassment and the consequences if a stakeholder engages in bullying, discrimination or harassment of another stakeholder.

All College stakeholders, including trainees, have a responsibility to treat each other fairly and with respect. They must:

- Comply with this policy and not engage in bullying, discrimination and/or harassment;
- Intervene if bullying occurs and indicate that it is unacceptable behaviour;
- Bring this policy to the attention of anyone being bullied, harassed or discriminated against;
- Report any bullying, discrimination or harassment of a College stakeholder to the Grievance Officer;
- Assist in the investigation of complaints in accordance with this policy;
- Maintain complete confidentiality if they provide or receive information during the investigation of a complaint; and
- Not engage in the victimisation of a College stakeholder for raising a grievance.

Refer to the Grievance Policy.

CONSIDERATION OF SPECIAL CIRCUMSTANCES

This policy applies to those examinations or assessments which are formally scheduled and not able to be altered. Where the assessment is on a one to one basis and scheduled by mutual agreement, a request for a change in time or date may be made directly to the relevant Director of Training (DoT).

The College will consider an application for Consideration of Special Circumstances where circumstances or conditions may have significant impact on or disadvantage a trainee's ability to complete an assessment or examination within the standard procedures and timing.

The College is unable to determine in advance all circumstances that might lead to the granting of Consideration of Special Circumstances. Each case will be considered on its merits in accordance with this policy.

Types of Circumstances

Consideration of Special Circumstances may be granted to an Applicant who has undertaken or will undertake a College examination or assessment where a Special Circumstances related incident has had, or has the potential to have, an adverse effect on their performance or precluded, or will preclude them from participating in the examination or assessment.

Applications for special circumstances are classified on the following grounds:

- Medical
- Compassionate
- Pre-existing, Permanent and/or Chronic Impairment or Disability
- Religious Observance.

Trainees who believe their circumstances have the potential to impact on their performance, should consider deferment of the Examination or training requirement. An application can be submitted for consideration of special circumstances for the determination of remaining attempts.

Applications for religious observance requirements, where that observance prohibits participation in an assessment or examination at a particular time or on a particular day will also be considered.

The following circumstances do not constitute adequate grounds for consideration of special circumstances:

- Mistaken timing or difficulties locating an examination or assessment venue
- The inability of an individual to organise their time effectively in order to meet assessment requirements/deadlines
- English as a second language
- Circumstances where alternative arrangements were available.

For more information, including further detail on the application process and the evidence required refer to the Consideration of Special Circumstances Policy.

RECONSIDERATION, REVIEW AND APPEAL OF DECISIONS

The College's Review, Reconsideration and Appeal of Decisions policy enables the College and those who have been subject to a decision which they consider unsatisfactory, to embark upon a defined pathway to enable resolution.

The policy provides the mechanism whereby any members or other individuals and organisations, adversely affected by a decision of the College can ensure that due processes were followed in reaching the decision and that proper consideration of evidence presented and available to the College in relation to the decision and any reconsideration, review or appeal of that decision.

The process consists of three stages:

- Stage One – Reconsideration of the original decision
- Stage Two - Review of the original decision
- Stage Three - Formal Appeal conducted by an Appeals Committee

The Reconsideration Stage and the Review Stage provide for an internal deliberation/assessment which may resolve the matter.

The Appeal process, as set out in the Policy, involves the appointment of an Appeals Committee. This provides a structured, formal approach to addressing challenging decisions. The Formal Appeal Stage has strict procedures to ensure it is conducted in accordance with principles of procedural fairness and transparency.

For more information, including further detail on the various decisions subject to Reconsideration, Review and Appeal and the application process refer to the Reconsideration Review and Appeal of Decisions Policy.

WITHDRAWAL FROM TRAINING

The overwhelming majority of trainees learn and progress through the training program in around five years. Some trainees may take a little longer or need some targeted training and increased monitoring and review along the way, by undertaking an agreed action plan or remediation plan, to support them to achieve their goals. On rare occasions, trainees voluntarily withdraw, or are withdrawn from, the training program.

Categories of Withdrawal

Category One **Voluntary Withdrawal**

Where a trainee notifies their DoT that they are withdrawing from the training program and resigning their College membership.

Category Two **Competence**

Where there is evidence that a trainee is unable to sustain an acceptable level of performance to progress through training at the rate expected and/or within the completion timeframes.

Category Three **Compliance**

Where a trainee fails, neglects or refuses to comply with the rules of the training program as documented in this handbook or College policies or the directions of:

- Their DoT
- The College.

Category Four **Misconduct**

Where a trainee is found by the College to have behaved in a way that constitutes misconduct as defined in the Policy, such as acts of plagiarism or fraudulent completion of assessments.

Category Five **Capacity**

Where a trainee is willing, but for reasons other than those listed above, are unable to continue their training.

Trainees who receive a written notice of withdrawal, will have the opportunity to discuss the reasons for the notice. They are also eligible to request reconsideration of their withdrawal as per the Reconsideration, Review and Appeal of Decisions Policy.

For more information, refer to the Withdrawal from Training Policy.

RE-ENTRY INTO THE TRAINING PROGRAM

The College recognises that some trainees may wish to voluntarily discontinue their progression in the Training Program. The College also upholds that trainees who do not achieve (or are unable to achieve) the required standards of training and practice, are withdrawn from the Training Program.

In certain instances, trainees who voluntarily withdraw or are withdrawn by the College and wish to re-enter their respective Training Program, may be permitted to re-enter.

For more information, refer to the Re-Entry into the Training Programs Policy.

Section Fifteen
COMMUNICATION AND ENGAGEMENT

COMMUNICATION

Newsletters

The College communicates with trainees and members regularly via a quarterly newsletter (Inside News) and monthly eNewsletters (eNews). Each newsletter is tailored to specific member audience to share latest news, events and updates.

Inside News

The aim of the Inside News publication is to increase members' awareness of the activities of the College and inform of issues affecting the clinical radiology and radiation oncology professions.

Members are able to contribute to Inside News in various areas including:

- Member research;
- Developments in area of special interest;
- Professional learnings; and
- Tips that can be of benefit to fellow members.

Members can write a letter to the editor, submit an article or a news item by contacting the Inside News team

For more information, contact the Inside News team at editor@ranzcr.edu.au.

eNewsletters

Latest information, events and reminders from the College is distributed in various eNews publications. Below is the list of eNews publications:

- Trainee eNews – published monthly
- DoT eNews – published monthly
- Faculty eNews – published monthly

For more information, contact CRTraining@ranzcr.edu.au.

Journal of Medical Imaging and Radiation Oncology

Journal of Medical Imaging and Radiation Oncology (JMIRO) is the official journal of The Royal Australian and New Zealand College of Radiologists. The journal aims to publish original research articles of scientific excellence in radiology and radiation oncology, case studies and commissioned reviews. Manuscripts are judged on the basis of their contribution of original data, ideas or interpretation.

The Journal attracts submissions from around the world, a reflection of its international appeal, reputation, and continued encouragement of original data, ideas and interpretation. All articles are peer reviewed.

Journal Access

RANZCR members, including trainees, have full access to JMIRO electronically by logging into JMIRO online or from the Home page of MyRANZCR, select "Find Past Editions of JIMIRO" or print copy via post.

Contribute to JMIRO

Information for potential JMIRO contributors, including author guidelines and submission instructions, can be found on the publisher's website.

Trainee Reviewers

The College offers the opportunity for trainees to become peer reviewers for submissions to JMIRO.

Peer review is designed to assess the validity, quality and often the originality of articles for publication. It is the foundation for safeguarding the quality and integrity of scientific research.

The opportunity to review submissions to JMIRO will provide an excellent insight into research in medical imaging and radiation oncology and it will allow you to develop your research skills and knowledge. Becoming a peer reviewer allows you to see research before it is published, and the experience will enhance your CV.

For more information, including how to apply, visit the current opportunities page or visit the JMIRO page on the College website.

For more information on peer review online courses, refer to Online Resources in **Section 13 - Training Resources.**

Connecting with the College

Trainees, DoTs, Clinical Supervisors and others involved in training are able to stay connected with the College through regular College communication channels:

Email

CRTraining@ranzcr.edu.au

Phone

Trainee Help Desk +61 2 9268 9700

RANZCR Reception +61 2 9268 9777

Website

www.ranzcr.com

Socials

Facebook

LinkedIn

FEEDBACK ON THE TRAINING PROGRAM

Feedback from trainees, Clinical Supervisors and Directors of Training (DoTs) is essential to ensure high quality training and for the College to achieve its purpose of optimising health outcomes for our patients and society. There are several avenues from which the program is evaluated, and all involved can contribute to its continual improvement.

Trainee Liaison Officer

The Trainee Liaison Officer (TLO) supports the wellbeing of trainees and is a central point of contact for all trainees in the training program. The TLO delivers outreach to all accredited training sites with a particular focus on rural and regional areas. It is recognised that sometimes a conversation about concerns is more appropriate than completing a survey.

Trainees can provide confidential feedback on the training program via the TLO. Specific issues raised by trainees remain confidential and only general feedback (which does not identify individual trainees and their circumstances) may be escalated for consideration.

To organise a confidential discussion with the TLO, email tlo@ranzcr.edu.au alternatively, trainees can SMS or call +61 437 893 973.

For more information on the TLO, refer to **Section 12 – Additional Trainee Support.**

Clinical Radiology Trainees Committee

The Clinical Radiology Trainees Committee (CRTC) represents the interests of RANZCR clinical radiology trainees within College structures. Trainees are encouraged to become involved in College governance to ensure their perspective, and that of their colleagues, is considered in decision making regarding the training program.

CRTC members serve on all Clinical Radiology education and training committees, and also on Council. Key objectives of the CRTC include to facilitate opportunities for communication between trainees and the College and advocating for trainee welfare and general wellbeing.

Nominations and Elections

Trainees are able to nominate to join the CRTC on an annual basis. It is intended that all Networks are represented on CRTC, with voting for trainee representatives commencing in August for the following year. The term of office for each committee member shall be one year, commencing 1 January of the year after election. There is no limit on re-election, other than the requirement to be a trainee.

Representation and Communication

If trainees have concerns about the training program, Clinical Supervisors or DoTs, they can make contact with their Branch trainee representative. The trainee representative can de-identify individual feedback but raise any underlying issues for discussion with the Committee.

In the monthly trainee eNews, the Chair of the CRTC provides a message to all trainees on committee progress, latest updates and how to contact the CRTC directly to provide feedback or share any training related items.

For more information, refer to Clinical Radiology Trainees Committee Terms of Reference.

Trainee Assessment of Training Site

The Trainee Assessment of Training Site (TATS) is a key mechanism for specific trainee feedback and must be completed every six months. Trainees are asked to rate their training location and their training experience on a range of dimensions and are also invited to comment on any particular strengths and weaknesses of the training site.

Survey data is held in confidence by the College. The data is processed and deidentified by the TLO to ensure trainee confidentiality is maintained when ratings and comments are provided to relevant College departments to assist with training site visits. .

For more information on TATS, refer to **Section 7 – Monitoring and Review.**

Medical Training Survey

Commencing from 2019, the Medical Training Survey (MTS) is a longitudinal study that tracks the quality of medical training and is administered by the Medical Board of Australia and the Australian Health Practitioner Regulation Agency. Stringent privacy controls make it safe and confidential for trainees to take part.

Anonymous feedback from all doctors in training deliver robust national data that will help identify strengths in medical training, as well as potential issues so these can be addressed. Previous reports are available to review. Reports are published for specific training cohorts (e.g. speciality training) and individual Colleges. Trainee responses on this survey are considered by the Australian Medical Council in the accreditation review of specialist medical colleges.

The survey is open during the medical renewal period 3 August to 30 September.

For more information, refer to the Medical Training website.

RANZCR Specialty Training Monitoring and Evaluation Survey

The College is committed to regularly improving the training program and giving trainees, Directors of Training and Clinical Supervisors an opportunity to provide feedback on various aspects of the program. An annual comprehensive monitoring and evaluation (M&E) survey will be conducted each October, to identify what is working well and areas requiring additional support or improvement. This process, aligned with the RANZCR Monitoring and Evaluation Framework, will systematically review all aspects of the program, including curriculum content, teaching, supervision, assessment, trainee experience and progress. More specifically, the survey will provide:

- Insights on key program indicators, which allow for continuous review and tracking of trends
- Allow for in depth, cyclical review of specific program aspects to evaluate alignment with best practice and training program relevance and effectiveness.

The survey is anonymous, and the results will be collated into a report and presented to the relevant education and training committees with recommendations for review and action. There will also be a report published on the RANZCR website with recommendations available for members to view.

Director of Training and Clinical Supervisor Support

A newly created role within the College Secretariat, the Director of Training and Clinical Supervisor Support Officer provides support to the DoTs, Clinical Supervisors as well as Network Training Directors. The DoT and Clinical Supervisor Support Officer helps to facilitate the delivery of training and upskilling of trainers and supervisors to meet the needs of the training program, including applications, induction and training, recognition and succession planning, training site and network enquiries, and engagement with Education Support Officers.

To arrange a discussion, please email CRTraining@ranzcr.edu.au or call on +61 2 9268 9787.

Escalating Concerns and Complaints

If trainees have acute concerns about their training experience at a training site, they are encouraged to raise concerns initially with their Clinical Supervisor or DoT. If the issue is not resolved, or is regarding a Clinical Supervisor or DoT, trainees should contact their Network Training Director.

The College is committed to ensuring equality of opportunity and that the training environment is free from bullying, discrimination and harassment. There are formal processes to register complaints, should the need arise, and these are documented in the College's Grievance Policy.

For more information refer to **Section 14 – Training Policies.**

Section Sixteen
NUCLEAR MEDICINE PATHWAY

NUCLEAR MEDICINE PATHWAY

Nuclear Medicine Advanced Training Program Pathway

Trainees are provided with an opportunity to undertake Nuclear Medicine Training while completing their clinical radiology training, thus completing a dual credential.

The Nuclear Medicine Advanced Training Program pathway is administered by the Royal Australasian College of Physicians (RACP) and supported by the College through a joint college training committee made up of representatives of the RACP and The Royal Australian and New Zealand College of Radiologists (RANZCR).

Trainees can apply for Nuclear Medicine Training on completion of Phase 2 for commencement in Phase 3.

Phase 2 Requirements for Dual Pathway Trainees

Below is a summary of the training requirements that trainees must complete by the end of Phase 2, prior to applying for Nuclear Medicine Training.

Structured Learning Experiences	**Attachments** Trainees must complete attachments for nuclear medicine, breast, obstetrics and gynaecology, paediatrics and procedural radiology. **Experiential Training Requirements** By the end of Phase 2, trainees must have completed the following as a minimum: • 10 000 plain x-rays • 5 000 CT studies (including 20 CTC studies and 50 CTCA studies) • 750 MRI studies • 200 nuclear medicine studies • 50 bone mineral density (BMD) studies • 600 mammograms • 100 breast ultrasounds **Online Learning** • Research Methodology Course • Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety Course.
Work-Based Assessments	**Reporting Assessments** During Phase 2 trainees must complete 10 imaging interpretation and reporting sessions per six-month period. **Performed Ultrasound Assessment** • 50 paediatric ultrasounds, with 1 in 5 assessed and the remainder to be logged, demonstrating that the trainee can perform the procedure with minimal direct supervision (Level 3). • 50 obstetric or gynaecological ultrasounds, with 1 in 5 assessed and the remainder to be logged, demonstrating that direct supervision is no longer required (Level 3). **Fluoroscopy Procedures Assessment** • 25 general fluoroscopic procedures, with 1 in 5 assessed, demonstrating that the trainee can perform the procedure and direct supervision is no longer required (Level 4).

	• 10 additional paediatric fluoroscopic procedures, with 1 in 5 assessed and the remainder to be logged demonstrating that the trainee can perform the procedure with minimal direct supervision (Level 3). **Procedural Radiology Assessment** Trainees must perform 100 core skills across four categories, with 1 in 5 assessed and the remainder to be logged, demonstrating that direct supervision is not required (Level 4). **Clinical Radiology/Multidisciplinary Meeting Assessment** Attendance and involvement in 50 Clinical Radiology/Multidisciplinary meetings, including 15 multidisciplinary meetings with a pathologist present, demonstrating that the trainee can independently prepare and present all aspects of the meeting (Level 4).
Research	Two CATs must be completed during Phase 2. Trainees must complete their research project and submit a manuscript of their project and notify the College that it has been accepted for publication or peer review.
Monitoring and Review	DoT Review every six months. CSF every six months. One MSF assessment. TATS every six months.

Examination	The Phase 2 written examinations consist of the:
	• Pathology Examination (three hours duration)
	• Clinical Radiology Examination
	  ○ MCQ (2 hours duration)
	  ○ Case Reporting Examination (three hours duration).
	
	Trainees must complete a minimum of 24 months FTE (irrespective of time spent in Phase 1) before sitting the Clinical Radiology Written Examination.
	
	Both Written Examinations must be successfully completed for trainees to be eligible to sit for the Objective Structured Clinical Examination in Radiology (OSCER).

Completion of Phase 2 and eligibility for nuclear medicine	Trainees may present for a portfolio review by the LGC after a minimum of 48 months of accredited training to progress from Phase 2 to Phase 3. Trainees who have completed all the requirements may apply for the Nuclear Medicine Advanced Training Program.

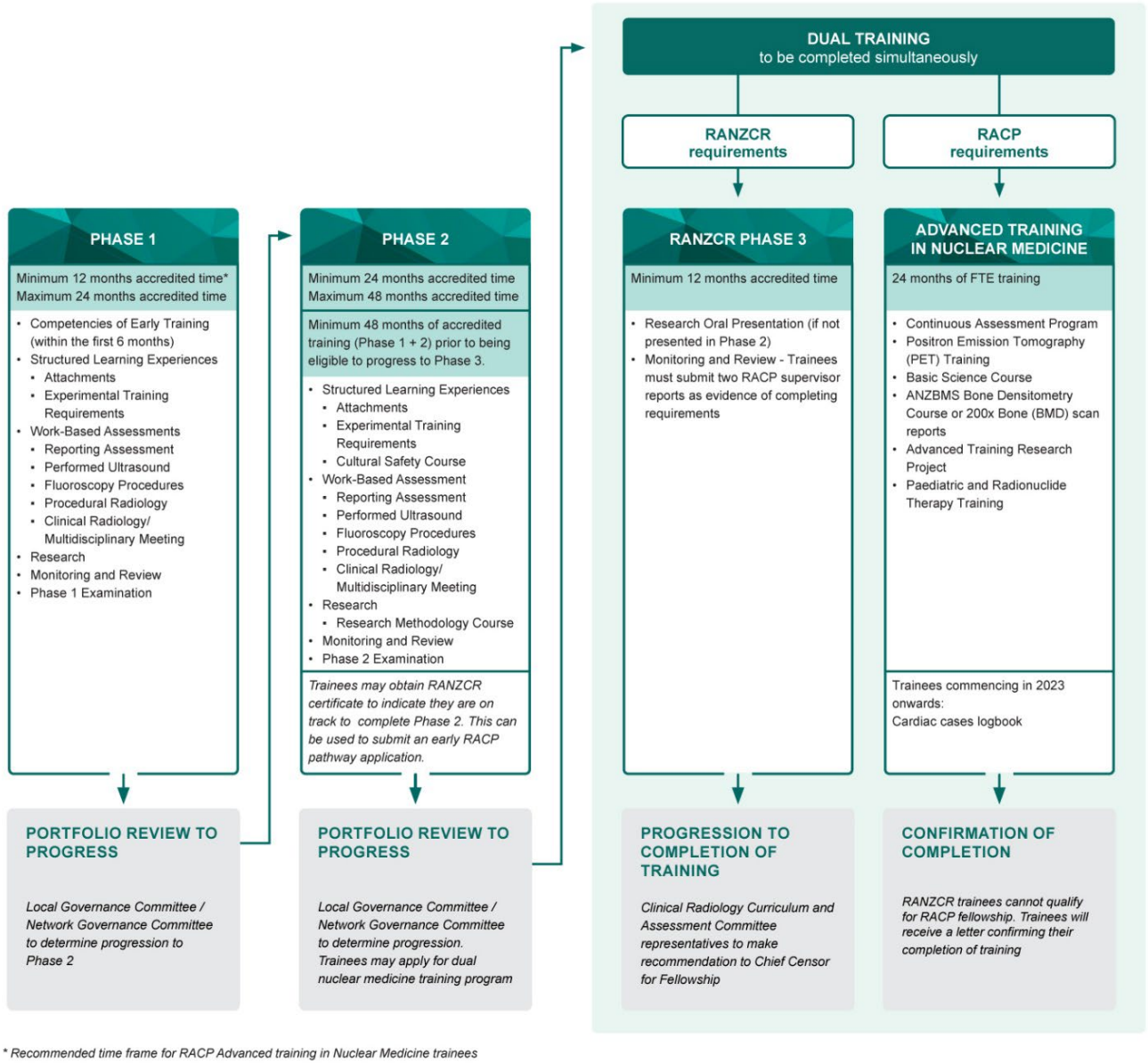
Transitioning trainees have different requirements and should email CRtraining@ranzcr.edu.au for more information.

Trainees must submit a Certificate of Confirmation letter to the RACP confirming completion of their training requirements. To obtain a confirmation letter, please email CRtraining@ranzcr.edu.au.

Phase 3 – Complete simultaneously with Nuclear Medicine

Anticipated Completion of Phase 3	Minimum time: 12 months accredited training time Trainees undertake the equivalent of sub-specialty rotations by completing the Nuclear Medicine Advanced Training Program.
Structured Learning Experiences	Trainees must complete all ETRs and online learning courses by the end of Phase 2.
Work-Based Assessment	Trainees must complete all WBAs by the end of Phase 2. Trainees will not have to complete Reporting Assessments in Phase 3.
Research	Trainees must present their research orally at a local branch or network meeting, if not already presented in Phase 2. Trainees will not have to complete CATs in Phase 3.
Monitoring and Review	Trainees must submit two RACP supervisor reports as evidence of completion of 12 months of training and include these in the Fellowship application. It is recommended that trainees complete one MSF assessment during the Nuclear Medicine Advanced Training Program.
Progression to Completion of Training	Trainees are eligible for progression to Completion of Training after 12 months in the Nuclear Medicine Advanced Training Program. Trainees may submit a progression application two months in advance. Applications will be reviewed by representatives from the Clinical Radiology Curriculum Assessment Committee (CRCAC).
Admission to Fellowship	When the College is notified by CRCAC that the trainee's application has been approved for completion of training, a fellowship application pack will be sent to the trainee to complete and return. The completed application will be sent to the Chief Censor for ratification and to the Board for approval.

Overview of Nuclear Medicine Advanced Training Program Dual Pathway



* Recommended time frame for RACP Advanced training in Nuclear Medicine trainees

For more information refer to the RACP website.

APPENDICES

APPENDIX 1 - ACRONYMS

AEDT	Australian Eastern Daylight Time
AERP	Anatomy Examination Review Panel
AEST	Australian Eastern Standards Time
AI	Artificial Intelligence
AIT	Applied Imaging Technology
AITERP	Applied Imaging Technology Examination Review Panel
ASM	Annual Scientific Meeting
BEO	Branch Education Officer
BMD	Bone Mineral Density
CanMEDS	Canadian Medical Education Directives for Specialists
CAT	Critically Appraised Topics
CR	Clinical Radiology
CRCAC	Clinical Radiology Curriculum Assessment Committee
CREAC	Clinical Radiology Examination Advisory Committee
CRETC	Clinical Radiology Education and Training Committee
CRQ	Constructed Response Questions
CRTC	Clinical Radiology Trainees Committee
CS	Clinical Supervisor
CT	Computed Tomography
DoT	Director of Training
EBM	Evidence-Based Medicine
ETR	Experiential Training Requirements
FAQ	Frequently Asked Questions
FRANZCR	Fellow of The Royal Australian and New Zealand College of Radiologists
FTE	Full Time Equivalent
GP	General Practitioner
IMG	International Medical Graduate
JMIRO	Journal of Medical Imaging and Radiation Oncology
LAN	Local Area Network
LGC	Local Governance Committee
MATEC	Māori, Aboriginal and Torres Strait Islander Executive Committee
MCQ	Multiple Choice Questions
MCU	Micturating Cystourethrogram
MDM	Multidisciplinary Meetings

NESO	Network Education Support Officer
MRI	Magnetic Resonance Imaging
MSF	Multi-Source Feedback
NET	Naso-enteric tube
NGC	Network Governance Committee
NGT	Nasogastric tube
NICU	Neonatal Intensive Care Unit
NM	Nuclear Medicine
NTD	Network Training Director
OPE	Online Practice Examination
OSCER	Objective Structured Clinical Examination in Radiology
PICO	Patient, Intervention, Comparison, Outcome
PRRT	Peptide Receptor Radionuclide Therapy
RACP	The Royal Australasian College of Physicians
RANZCR	The Royal Australian and New Zealand College of Radiologists
RCT	Randomised Controlled Trials
RPL	Recognition of Prior Learning
SAQ	Short Answer Questions
TA	Transabdominal
TATS	Trainee Assessment of Training Site
TV	Transvaginal
VSA	Very Short Answer Questions
WAN	Wide Area Network
WBA	Work-Based Assessment

APPENDIX 2 – TRAINEE TRANSITION TO TP 2022

This information was distributed to all trainees in November 2021 and has been included for reference. It has been updated to include relevant changes to the Training Program regarding examinations and WBAs.

Clinical Radiology Trainees

Transition to Phases of Training in the 2022 Training Program

At the time of transition in February 2022

Trainees who have not successfully completed the Phase 1 Examination will transition into Phase 1 of 2022 Training Program (2022 TP).

To transition into Phase 2, trainees must have:

- Completed a minimum of 12 months of accredited training,
- Pass the Phase 1 Examinations, and
- Be up-to-date with all their assessments.

To transition into **Phase 3**, trainees must have:

- Completed a minimum of 48 months accredited training,
- Pass the Phase 2 Examinations, and
- Be up-to-date with their assessments.

Trainees transitioning into Phase 1 in 2022

These are the requirements in order to progress into Phase 2.

Time	Minimum	Complete training time in Phase 1 to a minimum of 12 months accredited training time.
Competencies of Early Training	Radiography Attachment	Must complete 1 week/10 sessions.
	Key Conditions Assessment	Trainees to have satisfactorily completed a Key Conditions Assessment (entrustability level 3). Sign off from DoT in current program deemed equivalent.
Work-based Assessments	Reporting Assessments	10 sessions per six months in the 2022 TP demonstrating progress to required levels.
	Performed Ultrasound Assessments	• 50 performed general ultrasound assessments. • Ultrasounds logged in the program can be used toward completion of the Work-Based Assessment requirement. • Any outstanding ultrasounds at the time of transition will be assessed against the entrustability scale.

	Fluoroscopic Procedures Assessment	• Working towards 25 general and 10 paediatric fluoroscopic procedures assessments. • Fluoroscopic procedures completed prior to transition, can be used towards completion of the WBA requirements. • Any outstanding fluoroscopic procedures at the time of transition will be assessed against the entrustability scale.
	Procedural Radiology Assessment	• Working towards 100 procedures. • Procedures logged in the current program can be used toward completion of the Work-Based Assessment requirement. • Any outstanding procedures at the time of transition will be assessed against the entrustability scale.
	Clinical Radiology / Multidisciplinary Meeting Assessment	• Working towards 50 Clinical Radiology / Multidisciplinary Meeting Assessments. • Clinical Meetings completed prior to transition, can be used towards completion of the WBA requirements. • Any outstanding clinical meetings and MDMs at the time of transition will be assessed against entrustability scale.
Structured Learning Experiences	Experiential Training Requirements	Trainees should demonstrate progress towards achievement of ETRs, as listed in the Trainee Handbook. It is highly recommended that trainees complete: • 1,000 – 2,000 General X-Rays • 2,000 CT studies • 100 MRI studies
Monitoring and Review	CS Feedback Forms	DoT to ensure CS Feedback Forms every 6 months of accredited training time in 2022 TP.
	DoT Review	Complete a DoT Review every 6 months of accredited training time.
	MSF	One MSF (current or 2022 TP)
Examinations		Must have completed Phase 1 Examinations
Research	Research	Trainees must fulfill old training program research requirements.

Trainees transitioning into Phase 2 in 2022

These are the requirements in order to progress into Phase 3.

Time	Minimum	Must have completed 48 months accredited training time
Work-based Assessments	Reporting Assessments	10 sessions per six months in 2022 TP demonstrating progress to required levels.
	Performed Ultrasound Assessment	• Working towards 50 obstetric and gynaecological ultrasound assessments. • Working towards 50 paediatric ultrasound assessments. • Paediatric and obstetric and gynaecological ultrasounds logged in the current program can be used toward completion of the Work-Based Assessment requirement. • Any outstanding ultrasounds at the time of transition will be assessed against the entrustability scale.
	Fluoroscopic Procedures Assessment	• Working towards 25 general fluoroscopic procedures assessments. • Working towards 10 paediatric fluoroscopic procedure assessments. • Fluoroscopic procedures completed prior to transition, can be used towards completion of the WBA requirements. • Any outstanding fluoroscopic procedures at the time of transition will be assessed against the entrustability scale.
	Procedural Radiology Assessment	• Working towards 100 procedures. • Procedures logged in the current program can be used toward completion of the Work-Based Assessment requirement. • Any outstanding procedures at the time of transition will be assessed against the entrustability scale.
	Clinical Radiology / Multidisciplinary Meeting Assessment	• Working towards 50 Clinical Radiology / Multidisciplinary Meeting Assessments. • Clinical Meetings completed prior to transition, can be used towards completion of the WBA requirements. • Any outstanding Clinical meetings and MDMs at the time of transition will be assessed against entrustability scale.
Structured Learning Experiences	Attachments	Same as the current program. Specialty rotations completed prior to transition can be used towards requirements. Nuclear medicine – 4 weeks Breast – 8 weeks Obstetrics and Gynaecology – 8 weeks Paediatrics – 12 weeks Procedural Radiology – 12 weeks.

	Experiential Training Requirements	ETRs are as per the Trainee Handbook. ETRs completed prior to transition can be used towards requirements. Trainees should demonstrate progress towards achievement of ETRs.
Monitoring and Review	CS Feedback Forms	DoT to ensure a CS Feedback Forms per 6 months of accredited training time.
	DoT Review	A minimum of one DOT Review per 6 months of accredited training.
	MSF	Three MSFs (current or 2022 TP).
Examinations		Must have completed Phase 2 Examinations.
Research		Four CATs (current or 2022 TP) Trainees must fulfill old training program research requirements.

Clinical Radiology Training

Principles for Trainee Transition to the 2022 Training Program

2022 Training Program (2022 TP) will be implemented in early February 2022:

- Trainees commencing after February 2022 will join the 2022 TP.
- All trainees enrolled in clinical radiology training prior to 2022 will transition to a training Phase within 2022 TP.

The transition period will create a variety of trainee progression scenarios, and in addressing these scenarios the overriding principles are to:

- Minimise disruption for trainees
- Minimise disadvantage for trainees
- Introduce system flexibility

Trainee Data Management

All current trainees training information will be migrated from the Trainee Information Management System (TIMS) to the ePortfolio into a phase of training.

Trainees will have met with Directors of Training to document completion of activities not recorded on TIMS:

- CT numbers
- Fluoroscopic procedures
- Clinical meetings and MDM presentations
- Nuclear medicine studies
- Specialty rotations
- Specialty studies

The ePortfolio will:

- Replace the Trainee Information Management System (TIMS)
- Host trainee information and rotations
- Monitor trainee progression against training requirements
- Administer and manage Work-Based Assessments (WBAs)
- Manage trainee examination eligibility and record outcomes

Structured Learning Experiences

- All new and transitioning trainees will be expected to complete the required structured learning experiences of 2022 TP according to Phase of training.
- Experiential Training Requirements (ETRs) fulfilled under the old training program can be counted towards new ETR requirements. DOTs will have capacity to “sign off” on structured learning experiences completed prior to transition if required (see above). In the event that there is no documentation of previous completion of ETRs, they will be pro-rated according to year of training.

Research Requirements

- All trainees transitioning into 2022 TP are required to complete the research requirements of the old program:
    - Project 1
    - Project 2 (signed off with old criteria)
- Trainees commencing training in 2022:
    - Are not required to complete Project 1.
    - Must complete the new research project, signed off with new criteria.

Work Based Assessments (WBAs)

- All trainees will be expected to complete the required WBAs from 2022 onwards, according to their Phase of training.
- WBAs must be up to date at the time of transition, or Phase progression may be paused until they are complete.

Phase 3 of Training

- Comprises a consolidation phase of sub-specialty rotations.
- Some trainees may transition into Phase 3 of training if they have successfully completed all components of their Part 2 examinations.
- For transitioning trainees the time in Phase 3 will be determined by their overall training time; this may be more than or less than 12 months.
- For trainees who commence from Feb 2022 it is mandatory to spend 12 months FTE training time in Phase 3.

System Focused Rotations

System focused Rotations will be replaced by sub-specialty rotations during Phase 3.

- Transitioning trainees will continue to complete system focused rotations until their training site or network has implemented sub-specialty rotations.
- Transitioning trainees should spend 5th year and any additional training time doing system focused rotations or subspecialty rotations whichever is available at their site.
- Trainees who commence in 2022 will be required to complete sub-specialty rotations in Phase 3.

Examinations

Suggested Examination Journey in the 2022 Training Program

For Trainees commencing Phase 1 in 2022:

- 2022 - Phase 1 Anatomy and AIT Examinations
- 2023 - commence sitting Phase 2 Pathology Written Examination
- 2024 - commence sitting Phase 2 Clinical Radiology Written Examination
- 2025 - Phase 2 OSCER Written Examination
- 2026 - Phase 3

Phase 1 Examinations

Phase 1 Examinations - Format

Anatomy and Applied Imaging Technology (AIT) examinations commence 2022:

- Anatomy Examination
  - One 3 hour paper
  - Labelling – 120 labels
  - 60 Multiple Choice Questions (MCQs)
  - 30 Very Short Answer Questions (VSAs)
  - 20 Short Answer Questions (SAQs)
- Applied Imaging Technology (AIT) Examination
  - One 3 hour paper
  - 60 Multiple Choice Questions (MCQs)
  - 9 Constructed Response Questions (CRQs)

Phase 1 Examinations Rules

Rule	Part 1	Phase 1 (Series 1 2022)
Sitting	Four exam papers Must sit all exams together	One Anatomy and one AIT examination. Anatomy and AIT can be sat together or independently
Number of Attempts	Up to four consecutive opportunities in two years	Up to four attempts in two years, irrespective of number of exams sat at an attempt.
Passing rule	Must meet a passing standard	Must meet a passing standard

Part 1 to Phase 1 Examination Transition Arrangements

Phase 1 Anatomy and AIT examination format and delivery commence from Series 1, 2022:

For trainees commencing from 2022:

- Trainees can sit the Phase 1 Examinations independent of each other.
- Trainees have four attempts from the commencement of training to successfully complete the examinations, irrespective of how many exams sat at each attempt.
- Examinations must be successfully completed within 24 months of commencing training, irrespective of whether trainees are working full time or part time.

For transitioning trainees:

- Prior examination attempts and outcomes are recognised.
- Trainees who have failed one or two components of current anatomy examinations must sit the anatomy examination in its entirety.
- Trainees who have failed one or two components of the current AIT examinations must sit the new AIT examination in its entirety.
- All transitioning trainees will be granted a 6-month extension of training time and a 5th examination attempt if they fail to pass after four attempts.

- All transitioning trainees remain in Phase 1 of training until Phase 1 examinations have been passed.

Phase 2 Examinations

Phase 2 Written Examinations Format

Phase 2 examinations will commence in Series 1, 2023:

- Pathology Examination
  - 3 hours in duration
  - 100 MCQs
  - 10 Short Answer Questions (SAQs)
- Clinical Radiology Written Examinations
  - MCQ
    - 2 hrs in duration
    - 100 MCQs
  - Case Reporting
    - 3 hrs in duration
    - Short cases – 20 questions
    - Medium cases – 10 questions
    - Long cases – 5 questions

Phase 2 OSCER Examinations Format

Phase 2 Objective Structured Clinical Examination in Radiology (OSCER) examination will commence in Series 1, 2023.

- Objective Structured Clinical Examination in Radiology:
  - Structured and standardised oral examinations using digital cases
  - Seven stations across seven topic areas
  - Case numbers variable depending on the station and cases
  - Each question is mapped to one (or more) of the following domains:
    - Observation
    - Interpretation
    - Management
    - Pathology
    - Anatomy
    - Applied Imaging Technology / Patient Safety
    - Intrinsic roles

Phase 2 Examination Rules

Rules	Part 2	Phase 2 (Series 1, 2023)
Sitting	All exams sat at the same time Can pass "piecemeal"	Pathology and Clinical Radiology (CR) written exams can be sat independent of each other. CR written examination has two components - MCQ and Case Reporting, which must be sat together. Trainees must complete a minimum of 12 months FTE accredited training before attempting the Pathology examination. Trainees must complete a minimum of 24 months FTE accredited training before attempting the CR written examination. Written examinations must be passed before presenting for the OSCER.
Number of attempts	Four consecutive opportunities	Maximum of nine attempts overall at the Phase 2 examinations, irrespective of number of examinations sat at each sitting, and irrespective of FTE. Candidates are not required to sit the examination in consecutive sittings: • Maximum of three attempts for pathology. • Maximum of three attempts for CR Written examination. • Maximum of three attempts for OSCER.
Passing	Must reach a passing standard in each exam/viva Can pass vivas "piecemeal"	In CR Written examinations and OSCER, for borderline candidates, WBAs and other exams will be considered when determining if a candidate has reached a passing standard (concessional pass). At the OSCER • If 1 or 2 stations failed, only repeat those stations that were failed • If 3 or more stations failed, repeat the whole OSCER.

Part 2 to Phase 2 Written Examination Transition Arrangements

Phase 2 Written examination format and delivery commence from Series 1, 2023:

For trainees commencing from 2022:

- New examination rules apply
- Trainees have three attempts to complete the Pathology Written examination (by 72 months), irrespective of full time or part-time training status*.
- Trainees must have completed 12 months FTE accredited training before sitting the Pathology Written Examination
- Trainees have three attempts to complete the Clinical Radiology Written examination (by 72 months), irrespective of full time or part-time training status*.
- Trainees must have completed 24 months FTE accredited training before sitting the Clinical Radiology Written Examination
- Clinical Radiology MCQ and Case Reporting must be sat together at first attempt and a passed component can be carried forward.

- Pathology and Clinical Radiology Written examinations can be sat independently of each other.
- For borderline candidates in the Clinical Radiology Written examination, WBAs may be considered in determining whether a candidate has met a passing standard.

*Please note that candidates have a maximum of nine attempts overall at the Phase 2 examinations (this includes both the written examinations and the OSCER), irrespective of number of examinations sat at each sitting, and irrespective of FTE.

For transitioning trainees:

- Prior examination attempts and outcomes are recognised.
- Transitioning trainees who have been unsuccessful in the pathology, Clinical Radiology MCQ, or e-Film Reading examinations prior to Series 1 2023 must sit the relevant new exams.
- All trainees who have completed < 24 months training by Feb 2022 sit with the new Phase 2 examination rules, and new Phase 2 format and cannot commence sitting until Series 1 2023 e.g., must pass written examinations before presenting to OSCER.
- All trainees who have completed =/> 24 months training in Feb 2022 sit with the old examination rules, irrespective of format e.g., able to sit OSCER without having first passed written examinations.
- All candidates transitioning in Phase 2 will be automatically granted a 6-month extension in training time and one additional attempt if required:
    - If sitting with Part 2 rules, a 5th attempt at all remaining components
    - If sitting with Phase 2 Examination Policy rules, one additional attempt for Pathology, one additional attempt for the combined sitting of MCQ and Case Reporting, and one additional attempt at the OSCER.

Part 2 Viva to Phase 2 OSCER Examination Transition Arrangements

Phase 2 OSCER examination format and delivery commence from Series 1, 2023:

For trainees commencing from 2022:

- Trainees have three attempts to complete the OSCER examination (by 72 months), irrespective of full time or part-time training status*.
- Each station will have a passing standard.
- Trainee must pass all seven stations.
- If trainees pass five of seven stations or six of seven stations, trainees repeat only failed stations.
- If a trainee passes four or less stations, the trainee must resit the entire OSCER.
- For candidates who have passed five or more stations and are borderline in their failed stations, WBAs and Written examination results will be considered when determining if a candidate has reached a passing standard.

*Please note that candidates have a maximum of nine attempts overall at the Phase 2 examinations (this includes both the written examinations and the OSCER), irrespective of number of examinations sat at each sitting, and irrespective of FTE.

For transitioning trainees:

- All trainees who have completed < 24 months training by Feb 2022 sit with the new examination rules and new format and cannot present for the OSCER until they have successfully completed the Phase 2 written examinations.
- All trainees who have completed =/> 24 months training in Feb 2022 sit with the Part 2 rules irrespective of format.
- Prior examination attempts at the Viva's and outcomes are recognised.

- Trainees who have commenced sitting the vivas prior to Series 1 2023 and have successfully passed one or more of the vivas will be exempt from that station at the OSCER.
- Supplementary pathology vivas will be held if required for eligible transitioning trainees.
- All candidates transitioning in Phase 2 will be automatically granted a 6-month extension in training time and one additional attempt if required:
    - If sitting with Part 2 rules, a 5th opportunity at all remaining components
    - If sitting with Phase 2 examination policy rules, an additional attempt at Pathology, one additional attempt for the combined sitting of MCQ and Case Reporting and one additional attempt at the OSCER.

This also takes into consideration trainees who have commenced mid-year, and those who are working part-time or who have had breaks or pauses in training.

Part 2 Pathology Viva

For transitioning trainees:

There will not be a pathology "station" within the OSCER. Pathology will be incorporated into the body systems stations.

Transitioning trainees who have commenced sitting the Part 2 vivas prior to Series 1, 2023 and have been unsuccessful in the pathology viva will be required to sit a pathology "supplementary" viva which will be held at the time of the OSCER.

Trainees will have a maximum of four attempts at the pathology viva and supplementary pathology vivas will be held for transitioning trainees if required.

Transitioning trainees who are unsuccessful in the pathology supplementary viva in Series 1, 2024, after four attempts, will fail. Pathology vivas will not be held after Series 1, 2024, and candidates who have had remediation, breaks-in-training, or have been granted additional sittings under the reconsideration, review and appeal process will be assessed on an individual basis.

Trainee Examination Transition Scenarios in 2022

Year in 2022	Examination Transition
First	**<u>Enter Phase 1 of 2022 TP</u>** **Phase 1 and Phase 2 Examinations** Complete all Phase 1 and Phase 2 Examination rules and format.
Second	**<u>Part 1 exams not completed – enter Phase 1 of 2022 TP</u>** **Phase 1 Examinations** • Prior examination attempts and outcomes are recognised. • If failed one or two components of Part 1 anatomy exam, must sit the Phase 1 anatomy exam in its entirety. • If failed one or two components of the Part 1 AIT exam, must sit the Phase 1 AIT exam in its entirety. • Ordinarily have four attempts to complete the examinations within 24 months from commencement of training (irrespective of FTE) however all transitioning trainees will be granted a 6-month extension of training time and a 5th examination attempt if they fail to pass after four attempts (24 months plus 6 months of training time). • All transitioning trainees remain in Phase 1 of training until Phase 1 examinations have been passed. **Phase 2 Examinations** • Phase 2 examination format and rules apply. **<u>Part 1 exams completed - enter Phase 2 of 2022 TP</u>** **Phase 2 Examinations** • Cannot commence sitting Phase 2 examinations until Series 1 2023 • Phase 2 examinations format and rules apply • Automatically granted a 6-month extension of training time and an additional 7th attempt at the examinations in the event of failure to pass after 6 attempts (if required).
Third	**<u>Enter Phase 2 of 2022 TP</u>** **Phase 2 Examinations** • Commence sitting Phase 2 examinations from **Series 1, 2023.** • Phase 2 format and Part 2 rules apply • Automatically granted a 6-month extension of training time and a 7th consecutive opportunity at the examinations in the event of failure to pass after 6 opportunities (if required).

Fourth	**<u>Enter Phase 2 of 2022 TP</u>**
	Part 2/Phase 2 Examinations
	• Part 2 rules apply but format changes, i.e.
	  ○ In 2022, Part 2 format and rules apply.
	  ○ From 2023, Phase 2 format and Part 2 rules apply
	Irrespective of whether sitting in 2022 or 2023, automatically granted a 6-month extension of training time and a fifth attempt at the exam series in the event of failure to pass after 4 attempts (if required).

Fifth	**<u>Part 2 examinations not yet commenced - Enter Phase 2 of 2022 TP</u>**
	• Part 2 rules apply but format changes i.e.
	  o In 2022, Part 2 format and rules apply.
	  o From 2023, Phase 2 format and Part 2 rules apply.
	Irrespective of whether sitting in 2022 or 2023, automatically granted a 6-month extension of training time and a fifth attempt at the exam series in the event of failure to pass after four attempts (if required).
	<u>Part 2 examinations commenced but not completed - Enter Phase 2 of 2022 TP:</u>
	• Sit only outstanding components
	• Part 2 rules apply but format changes, i.e.
	  o In 2022, Part 2 format and rules apply.
	  o From 2023, Phase 2 format and Part 2 rules apply.
	Irrespective of whether sitting in 2022 or 2023, automatically granted a 6-month extension of training time and a fifth attempt at the exam series in the event of failure to pass after four attempts (if required).
	<u>Part 2 examinations completed- Enter Phase 3 of 2022 TP:</u>
	• No examination requirements.

APPENDIX 3 – INTERNATIONAL MEDICAL GRADUATE TRANSITION TO 2023

This information was distributed to all International Medical Graduates in December 2021 and has been included for reference.

RE: Changes to RANZCR's Clinical Radiology Training Program and Part 2 Examinations

RANZCR commissioned a review of its training programs in 2015 to evaluate the quality and sustainability of its training, assessment, and examination activities, and to recommend strategies for improvement.

The Training Program has been revised based on the recommendations of the review, with changes to learning outcomes, learning experiences, work-based assessment and examinations. The training and assessment reforms are being implemented in February 2022 for all RANZCR trainees and IMGs.

Changes to the Clinical Radiology Training program include changes to format and conditions of the Part 2 Examinations.

Main Changes

1. From Series 1 2022, all Phase 2 Examinations will be aligned to the 2022 Training Program Learning Outcomes, regardless of examination format and rules.
2. In 2022 the Phase 2 examinations will be in the Part 2 examination format. From Series 1 2023, the examinations will be in the Phase 2 examination format.
3. IMGs who commence sitting prior to Series 1 2023 will sit with Part 2 examination rules. IMGs who commence sitting from Series 1 2023 will sit with Phase 2 examination rules.
4. Phase 2 Examination format (from Series 1 2023)
    a. **Written Components**
        - Pathology: Changed from 2 hours to 3 hours; 100 MCQs and 10 short answer questions
        - Clinical Radiology
            - Radiology MCQ: Unchanged 2 hours; 100 MCQs
            - Case reporting: Changed from 2 hours to 3 hours; short, medium and long cases

    b. **Oral Components (OSCER)**
        - 7 stations with 2 examiners at each station
        - Breast and O&G split into separate stations
        - Pathology incorporated into other OSCER stations, with capacity for applied anatomy and AIT questions to be asked also
        - Number of cases at each station determined by topic area and modality
        - Same case set shown to all candidates in a day
        - Standardised digital cases with standardised questions, marking rubrics and global rating
5. Phase 2 Examination Rules (for IMGs who commence sitting from Series 1 2023)
    a. **Sittings**
        - Pathology and Clinical Radiology Written Examination can be sat independent of each other.
        - Clinical Radiology Written Examination has two components, CR MCQ and Case Reporting, which must be sat together.

- Pathology and Clinical Radiology Written Examinations must be passed before presenting for the OSCER.

b. Number of Attempts

Maximum 9 attempts from when candidate commenced sitting the examinations, irrespective of how many examination components sat at one attempt. Additionally, maximum attempts for individual components:

- Pathology - 3
- Written Examinations – 3
- OSCER - 3

c. Passing

OSCER:

- If 1 or 2 stations failed, only repeat those stations that were failed
- If 3 or more stations failed, repeat the whole OSCER.
- If 1 or 2 stations failed and results borderline, the Clinical Radiology Examination Advisory Committee (CREAC) has the capacity to review the RANZCR Phase 2 written examination results to assess for conceded pass.

Implementation of Phase 2 Examination Format

The Phase 2 Examination format will be implemented in one of two ways:

1. IMGs who commence sitting Part 2 Examinations prior to 2023 and still have components to complete:
    a. Part 2 Examination format in 2022.
    b. Phase 2 Examination format from Series 1 2023
    c. Part 2 Examination rules as detailed in RANZCR's Part 2 Examination (Clinical Radiology Policy. In particular:
        I. Candidates to attempt all remaining components (not able to split attempts)
        II. Candidates have 4 attempts to successfully complete all components, plus a fifth attempt offered to all transitioning IMGs (a transitioning IMG is a candidate who commenced the Part 2 examinations prior to Series 1 2023)
        III. Each OSCER station will be considered as a separate Viva.
        IV. For those who have failed the pathology viva in 2022, a separate pathology "supplementary viva" will be provided up to Series 1 2024 (in line with attempt rules)
2. IMGs who commence sitting Phase 2 Examinations in 2023

    Phase 2 Examination format and rules as per the above (attached table)

Specialist Recognition Outcome Validity Extensions

In response to Covid-19, in early 2020 RANZCR set out overarching priorities, principles and strategies to guide decision making during Covid-19 pandemic and in its aftermath.

Full details can be found on the College website: Impact on College Activities | RANZCR.

Strategies included:

RANZCR will extend the timeline for IMGs to complete assessment pathways by up to 12 months, if needed and will manage these circumstances through its Consideration of Special Circumstances Policy.

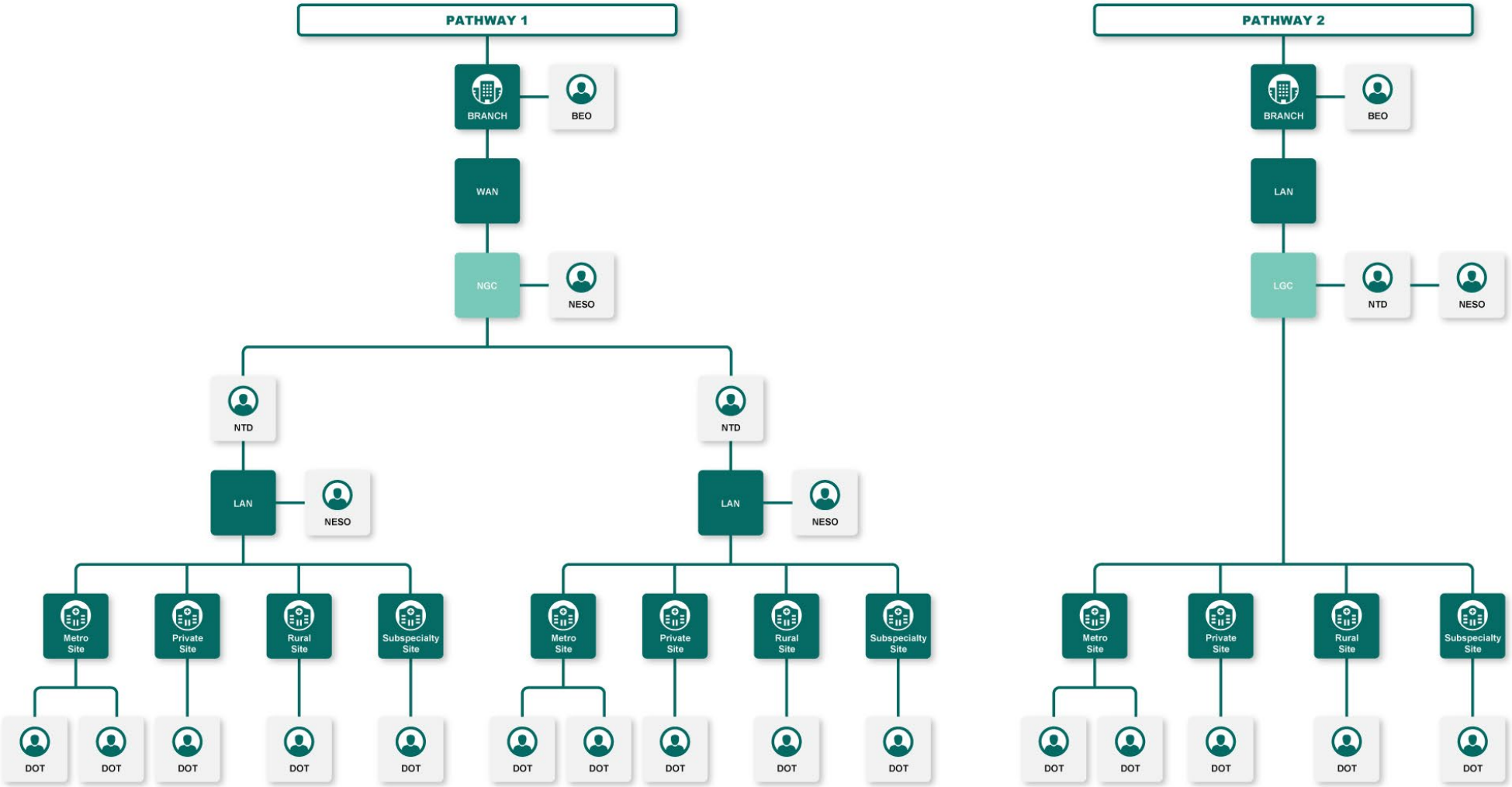
RANZCR's Specialist Recognition outcomes are valid for 3 years from the outcome date. If you have been affected by Covid-19 and require a 12 month validity extension to your Specialist Recognition outcome validity, please apply via the Consideration of Special Circumstances Policy.

Want to Find Out More?

To find out more information about the 2022 Training Program implementation/launch, we encourage you to view the Examinations webinar. A QR code has been created to provide quick access to all future updates and information about the program.

The resumption of face-to-face examinations and the transition to the new examination format is complex and we understand that there may be particular situations that do not appear to align neatly with the above transition scenarios. If you are concerned about how the transition will impact the completion of your Specialist Recognition pathway, please write to img@ranzcr.edu.au.

APPENDIX 4 – NETWORK TRAINING



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