



CRITERIA AND STANDARDS
FOR THE ACCREDITATION OF RADIOLOGY TRAINING SITES

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Introduction

In order to deliver excellence in Radiology Education and Training, the Faculty of Radiologists wishes to establish a consensus on an agreed set of standards for Training Sites. This first edition of ‘Quality Standards for Radiology Training sites in Ireland’ reflects work and input from a wide range of stakeholders across the radiology community to whom we owe significant gratitude, especially the education committee of the Faculty..

This set of standards is not all-encompassing. It does, however, reflect a minimum set of standards that all training sites should aspire to and complement the Medical Council criteria for evaluation of training sites which support the delivery of specialist training. These standards will form the basis for training site inspections and audit for all Radiology Training sites. The Radiology training sites will be assessed on these criteria every five years by direct inspection of each site.



Training Site Accreditation

Diagnostic Radiology trainees are postgraduate medical doctors undergoing specialist education and training, as well as employees of the health services. Each of these roles is important for a successful outcome of training.

Trainees work in a broad range of clinical environments, each of which should provide a rich learning experience, which is also aligned to the career aspirations of each individual trainee. Trainees make a significant contribution to the healthcare of patients and receive significant help in their training from the consultants and the other staff with whom they work with on a daily basis in the hospitals which employ them.

This document has been prepared to help familiarise trainees, trainers and hospital administrators with the requirements necessary to educate and train radiologists. It aims to set clear standards and criteria for those who undertake and provide such training. These standards and criteria will ensure that trainees progress towards proficiency in radiology measured against the requirements of the Diagnostic Radiology Curriculum.

The underlying principle of the accreditation process is to ensure that education and training sites provide learning environments that facilitate the training of safe and competent radiologists



Standards for Core Radiology Training Years 1 to 4

1. The Training Site

1.1. General Standards

- 1.1.1. Radiology Trainees (Trainees) should be allocated to Faculty of Radiologists approved posts.
- 1.1.2. Trainees should be assigned to a site where there is at least a 1:1 ratio of consultants to trainees, one of whom is the Assigned Local Educational Coordinator.
- 1.1.3. All consultant trainers must be on the Specialist Division of the Register of the Medical Council.
- 1.1.4. Trainees should undertake service work which is appropriate to their level of training and should not be required to undertake duties normally performed by consultants.
- 1.1.5. On commencement of each post, the Trainees should have signed a training contract with the Faculty of Radiologists and an employment contract with the employee hospital.
- 1.1.6. There should be enough clinical work in the unit to support the number of Trainees working there and provide experience in a broad range of diagnostic examinations and image-guided procedures.
- 1.1.7. Trainees should have exposure to an appropriate caseload and case mix to meet the needs of the diagnostic radiology curriculum. There should be a balance of reporting of radiographs, cross sectional imaging, ultrasound and image-guided procedures.
- 1.1.8. There should be an appropriate on-call ratio which takes account of the capabilities of trainees and which reflects the volume of all on-call activity in the unit. On-call trainees should be adequately supervised by a named consultant.
- 1.1.9. Trainees should be regularly rostered to be on-call after their first year of training has been satisfactorily completed.
- 1.1.10. Trainees should have the opportunity to perform basic image-guided procedures to a specified level as defined by the Diagnostic Radiology Curriculum.
- 1.1.11. Trainees should not miss training opportunities due to providing cover for absent colleagues or filling rota gaps.



- 1.1.12. Clinical training work intensity must allow sufficient time for consultant teaching and there should be a timetable of all educational, teaching and academic activities in the training site.
 - 1.1.13. Trainees should receive regular and scheduled teaching sessions relevant to their level of training.
 - 1.1.14. The site should have an adequate variety of imaging and interventional equipment to meet the needs of the curriculum.
 - 1.1.15. The site should have a PACS for image storing and reporting.
 - 1.1.16. Trainees should have access to a reporting workstation consisting of a PACS system for image viewing and an integrated Voice Recognition system for reporting. The number of reporting workstations available to trainees should be sufficient that all available trainees can access a workstation when needed.
 - 1.1.17. Trainees should have a dedicated room for reporting, which permits direct supervision by more senior trainees and consultants.
 - 1.1.18. Trainees should have a general room for breaks and meals. Trainees should have access to the internet both in their reporting and general room for access to journals and teaching files.
 - 1.1.19. If training is taking place across more than one site, then the standards apply for the subset of training that is occurring on each site.
 - 1.1.20. Trainees should be aware of all local HR policies and benefits.
 - 1.1.21. Particular consideration should be given to the needs of less than full-time trainees.
- 1.2. Workload and assignment
- 1.2.1. Sites should carefully measure trainee workload and working hours.
 - 1.2.2. Trainees should be scheduled to work at an intensity commensurate with their training level and experience.
 - 1.2.3. Trainees should be clear who the individual supervising consultant(s) is when being assigned work. There should be an assigned consultant for supervision or assistance even when the trainee is judged experienced enough to sign off reports by themselves.
 - 1.2.4. Trainees should not be rostered in a fashion where there could be routine breaches of the EWTD.
 - 1.2.5. Trainees should be given sufficient rest after on call period as per the requirements of the EWTD.



1.3. Specific Standards

1.3.1. Clinical Activity

1.3.1.1. Diagnostic Imaging Viewing and Reporting:

1.3.1.1.1. Trainees should:

- 1.3.1.1.1.1. Participate in viewing a mix of radiographs, CT, MRI, Ultrasound, Nuclear Medicine, Mammography and PET/CT appropriate to their level of training.
- 1.3.1.1.1.2. Be assigned work in a fashion such that it is clear what each trainee is expected to do within their session. The amount of work should be appropriate to their level of training.
- 1.3.1.1.1.3. Be permitted to dictate cases of varying complexity appropriate for their level of training.
- 1.3.1.1.1.4. Receive regular consultant feedback on dictated reports, in particular where there are discrepancies between the preliminary and final interpretation.
- 1.3.1.1.1.5. Participate in regular reporting sessions with a training consultant directly viewing the images and reports with them. This should be the case for the majority of reporting performed with very junior trainees. Indirect feedback can be introduced by the department at a rate appropriate to the level of training of the trainee.
- 1.3.1.1.1.6. Have appropriately supervised responsibility for reporting inpatient, outpatient and emergency cases.
- 1.3.1.1.1.7. Be permitted to sign off reports independently when judged competent to do so. At the end of training radiology trainees are expected to be able to do this at the level of a consultant and sites may judge what modality and type of exam a trainee may sign off when judged competent. However, sites should not use trainees to substitute for consultants and at all times there should be a supervising consultant to whom the trainee can discuss cases.
- 1.3.1.1.1.8. Routinely participate in formal Clinical Handover of radiology cases at the end of shifts.



1.3.1.2. Ultrasound:

1.3.1.2.1. Trainees should:

- 1.3.1.2.1.1. Have sufficient exposure to ultrasound techniques to develop knowledge sufficient to meet the needs of the Diagnostic Radiology Curriculum.
- 1.3.1.2.1.2. Regularly perform diagnostic ultrasounds at a level of supervision appropriate to their level of training. The trainee should have sufficient access to enable them to independently perform general diagnostic ultrasound at consultant level by the end of their training.
- 1.3.1.2.1.3. Have the opportunity to work with sonographers and report their images.
- 1.3.1.2.1.4. Have the opportunity to perform portable ultrasound in the care of critically ill patients (in ICU/HDU).

1.3.1.3. Image Guided Procedures.

1.3.1.3.1. Trainees should:

- 1.3.1.3.1.1. Assist in the majority of cases on interventional radiology lists performed in the training institution. This figure includes cases done by fifth years and post CSCST trainees and the cases should be relevant to their respective curricula.
- 1.3.1.3.1.2. Be expected to be involved in the clinical pre- and post-procedural evaluation and care of patients undergoing procedures in inpatient and outpatient settings.
- 1.3.1.3.1.3. Receive appropriate tuition on interventional radiology techniques from the consultant trainer/SpR during every attended session.
- 1.3.1.3.1.4. Have the opportunity to perform procedures/part procedures under supervision.
- 1.3.1.3.1.5. Have the opportunity to perform a sufficient number of procedures to reach a level of competency in basic procedures as defined by the Diagnostic Radiology Curriculum.
- 1.3.1.3.1.6. Routinely participate in the pre-procedure safety checklists.



- 1.3.1.3.1.7. Receive proximate feedback on performance using the Faculty of Radiologists' Workplace Based Assessment tool where appropriate.
- 1.3.1.3.1.8. Participate in a dedicated 'Minor Procedures' list under appropriate supervision (consultant trainer or SpR), for example ultrasound guided FNAs of thyroid nodules or US guided joint injections.
- 1.3.1.3.1.9. Participate in CT/US-guided biopsy and drainages.
- 1.3.1.3.1.10. Write post-procedure notes on their own cases.
- 1.3.1.3.1.11. Receive proximate feedback from their consultant trainer on their procedure notes.

1.3.1.4. Nuclear Medicine and PET:

1.3.1.4.1. Trainees should:

- 1.3.1.4.1.1. Have sufficient exposure to nuclear medicine techniques to develop knowledge sufficient to meet the needs of the Diagnostic Radiology Curriculum.
- 1.3.1.4.1.2. Have exposure to a radiopharmacy to understand the production and administration of radiopharmaceuticals.
- 1.3.1.4.1.3. Have direct access to reporting PET/CT examinations or have sufficient indirect access either by rotation or other mechanisms (For example at Cancer MDMs) to meet the exposure required by the Diagnostic Radiology Curriculum.

1.3.1.5. Breast Imaging:

1.3.1.5.1. Trainees should:

- 1.3.1.5.1.1. Have sufficient exposure to breast techniques to develop knowledge sufficient to meet the needs of the Diagnostic Radiology Curriculum. This should include mammography, ultrasound, MRI and associated biopsy techniques.
- 1.3.1.5.1.2. Have direct access to reporting Breast examinations or have sufficient indirect access either by rotation



or other mechanisms to meet the exposure required by the Diagnostic Radiology Curriculum.

1.3.1.6. Paediatric Imaging:

1.3.1.6.1. Trainees should:

1.3.1.6.1.1. Be permitted to rotate to a specialist paediatric hospital defined by the Faculty of Radiologists for a period of at least 10 continuous weeks to develop the experience necessary to meet the needs of the Diagnostic Radiology Curriculum.

1.3.1.6.1.2. Have exposure to paediatric diagnostic imaging procedures in general radiography, fluoroscopy, CT, MRI and Ultrasound in the specialist paediatric hospital. At the end of the rotation the trainee should be able to perform basic ultrasound and fluoroscopic procedures to the level defined by the Diagnostic Radiology Curriculum.

1.3.1.6.1.3. If the trainees are not rotated to a paediatric hospital, then the site should demonstrate that the trainees are getting equivalent time and exposure to trainees that rotate to the paediatric hospital, that the training is supervised by a consultant paediatric radiologist and that their training meets the needs of the Diagnostic Radiology Curriculum.

1.3.1.7. Neuroradiology:

1.3.1.7.1. Trainees should:

1.3.1.7.1.1. Be permitted to rotate to a neurosurgical specialist centre hospital defined by the Faculty of Radiologists for a period of at least 2 continuous weeks to develop the experience necessary to meet the needs of the Diagnostic Radiology Curriculum.

1.3.1.7.1.2. If the trainees are not rotated to a neurosurgical hospital, then the site should demonstrate that the trainees are getting equivalent time and exposure to meet the needs of the Diagnostic Radiology Curriculum.



1.3.1.8. Conferences, Meetings And Teaching

1.3.1.8.1. Trainees Should:

- 1.3.1.8.1.1. Regularly attend departmental conferences and Multidisciplinary Team meetings (MDTs), at least once per week. Over the course of their training, the trainees should attend a minimum number of all conferences available at a site.
- 1.3.1.8.1.2. Regularly present cases at clinical conferences and MDTs commensurate with their level of training and using the Faculty of Radiologists' Workplace Based Assessment tool where appropriate.
- 1.3.1.8.1.3. Attend and participate in Audit/Morbidity and Mortality meetings.
- 1.3.1.8.1.4. Have the opportunity to perform one major audit each year.
- 1.3.1.8.1.5. Attend Medical and/or Surgical Grand Rounds and present at these at least once during their training.
- 1.3.1.8.1.6. Have protected time for study or attending Faculty of Radiologist lectures in the timetable each week.

1.4. Research Activity

1.4.1. Trainees should:

- 1.4.1.1. Have the opportunity and encouragement to participate in clinical research projects.
- 1.4.1.2. Receive feedback from the consultant trainer on clinical research projects.
- 1.4.1.3. Write up and publish the results of clinical research projects.

1.5. Teaching

1.5.1. Trainees should:

- 1.5.1.1. Have the opportunity to give formal teaching sessions/tutorials to other healthcare professionals (e.g. medical students, interns, nurses and other allied healthcare professionals).
- 1.5.1.2. Receive appropriate support and feedback from consultant trainers on teaching activities.



1.5.1.3. Receive regular scheduled teaching sessions in the hospital from the consultant staff and others.

1.6. Administrative Activity

1.6.1. Trainees should:

1.6.1.1. Have the opportunity to actively participate in administrative activity (e.g. arranging rotas, arranging procedure lists, protocolling and prioritising studies).

1.6.1.2. Have the opportunity to participate in departmental QI projects.

1.6.1.3. Receive feedback from the consultant trainers on their administrative activity.

Additional standards for Fellowship Radiology Training Years 5+

1. Fellowship Post Accreditation

- 1.1. Diagnostic Radiology Fellows are postgraduate medical doctors undergoing specialist education and training after successful completion of four years of core training.
- 1.2. Radiology fellowships aim to build on the general experience a trainee has achieved in their core training to give a trainee an in-depth understanding of a radiology subspecialty. Fellowships are typically one year in duration after which a trainee can apply for a Certificate of Successful Completion of Specialist Training (CSCST). However, some specialties require more than one year of fellowship training. In these cases, the trainees can complete their training in post-CSCST training years.
- 1.3. This document has been prepared to help familiarise trainees, trainers and hospital administrators with the requirements necessary to educate and train fellows. It aims to set clear standards and criteria for those who undertake and provide such training. These standards and criteria will ensure that trainees progress towards proficiency in their specialist area against the requirements of the Diagnostic Radiology Curriculum.
- 1.4. The underlying principle of the accreditation process is to ensure that education and training sites provide learning environments that facilitate the training of safe and competent radiologists.



2. General Standards

- 2.1. Radiology Fellows (Fellows) should be allocated to Faculty of Radiologists approved posts which are suitable for fellowship training.
- 2.2. Trainees should be assigned to a site where there is at least a 1:1 ratio of consultants in the sub-specialist area to trainees.
- 2.3. Fellows should undertake service work which is appropriate to their level of training and should not be required to substitute for a consultant.
- 2.4. The fellowship should take place in an appropriate clinical environment with a relevant caseload to the subspecialty and relevant consultants from non-radiology specialties contributing to patient management.
- 2.5. When working in a general radiology department, trainees have a responsibility to assist with certain general duties including on-call as defined in their job description. However, at least 70% of their assigned time should be directly related to their fellowship.
- 2.6. There should be enough clinical work in the unit to support the number of Fellows and Trainees working there and provide sufficient experience for the Fellow in their sub-specialist area without depriving core trainees of the exposure they require.
- 2.7. Fellows should have exposure to an appropriate caseload and case mix to meet the needs of the sub-specialist area. There should be an appropriate balance of reporting and image-guided procedures depending on the requirements of the fellowship.
- 2.8. There should be an appropriate on-call ratio which takes account of the capabilities of fellows and which reflects the volume of all on-call activity in the unit.
- 2.9. Fellows should not miss training opportunities due to providing cover for absent colleagues or filling rota gaps.
- 2.10. Clinical training work intensity must allow sufficient time for consultant teaching and there should be a timetable of all educational, teaching and academic activities in the training site.
- 2.11. Particular consideration should be given to the needs of less than full-time Fellows.
- 2.12. Where applicable, the standards assigned to core trainees, in particular those involving workload, research, teaching and administration also apply to fellows.



3. Specific Requirements for Sub-specialist Training
 - 3.1. The specific requirements for each fellowship will be designed to allow the fellow to gain sufficient exposure to all aspects of the specialty to meet the needs of the Diagnostic Radiology Curriculum.
 - 3.2. Fellows should have direct access to reporting specialist examinations and procedures to meet the exposure required by the Diagnostic radiology Curriculum.
 - 3.3. Participate in specialist MDTs.
 - 3.4. Have an opportunity to participate in research and audit projects in the specialty.
 - 3.5. Should be facilitated in maintaining logbooks where relevant if required by any specific fellowship curriculum. For example if following CIRSE curriculum in Interventional radiology.

