Resident Doctors: **Leaders of the future**

NOVEMBER 2024

The Royal College of Radiologists

Introduction

Our resident doctors are the future leaders of clinical teams, and their training must be prioritised to ensure that they have both the clinical skills to provide an expert level of evidence-based, patient-centred, holistic care and the leadership skills to lead a multidisciplinary workforce.

They will need to apply extensive medical knowledge and advanced problem-solving skills in real-life clinical situations, accepting uncertainty and carrying risk. They must be innovators and researchers, educators and teachers, team workers and patient safety advocates.

The last few decades have seen an unprecedented increase in the number and complexity of imaging tests, radiological interventions and cancer treatments. Current residents will need to adapt to an even greater pace of change and technological advances throughout their careers. As the demand for healthcare continues to exceed workforce supply worldwide, there has never been a more important time to focus on high quality training to prepare residents to lead the transformation necessary to meet patient need.

Despite this, residents and their trainers have expressed concerns about the impact of recent changes in service delivery and staffing models on training opportunities. These concerns are echoed across other specialties with the introduction and expansion of medical associate professionals (MAPs) more widely within medicine. The number of MAPs in Clinical Radiology (CR) and Clinical Oncology (CO) is currently minimal and it is unlikely that there will be significant expansion of these roles, however there are several other established advanced practice roles within CR and CO which are reported to have both positive and negative impacts on training.

Multiprofessional team working is crucial to providing a sustainable service in both CR and CO, however implementation of new service and staffing models without full consideration of their wider and longer-term impact, risks creating problems for the future. Our residents are uniquely impacted by these changes, particularly where implementation plans fail to fully consider the impact on specialty training. It is vital that the urgency of addressing current service shortfall does not compromise our ability to prioritise the high-quality specialty training needed to safeguard future patient care.

In response to these difficulties, the Royal College of Radiologists (RCR) formed a Task and Finish Group to discuss the current challenges and create a set of guiding principles for the future. This document outlines the actions required, to ensure that residents acquire and practice the skills they need to lead teams to provide safe, effective care for patients.

Supporting our future medical leaders

Effective and comprehensive training of doctors is essential to provide the next generation of medical leaders who can supervise a multidisciplinary workforce. This can only be achieved through collaboration with all professional groups.

Review of current practice and planning for the future are both required, and must include training programme directors, college tutors, residents, trainer representatives and deaneries/local offices, alongside service leads, finance directors, and HR teams within Trusts.

Effective communication between all groups is key to ensuring that more immediate solutions to service demands do not create new problems for the future.

Supervision, training capacity, and service targets

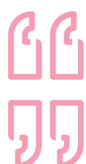
Good supervision is essential to the progression of residents and for patient safety, however training capacity is stretched in all departments. With current expansion of training places in clinical radiology and clinical oncology, and the anticipated expansion in medical school places, it is vital that all services have a sustainable plan to provide the increases in training capacity required.

In recent years, there has been a much-needed expansion in the number of residents. However, this has not always been accompanied by an expansion of training and supervisory roles, particularly in the number of GMC-recognised educational and clinical supervisors. The time required for educational and clinical supervisor roles is outlined in CO and CR job planning guidance but supervisors frequently report that they do not have sufficient time allocated in job plans to carry out these roles. This is reflected in the RCR's CR census and CO census, and the GMC's national training survey.

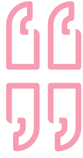
With increasing clinical workloads, trainers are also reporting that they are forced to exclude training from some aspects of their work to allow them to meet service targets. Training capacity is stretched to the limit and it will only be possible to train the workforce needed if we exploit all training opportunities. Productivity targets should be realistic and take time for training into account.

Training programme directors should be supported by their service leads and HR departments to provide sufficient named supervisors for all residents. This includes ensuring that all doctors have sufficient time in their job plan for educational roles, appropriate funding for these programmed activities and access to relevant professional development.

Locally employed doctors (LEDs), Specialty and Specialist (SAS) doctors, advanced practitioners, and senior residents should be supported to take on educational roles and contribute to teaching and training of all staff groups. There are many examples where this approach has supported the progress of residents, while fostering positive relationships across the multiprofessional team.



"Reporting radiographers provide training in plain film and support residents with feedback and advice, including a direct phone line for advice from the reporting radiographer team, which has been useful for trainees seeking a second opinion following OOH shifts. Feedback from residents highlights how much they value the effort the reporting radiographer team put into delivering great teaching and constructive feedback, and that they find the reporting radiographer team approachable and supportive." – Clinical radiology training programme director



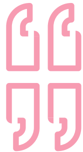
"Consultant Sonographers are solely responsible for ST1-3 ultrasound training. They have had fantastic feedback each year on their teaching, including a sonographer winning the 'Trainer of the Year' award." – Clinical radiology trainer

"We have an advanced radiographer-led fluoroscopy service. In the first year of radiology training, we have a 3-month block of fluoroscopy training which is entirely radiographer led. The advanced radiographer in our institute has organised a well-written fluoroscopy guide which includes background, details and technical aspects of each fluoroscopy examination. The radiographers are also able to sign-off on Rad-DOPs (workplace-based assessments) and their feedback is crucial in progressing during this particular block." – Clinical radiology trainer

"Radiology consultants in the academy have protected time in their job plans for teaching residents. This has helped the training programme to expand the number of residents they can accommodate, safeguarding the future workforce in the region."
– Clinical radiology trainer

Multiprofessional contribution to training

Many traditional consultant roles are now carried out by a range of other professionals, such as, LEDs, SAS doctors and advanced practitioners, who undertake valuable service provision, but in some cases do not contribute to training. Residents have expressed concerns that this is limiting training opportunities.



"PAs are doing simple IR procedures which is received positively by IR trainees who can focus on more complex work, but this is negatively impacting CR trainees who need simple procedures for their training/curriculum requirements."
– Clinical radiology trainee

"Reporting radiographers run the CT head service in our hospital. This is a big issue for training as consultants are now de-skilled in reporting CT heads and radiology trainees cannot get training from reporting radiographers." – Clinical radiology trainee

"We have the issue of reporting radiographers reporting MSK plain films, with very few to none left for radiology registrars to report. Many trainees have faced issues of reporting radiographers actively telling registrars not to report the plain films."
– Clinical radiology trainee

Maximising educational opportunities

Residents take part in on-call rotas and need days off after on-call, as well as protected teaching time, and study leave. These activities enhance their training and provide invaluable service delivery, but also impact on the number of days that they can spend learning from their teams and building essential clinical experience.

Residents have expressed specific concerns about the impact of heavy acute workloads on their training. Whilst acute work is an essential part of training, there has been marked and sustained increase in emergency imaging which necessitates increased numbers of out of hours (OOH) shifts.

It is important that everyone within the department recognises that residents have time-limited opportunities for training. All members of the multiprofessional team should work together to support residents by maximising the availability of educational opportunities. This includes freeing up time for both residents and trainers to focus on educational opportunities and ensuring that every clinic, multidisciplinary team meeting, interventional and reporting list is fully utilised as an opportunity to train CO and CR

residents. Training should be available in every setting, including all hospitals, clinics and community diagnostic centres, and OOH.

"We are finding the availability of medical associate professions (MAPs) helpful. They aid in service provision and help to relieve the strain on the availability of training for doctors. For example, they help with ward cover of inpatients, provide continuity of care and work closely with the parent team." – Clinical oncology trainer

"AHPs and non-medical prescribers (NMPs) in our department help foster a positive learning environment and free up time for Residents to take advantage of the learning opportunities available. SACT-prescribing nurse practitioners and pharmacists help in clinic, freeing up time for learning and giving a different perspective on management of our patients. They also help run immunotherapy toxicity clinics and there are lots of shared learning opportunities." – Clinical oncology trainer

"Our acute oncology nurses are excellent across the region and provide a wealth of education and training… particularly in communication and acute oncology. They also take the pressure off residents by seeing patients out-with the oncology ward, allowing more time in our timetables for learning and allowing us to gain experience in oversight and management of the acute team." – Clinical oncology trainee

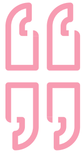
"To tackle the issue of reporting radiographers taking up all of the ED plain film reporting, a couple of trusts allocate a proportion of ED plain films to a specific registrar box."
– Clinical radiology trainee

Challenges of rotational training

The necessity for residents to rotate through different teams and departments puts them at risk of being viewed as an inferior, temporary workforce and a low priority for training compared with other staff groups due to the perception that they will not stay in the department beyond their rotation. This combined with the on-call duties, days off following on-call, and teaching/study leave discussed above, can make it difficult for residents to integrate fully into their teams.

Difficulty in feeling part of a team can exacerbate the other challenges faced because of rotational training, such as a lack of flexibility, short rotations, short notice for rota changes, and attachments in geographically dispersed regions resulting in very long commutes or moving house. The impact on home life and wellbeing should not be underestimated. Advice for structuring rotations and addressing the wider issues of morale within the resident workforce are covered in the NHSE guidance on "Improving the working lives of doctors in training."

All team members must contribute to creating a supportive learning environment, where the challenges of rotational team members are fully appreciated, and residents feel a sense of belonging in their team. It is important to recognise that the long-term staffing of departments is improved when they provide an environment where residents feel welcomed, valued and supported in their team and where there are positive relationships between members of the multidisciplinary team. residents should be welcomed into the department with an induction programme, which should include meeting all members of the multidisciplinary team and an explanation of how the wider team works together, as this will likely vary between departments and may not be immediately obvious to new staff.



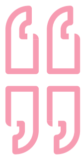
"In our institution we recognise that doctors-in-training are our future consultant colleagues, and we try and make an effort to treat them as such despite the fact they are often only with us for 6 months. We arrange a welcome social event attended by consultants soon after the rotation starts, as well as a leaving dinner to celebrate and thank our residents for their contribution. We also encourage our residents to be part of the department, inviting them to consultant meetings and other departmental development meetings which are a learning opportunity as well as a chance to better integrate them within a department." – Clinical radiology training programme director

"Our clinical nurse specialists (CNSs) offer a supportive session to residents as part of their introduction to the team. The CNSs explain their roles including information giving and patient support, facilitating and tracking neoadjuvant treatment pathways, post-radiotherapy clinics, and management of late effects of pelvic radiotherapy. They also offer simulator-based training on clinical examination of patients who have received radiotherapy. This session helps with team-working, mutual understanding of roles and awareness of avenues for support." – Clinical oncology trainer

Rotas must be designed to allow trainees to fulfil curriculum requirements and should be flexible to suit the learning needs of individual trainees. Wherever possible personal circumstances should be considered, and rotas should avoid geographically dispersed or short placements. Residents must be provided with adequate notice for rotation changes. NHSE guidance on improving the working lives of doctors in training states that schedules must be provided at least 8 weeks in advance.

Impact of homeworking

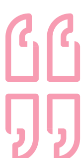
Following the COVID pandemic there has been a significant increase in consultants working from home. Whilst this has some potential benefits for consultants, it can limit valuable side-by-side apprenticeship training. Residents should have access to adequate on-site supervision and remote access to consultant advice where necessary. Recommendations for managing the impact of homeworking on radiology training are provided in separate RCR guidance 'Homeworking for radiologists.'



"Increased homeworking by consultants has many benefits, however limits face-to-face training opportunities. Senior leadership recognised the issue and facilitated discussion with trainees, clinical leads, college tutors and educational supervisors as well as the wider consultant body, resulting in an agreement on assessing job plans to ensure a balance between onsite and offsite working. This translated to an increased onsite presence and subsequent positive feedback from trainees." – Clinical radiology trainee

Team and service structures

In imaging departments, the separate team structures for radiology and radiography can create challenges for effective team working, with some imaging departments reporting issues caused by poor visibility of radiographer teams.



"We have had instances where 3 reporting radiographers joined the team without us having any advance notice of the change. This had an immediate impact on the availability of scans for Residents to report with a loss of training opportunities which we were then on the back foot to solve." – Clinical radiology training programme director

Imaging is also increasingly being performed in a wide range of facilities, including community diagnostic centres, which are, in some cases, run by private providers. Most departments outsource some of their reporting to private providers. While these approaches can be helpful in relieving service pressure and in improving access for patients, they can result in lost training opportunities.

Resources and cost of training

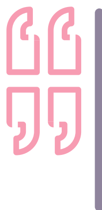
Residents may be constrained by a lack of physical resources, including workstations, computers, office space and clinic rooms. Some clinical oncology trainees have reported that limited availability of clinic rooms have led to them being forced to speak to patients in unsuitable spaces, a stressful experience for both residents and patients.

Increasing costs related to training, such as exam fees, are also putting financial pressure on doctors. This is often not the case for other staff groups who frequently have their advance practice training fully funded by their employer or other organisations. Some residents have also reported that reporting radiographers have benefitted from funding being provided for outsourcing of some consultant work to allow the consultants time to train the radiographers. Service leads should ensure resources are deployed strategically to provide equitable access to training opportunities for all staff groups. Where funding is used to free consultant time for training, this opportunity must also be available for residents.

As departments expand, it is imperative that all members of the team, including residents, have the resources to discharge their duties effectively. All residents should have appropriate access to office space and workstations. Service leads, facilities managers, and finance directors must plan now for how they will meet the future resource requirements of a growing imaging and cancer workforce and the expected expansion of training posts. There must also be adequate provision of clinical spaces to ensure that residents can see patients in an appropriate environment.

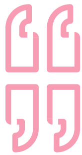
Implementation of new service models

Service leads should ensure that any review of, or change in, service considers the impact on residents during the planning stage, including consultation with them and their supervisors. The impact on training should be monitored during implementation and on an ongoing basis. Engaging with residents during planning and implementation can highlight potential problems that service directors may not have considered and residents can help identify solutions to avoid these issues.



"The development of advanced practice therapeutic radiographer roles in palliative radiotherapy threatened to reduce exposure to palliative therapy for residents. The residents developed a new notification system for planning which allows trainees to highlight patients they want to have a go at planning. We also have a palliative planning buddy system to increase exposure for residents who are preparing for their Part 1 FRCR exams." – Clinical oncology trainee

Promoting a culture of respect, understanding, and mutually supportive communication between professional groups can resolve many of the potential issues that can arise from changes in service delivery. There should be clear lines of responsibility, with an emphasis on the team as a whole working together. This is especially key in imaging departments where reporting radiographers may have separate structures from radiology, creating additional challenges for effective teamworking. Residents must have a voice in the department including clear, formal communication channels. Their status as rotational members of the department should not diminish consideration of their input and it is worth noting that positive experiences during training will encourage them to return to departments as consultants.



"Both doctors-in-training and reporting radiographers make a significant contribution to the plain film workload in our department and this relationship is often mutually beneficial. Occasionally it can lead to conflict when there is limited work available, with emergency department (ED) plain films often the biggest challenges. When this occurs the college tutor has been the contact point for residents to escalate concerns and has been able to develop solutions, such as allocation of ED MSK films to registrars to prioritise their learning." – Clinical radiology trainer

"There were instances where palliative radiotherapy opportunities were less available for residents due to consultant radiographers providing this service. We resolved this easily internally by bringing awareness to the situation and letting residents know about palliative radiotherapy opportunities via a WhatsApp group. The consultant radiographers even provided teaching for the residents." – Clinical oncology trainer

"Weekly radiotherapy planning meetings are attended by consultants, residents, non-medical outliners and radiographers. This regular touchpoint for the multiprofessional team ensures that tasks are completed on time, teaching and training opportunities are maximised, and peer review is undertaken. Attendees report that the meetings are effective, supportive and a learning opportunity." – Clinical oncology trainer

Ongoing audit, feedback and review of service change are key to ensuring services develop to meet current and future patient need in a sustainable way that includes the training of the next generation of medical leaders. All implementation plans for service change should include evaluation and ongoing audit. The RCR and College of Radiographers' Quality Standard for Imaging provides a framework for supporting and enabling quality improvement in imaging services.

Conclusion

All oncology and imaging services should ensure that the principles for supporting residents described in this document are at the heart of service development and delivery. This aligns with the NHS educator workforce strategy which emphasises that "the educator workforce must be a key consideration in integrated workforce and service planning."

The RCR is committed to supporting residents and their trainers to ensure that our future clinical leaders are fully equipped to lead the multidisciplinary teams that will meet patient need. We will continue to build our guidance and resources, providing the tools needed to safeguard specialty training and future patient care.

In summary:

Training Programme Directors, College Tutors, deaneries or local offices, service leads, finance directors, and HR teams in trusts should:

- Recognise that resident doctors are the future leaders of multidisciplinary teams, and therefore ensure their training is comprehensive, effective, and protected.
- Support multi-professional teams to collaborate to maximise the training opportunities available to resident doctors during each of their rotations. Ensure that every clinic, multidisciplinary team meeting and reporting list is fully utilised as an opportunity to train.
- Ensure that training is available in every setting, including all hospitals, clinics and community diagnostic centres.
- Ensure provision of sufficient named supervisors and that all supervisors have adequate time in their job plan for these roles, appropriate funding and access to relevant professional development.
- Support LEDs, SAS doctors, AHPs and senior residents to take on educational roles and be trained to provide supervision and teaching.
- Ensure access to office space, workstations, and clinical areas for all resident doctors and plan ahead to meet the future resource requirements of a growing imaging and cancer workforce.
- Design rotations that prioritise resident doctors' education and wellbeing. Provide adequate notice, minimise geographical dispersion, conduct thorough inductions, and foster a supportive team environment.
- Ensure all services have clear lines of responsibility across professional groups, with clear formal communication channels and mechanisms for providing residents with a voice in their teams.
- Consider the impact on resident doctors of any reviews of, or changes to, service models and both seek and consider resident and trainer input. Ensure full evaluation and ongoing review of all service changes and ensure that impact on training is an integral part of these.

Task and Finish Group Contributor list

Dr Katharine Halliday

Dr Tom Roques

Dr Stephen Harden

Dr Priya Suresh

Dr Louise Hanna

Dr David Little

Dr Kyle Crawford

Dr Priyanka Singhal

Dr Alex Pawsey

Tania Vanburen

Louise Leon-Andrews

The Royal College of Radiologists
63 Lincoln's Inn Fields
London, WC2A 3JW, UK

The Royal College of Radiologists
is a Charity registered with the
Charity Commission No 211540.

+44 020 7405 1282
enquiries@rcr.ac.uk
rcr.ac.uk

@RCRadiologists

The Royal College of Radiologists

The Royal College of Radiologists. Head and neck cancer. RCR consensus statements. London:

The Royal College of Radiologists, 2024.
The Royal College of Radiologists is a Charity registered with the Charity Commissino No, 211540

© The Royal College of Radiologists, November 2024.

For permission to reproduce any of the content contained herein, please email permissions@rcr.ac.uk

This material has been produced by The Royal College of Radiologists (RCR) for use internally within the specialties of clinical oncology and clinical radiology in the United Kingdom. It is provided for use by appropriately qualified professionals, and the making of any decision regarding the applicability and suitability of the material in any particular circumstance is subject to the user's professional judgement.

While every reasonable care has been taken to ensure the accuracy of the material, RCR cannot accept any responsibility for any action taken, or not taken, on the basis of it. As publisher, RCR shall not be liable to any person for any loss or damage, which may arise from the use of any of the material. The RCR does not exclude or limit liability for death or personal injury to the extent only that the same arises as a result of the negligence of RCR, its employees, Officers, members and Fellows, or any other person contributing to the formulation of the material.