GUIDANCE REGARDING ON-CALL AND HANDOVER FOR RADIOLOGY TRAINEES

The Royal College of Radiologists is aware that the nature of on-call work for consultants and trainees is changing with more and more departments extending their normal hours of working and extending the range and complexity of on-call work in general[1,2]. There are also varied on-call arrangements including partial and full shifts that contribute further to the difficulties in providing guidance.

Whilst the RCR cannot define working arrangements that can be put in place by the employer it can give guidance that ensures on-call work for trainees can maximise learning and that appropriate support is available, prepares the trainee for on-call work as a consultant, and maintains the underlying principle of the highest possible standards of patient safety.

On-call work should be a positive learning opportunity for trainees and this requires close and appropriate levels of supervision by the consultant on call with them.

1. It is appropriate for trainees to commence on-call work between 12 to 24 months whole time equivalent training onwards, provided that progress has been satisfactory. Trainees are expected to participate in on-call duties from the end of the second year at the latest as a minimum requirement. Trainees in their first year can gain good experience in shadow on-call duties and may be able to contribute in some tasks within their competencies and also in administration of on-call cases. They will naturally require full supervision at all times.
2. There must be a named consultant on-call covering the trainee. The consultant must be available for advice by phone and be able and prepared to be on site if required.
3. For radiologists on call from home there should be remote access to good quality images for both the on-call trainee and the covering consultant. Image quality will define if the images can be used for diagnostic purposes or for management advice. Where a shift system is in operation in the hospital, access to images from home is not required for the trainee.
4. On-call should be a positive learning opportunity. Therefore, routine reporting or supervision of out-patient routine work would not normally constitute on-call experience, particularly after 10.00pm. Where trainees are involved in full shift working the trust may reasonably expect more routine inpatient work to be carried out as part of the shift duty. The level of consultant supervision of this work should be the same as that provided during normal working hours and should be at a level appropriate for the stage of training of the individual trainee.
5. On-call experience should expose the trainee to:
    a. Discussing with referring clinicians to determine the most appropriate imaging pathway, and advising referrers and patients on radiation exposure to guide informed decision making.
    b. Appropriately prioritising and managing out of hours workload.
    c. Imaging of the acutely ill patient who requires a management plan at that moment or at the beginning of the next working day.
    d. Imaging the acutely ill patient who requires a decision as to whether or not the patient should be admitted to hospital for further investigation. “Hot reporting" of ED plain films through the night is considered acceptable as it directly and immediately affects patient care.
    e. A wide range of imaging techniques, including plain radiography, ultrasound and CT.

f. Experience of dealing with emergency or urgent interventional radiological procedures.

6. Trainees need to be able to construct accurate reports which are available to the referring teams. Precise mechanisms need to be in place so the trainee and referring team understand that the initial report is provisional and additional information may be added. The level of the trainee and the emergency nature of the examination should be stated in the report, but a process of clarification should be in place regarding the level of checking of reports that would be required for the level of trainee involved. For example, it may be acceptable for an ST5 trainee to issue reports that require little review, whilst all the reports of a pre-FRCR trainee should be double reported by a more senior trainee or the supervising consultant.
7. If the trainee experiences difficulty in evaluation of an imaging study on-call then the case should be discussed at that time with the consultant on-call. There should be clear policies with regards to any cases where a consultant should be involved as a matter of routine, e.g. trauma where there is a specific reporting turnaround target. All other on-call work should be reviewed by a consultant as soon as possible the next working day until there is evidence that appropriate competencies have been achieved.
8. There should be formal feedback to the trainee regarding the quality of the work performed and outcomes of emergency imaging.
9. If a trainee is covering emergency work generated in a hospital in which the trainee or the supervising consultant are not routinely working then there must be formal and robust processes in place to allow documented feedback from the cases.
10. Handover of on-call work both at the start and at the end of a period of on-call remains an important patient safety standard. Individual departments will have different ways of defining this process and monitoring its efficiency but it is imperative that these processes are documented clearly and form part of the trainee departmental induction programme.
11. The RCR believes participating in on-call work provides essential and important experience for the trainee radiologist. If an imaging department significantly reduces or removes out of hours imaging by outsourcing or other measures, the training programme should provide the trainee with exposure to emergency radiology as would be seen in on-call routine radiological practice. This may occur within the hours of the traditional working week.

Interventional Radiology On-Call Exposure

Sub-specialty training in interventional radiology is intended to produce new consultants who are competent to discuss and manage patients requiring a range of essential emergency interventions, as well as elective care. It is therefore important that trainees following the sub-specialty curriculum are given adequate on-call and emergency exposure to gain skills and confidence. Whilst specific arrangements will vary by location, need and availability, all such trainees should have, at the very least, moved onto regular, dedicated IR on-call rotas by the start of ST6.

Less Than Full-Time Trainees

The RCR supports the Gold Guide statement that less than full time trainees: "will reflect the same balance of work as their full-time colleagues. Day-time working, on-call and out-of-hours duties will normally be undertaken on a basis pro rata to that worked by full-time trainees in the same grade and specialty unless the circumstances that justify LTFT training make this inappropriate/impossible." If operational circumstances at the employing organisation make pro rata on-call/out of hours duties impossible then it must be ensured that legal and educational requirements are met.

Returning to Training

Where trainees are returning to work after an absence of three months or more it is recommended that they be omitted from on-call rotas where these require independent practice for a minimum of 4 weeks from their start date back. Where possible, provision should be made for the trainee to attend on-call shifts in a supernumerary capacity prior to this.

General Guidance Notes on Handover and Review

Handover is the process by which ongoing patient events are discussed between a doctor finishing a period of work, shift or period of on-call and the doctor taking over responsibility for those patients. Within the context of radiology this will typically include information about any imaging investigations or interventions planned, but not yet undertaken, or any outstanding reports on investigations. Other matters, such as ongoing discussions with referrers or the need to communicate results as well as anything else that the "outgoing" doctor considers to be relevant should be discussed. The purpose of handover is to ensure that patient care is seamless when members of staff change. It ideally takes place face to face, but may occur over the telephone. As shifts are increasingly being employed for provision of emergency out of hours imaging, time for handover should be included in the shifts. As a result email should not be needed for handover of patients or tasks, and indeed is considered suboptimal as the sender cannot be certain that it has been received and it is not possible to seek clarification.

The principles of, and responsibilities for, the safe handover of professional responsibility and accountability (refer to the Acute Care Toolkit)[3] include:

- Being prepared with a prioritised and concise summary.
- Being current, only referring to past cases if they seem likely to be re-referred (for example additional examinations proposed but not yet confirmed as necessary).
- Use professional language that enables clarity about the clinical situation.
- Encourage and enable challenge, requesting clarity by recipient should be respected and lead to a professional exchange.
- Wherever possible be supported with patient identification information to avoid subsequent confusion, or errors of omission or commission.
- Use a standardised template that will facilitate clear communication but not avoid the need to individualise on a case by case basis
- Include 'at risk situations' or learning that may be pertinent to safety in the subsequent session - for example complex case discussions or changing skill mix within the imaging department due to shift changes.

Review of examinations is the process by which imaging investigations undertaken by a trainee during a period of work, shift or on-call period are checked by a supervising consultant. Ideally this should be face to face, as it represents an important teaching opportunity. However, it is recognised that this is not always possible, but it is important that feedback on all cases is given. Feedback should be considered an essential and integral part of on-call education for trainees and represents an excellent opportunity to undertake workplace based assessments.

Integration of outsourcing into departmental workflows

With the increased amount of imaging activity taking place out of hours, many departments have taken the decision to use teleradiology companies to outsource this activity to avoid an adverse impact on their imaging services during the day. It is important that there is clear communication between clinicians at the referring department and the reporting radiologist and it is expected that these arrangements will be clear between the department and the relevant company. However, it is recognised that in many cases subsequent review of the acute imaging will take place and there may be additional findings that can influence patient management. In addition there may be further clinical information that was not available to the radiologist generating the original report.

It is important that imaging departments using outsourced services have mechanisms to "take ownership" of studies that were performed on an urgent basis out of hours. This is particularly important for trauma imaging where it is not unusual for additional findings to become apparent after the initial report.

Action in the event of unexpected IT failures and staff absence

It is the radiologist's responsibility to ensure that any IT failures or staff absences that are or are imminently likely to interrupt the provision of a safe service are escalated through the agreed

means within their employer. In most cases this would mean at least escalating to their consultant on call and radiography management on call. Ensuring that all staff are aware of what to do on these occasions, should be part of the induction to participating in the on-call service and in addition be information that is available in written form easily within the department.

References

1) Standards for the Provision of Seven Day Acute Care Diagnostic Imaging
https://www.rcr.ac.uk/sites/default/files/publication/bfcr1514_seven-day_acute.pdf

2) Standards for providing a 24-hour interventional radiology service
https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfcr171_24hr_ir.pdf

3) Acute Care Toolkit
https://www.rcplondon.ac.uk/resources/acute-care-toolkit-1-handover

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