

# The role of the radiography workforce in accident and emergency



The Society & College of Radiographers

Emergency departments throughout the UK are under huge pressure as ever increasing demands are placed upon them. To deliver excellent services, the workforce needs to be highly trained and skilled with excellent levels of knowledge and the ability to work together as a team. The radiography workforce within emergency services provides imaging 24 hours a day, 7 days a week, 365 days a year.

Radiographers are involved throughout the diverse range of emergency medicine, including services in minor trauma units, major trauma and resuscitation units and everything in between.

Increasingly, minor trauma units are led by healthcare professionals and radiographers have a unique set of skills which allow them to triage the patient on arrival, acquire any necessary images, report the findings and discharge, treat and/or refer the patient appropriately.

In larger emergency departments, it is essential that radiographers work alongside doctors and other healthcare professionals to provide accurate and timely diagnoses so that the correct treatment can be given as quickly as possible.

Emergency department imaging includes mobile imaging where radiographers are required to obtain images of the patient while they are in the resuscitation unit and/or operating theatres. These radiographers are able to work quickly and calmly under extreme pressure, leading the imaging process and providing the information needed for an immediate diagnosis to ensure effective treatment.

Diagnostic tests need to be fast and accurate and radiographers undertaking this work not only have highly specialist skills in imaging modalities, but are experienced in the care and techniques required for scanning acutely ill patients who require urgent assessment during a critical period of the care pathway.

Radiographers' contribution to reporting within emergency services is already extensive and allows for immediate or 'hot' 24/7 reporting. This contribution can potentially be extended significantly as more radiographers undergo specialist training in reporting skills.

## CT in major trauma

Computed Tomography (CT) plays an essential role in the rapid diagnosis of major trauma cases and a whole body CT protocol has emerged as the gold standard in the UK for major trauma.

CT is the investigation of choice for imaging head trauma due to its ability to demonstrate fresh bleeding and bony injury. It is widely available and allows for ease of monitoring the patient during scanning. Postgraduate courses in interpretation of head CT images have existed for some years and this is considered normal practice for radiographers in many imaging departments.

For blunt chest trauma, CT is able to rapidly demonstrate aortic injury, diaphragmatic tears and bone fractures. It is also excellent for depicting spinal fractures and abdominal trauma such as ruptured spleen.

The radiography workforce delivers diagnostic imaging and radiotherapy services in a range of health and social care settings across the UK. Radiographers are pivotal to delivering fast and reliable diagnoses of disease, as well as curative and palliative treatment and care for patients with cancer. A large majority of patients will be referred for imaging during their treatment and radiographers are key to the delivery of successful clinical outcomes.

The Society and College of Radiographers (SCoR) is a professional body and trade union. With more than 90% of the radiography workforce in membership, it represents the entire profession. It shapes the healthcare agenda and leads opinion on a wide range of professional issues, setting standards and developing policies that are adopted and acclaimed by governments and health professionals worldwide.

The SCoR pioneers new ways of working and ensures that its members work in a safe and fair environment. Its activities are designed to ensure that patients receive the best possible care.

### The SCoR believes that:

- Every patient must have the right diagnostic examination, at the right time, undertaken by the most appropriate person, using the right equipment to the best possible standard and with timely results to inform the outcome.
- Every cancer patient must be able to be in control of decisions about their care and have access to the most effective treatment, delivered at the right time and by the most appropriate person.

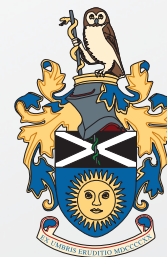
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## MRI in major trauma

Magnetic Resonance Imaging (MRI) is less used in the initial assessment of major trauma because it is not as widely available and has longer scan times. Other barriers to its use include the need to screen patients (to exclude any MR incompatible devices such as pacemakers) and the need to ensure compatibility of monitoring and anaesthetic equipment with the very high magnetic field strengths.

However, MRI has an important role in head trauma, following initial imaging for further classification of injury and for onward patient management.

For abdominal trauma, MRI is useful following initial assessment from CT for advanced cross sectional imaging with increased sensitivity in depicting abdominal fluid collections such as haematomas. MRI does not involve the patient receiving a radiation dose and therefore where repeated imaging is required following trauma, MRI has the advantage.

Following spinal trauma, MRI is useful to evaluate all the soft tissue structures surrounding the spine to detect, for example, damage to ligaments and to assess the spinal cord.

## Summary

The reporting of trauma radiographs is embedded in the professional field of diagnostic radiography in the UK and is continuing to evolve.

It is clear that radiographers' contribution to trauma reporting services can potentially be extended significantly. This assumes greater importance with the move to 24-hour imaging services and the increased desirability for the 'hot' report, issued by the fully authorised and trained practitioner, in line with the requirements of good clinical practice and governance.

