The College of Radiographers

1. **Title of Paper**
   Why clinical imaging services should be delivered by Radiographers

2. **Author of the Paper**
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3. **Purposes of Paper**
   - To provide an overview of the reasons why a UK registered Radiographer should not be substituted by other workers to deliver clinical imaging services, using ionising or non-ionising radiations, in remote and rural NHSScotland sites
   - To provide evidence of the relevant legislative and professional frameworks to support this statement
   - To highlight the additional imaging services that could be delivered by Diagnostic Radiographers to further support clinical imaging services

4. **Background**

   Diagnostic Radiographers are UK registered professionals who employ a range of different clinical imaging techniques and sophisticated equipment to produce high quality images of an injury or disease. Diagnostic Radiographers acquire images and very often report on them so that decisions may be made about the ongoing management plan for a patient. They are able to use a range of techniques such as x-ray imaging, fluoroscopy, computerised tomography, magnetic resonance imaging, ultrasound and nuclear medicine to support the majority of clinical patient pathways within NHSScotland services.

   Radiography services occupy an ever-more central role in the development of healthcare. The discipline of diagnostic radiography is required to keep pace with a significant increase in demand driven by the government-led initiatives and relevant legislation.

   The College of Radiographers, as the UK professional body for the radiography profession, exists to promote the science and practice of radiography in the interests of furtherance of the profession and in the public interest, to support and promote education and research in radiography for the ultimate benefit in better and more effective patient care.
The practice of “radiography” is regulated and governed by various legislative frameworks which provide the “Diagnostic Radiographer” with the appropriate professional status to ensure that the public are assured of safe and effective services with the necessary protection from malpractice.

5. The Evidence to Support Safe Radiography Practice

- The UK Legislation


Responsibility for compliance with IR(ME)R firmly rests with the Employer and all of the “entitled” duty holders as defined in the IR(ME) Regulations (DH, 2007). The Employer is normally considered to be the Chief Executive Officer unless an alternative individual has been formally designated but this person should be of sufficient seniority (e.g. at Board level). The IR(ME) Regulations allow a wide variety of practices to be undertaken as long as there is clear justification for the radiation (medical) exposure to be undertaken. Justification is the responsibility of the “Practitioner” who must be a registered healthcare professional, be appropriately trained (according to Schedule 2 of IRMER) and “entitled” by the Employer to undertake the functions of this legal role. The “Practitioner” must assess the need for radiation exposure, before it is undertaken; using the clinical data supplied by the referrer in order to decide what is in the best interest of the patient. This decision (or “justification”) is the process of balancing the potential benefit of the radiation exposure against the potential detriment from the exposure to that individual (especially if the patient is a pregnant woman (RCR, CoR, HPA, 2009)). This requires the “Practitioner” to have a full knowledge of the potential benefit and detriment associated with the radiation (medical) exposure under consideration – Radiographers, by virtue of their undergraduate education, training and qualifications (CoR, 2008) as well as their Health Professions Council (HPC) registration have this knowledge and therefore fulfil the requirements of “adequate training” under Schedule 2 of IR(ME)R.

IR(ME)R “Operators” are also legal duty holders who are “entitled” to carry out practical aspects of a radiation (medical) exposure – the quality assurance of the imaging equipment (HSE, 2006), reviewing the clinical image request information, patient positioning, image acquisition, recording of radiation dose and digital images as well as the clinical evaluation of the radiation exposure (i.e. the interpretation of the image) are all examples of “Operator” functions. Once again, Radiographers, by virtue of their education, training and qualifications (CoR, 2008) already possess the
required skills and knowledge to fulfil the requirements of “adequate training” under Schedule 2 of IR(ME)R.

Radiography Assistant Practitioners (APs) can perform limited clinical imaging examinations in concert with, and under the supervision of, HPC registered Radiographers. Qualified APs are also able to be entitled as “Operators” for certain functions within that role due to their CoR approved education and training and subsequent CoR AP Accreditation. Radiography APs, however, are roles that require supervision by an HPC registered Radiographer as they cannot be responsible for the episode of patient care and are legally unable to adopt the IR(ME)R “Practitioner” role (CoR, 2012a; IR(ME)R, 2000).

The IR(ME)R Employer should specify the scope of practice and the tasks for which an individual can act as an entitled “Practitioner” and “Operator” and must be able to demonstrate that the worker(s) is (are) adequately trained to undertake IR(ME)R roles and functions. It must be stressed that “Operators” must not carry out a radiation (medical) exposure or any practical aspect of that exposure without having been “adequately trained” (Regulation 11(1) of IR(ME)R). Schedule 2 of IR(ME)R details the comprehensive theoretical and practical elements of all education and training pertaining to “medical radiation exposure” required before entitlement may be given and maintained to ensure safe and legal practice.

Health Boards must also comply with the Ionising Radiations Regulations 1999 (IRR, 99) which are aimed at the protection of the public and the health of those staff who work with ionising radiations (SI 1999 No. 3232). Radiographers also play a pivotal and essential role in the protection of service users, staff and members of the public from the risks of ionising radiations with many Radiographers undertaking the role of the Radiation Protection Supervisor (HSE, 1999) to ensure compliance via Local Rules.

- **The UK Regulatory Body for Radiographers**

The Health Professions Council (HPC) is the body that regulates the practice of radiography within the UK and there is much published material relating to the assurance of safe and effective practices as well as protection of the public. The HPC “Standards of Proficiency for Radiographers” (HPC, 2009) are the minimum standards that are considered necessary to protect members of the public who would be subject to “radiography” (i.e. clinical imaging) services. A Radiographer must meet these standards when they first become registered and every time they renew their registration (every 2 years). Radiographers, like other “professionals”, are expected to work within their scope of practice to ensure they work lawfully, safely and effectively.

There is also an expectation that the Radiographer complies with the HPC “Standards of Conduct, Performance and Ethics” (HPC, 2008) and that he/she maintains their
professional registration by complying with the HPC Standards for Continuing Professional Development (HPC, 2011).

- **The UK Radiography Professional Body**

The College of Radiographers (CoR, 2008) has published a learning and development framework as authoritative guidance to inform all those working in the provision of clinical imaging or oncology services at all levels of practice and/or supporting education, research and development and management, both in the public and private sectors. It is also intended as a major source of reference for all stakeholders concerned in the delivery of high quality healthcare services and supporting education and development across the United Kingdom. It is expected that the various stakeholders, both within the profession and in the wider healthcare and education environments, will utilise this authoritative guidance as it sets out and clarifies the elements required to ensure appropriate education of the profession from assistant level to the highest levels of practice. This framework has been designed to specifically identify the skills, knowledge and educational level of all radiographic staff and clearly dovetails with the requirements of the Health Professions Council and the UK “radiation” legislation.

6. **Further Services**

All Diagnostic Radiographers are able to contribute to the clinical imaging service by producing a preliminary written clinical evaluation of the examinations that they perform. This assists referrers in developing treatment plans and reduces errors in patient management and it could also save bed days through unnecessary admissions.

The College of Radiographers believes that it is essential that all Radiographer skills are utilised in service delivery and many have been supported by NHS Education for Scotland (NES) to achieve new education and training (e.g. post graduate qualifications in Image Interpretation) in order that they practice at an advanced level. This additional training is particularly pertinent to those Radiographers working in remote and rural areas of NHSScotland as they could then provide a fuller service for the referrer (e.g. the GP) and to the patient. Health Boards could ensure that their Clinical Image Reporting Plans seek to use appropriately trained Radiographers to contribute to the overall clinical image reporting service. There is College of Radiographers’ published guidance on clinical image interpretation undertaken by Radiographers (CoR, 2010) who work at advanced practice level. The Managed Diagnostic Clinical Imaging Network (MDCIN) in collaboration with the CMO advisor for Radiology, have written a discussion paper reviewing overall image reporting capacity in NHS Scotland (Cannon, Robertson & McRitchie, 2012). Within this paper, there is detail of advanced practice level Radiographers potentially providing between 20-40% of overall plain film reporting capacity which is based on
evidence from Radiographer reporting models that are presently in existence in Scotland.

The results of a recent survey carried out by the College of Radiographers (CoR, 2012b) show that the scope of practice for the diagnostic radiographic workforce continues to develop. Significant numbers of departments have radiographer-led examinations, interventional procedures and gastro-intestinal studies. Many radiographers issue written reports, especially in ultrasound departments

References

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