

EFRS Statement on Clinical Audit

December 2020

Introduction

The purpose of this document is to raise awareness of the importance of clinical audit across clinical practice and to encourage radiographers to be actively involved in this process.

Clinical audit is one of the most important tools in supporting quality improvement, patient care, effective use of resources, and risk management in clinical settings today [1].

There are many definitions of clinical audit in the literature. "Clinical audit can be described as a quality improvement cycle that involves measurement of the effectiveness of health-care against agreed and proven standards for high quality and taking action to bring practice in line with these standards so as to improve the quality of care and health outcomes." [2] Whilst a dialogue on quality improvement is outside of the focus of this standard, clinical audit forms a key part of this cyclical process and should not be considered in isolation.

In recent years, clinical audit has been mandated in radiation safety legislation across Europe [3]. This has been a positive move towards embedding clinical audit in radiographer practice.

Requirements for Clinical Audit to take place in Clinical Departments

- Each clinical audit should include an agreed gold standard to be measured against and should confirm ongoing improvement against the set standard. This standard may be focused on a local element of practice in a department or modality, in response to accreditation requirements or it could be focused on a best practice guideline or emerging evidence base.
- The audit should have a target compliance rate which is agreed in advance. This target can be reviewed as part of the clinical audit cycle and in response to changes made or emerging evidence or practice.
- Consideration should be given to different audit methods and the appropriate application of any methods. From time to time, it may be appropriate to audit certain metrics using a range of methods. Methods include, but are not limited to: image review, review of documentation such as the examination request form, observational audit of practice, interview of key personnel or patients.

- In order for clinical audit to take place effectively, provision should be given at a management level for infrastructures and resources
 [4] such as dedicated time, equipment, and training to reinforce the focus on the area.
- Before a radiographer embarks on clinical audit, there should be a reasonable expectation that change can occur and/or that the results of the audit can be used as part of quality improvement. These changes should be considered as continuous work that has resource allocated appropriately.
- It is reassuring for patients to be aware that clinical audit is happening in the service they are attending and within the profession. This allows patients to understand that continuous evaluation and improvements are being made to their care and to feel safe while undergoing clinical examinations and treatments.

Education in clinical audit

 Education in clinical audit, and the need for participation in clinical audit, should be encompassed in undergraduate / entry level programmes [5]. Regular updates and participation in clinical audit should be part of a radiographers continuing professional development (CPD) profile [6].

Types of Clinical Audit

- Clinical audit has a wide-reaching scope, covering all aspects of the patient journey.
 The types of clinical audit are broadly divided into structure audits, process audits, and outcome audits [7].
- In recent years, there has been a lot of guidance on clinical audit focusing on radiation safety, which is also inherent to national and EU legislation [3]. However, clinical audit should extend beyond the realms of radiation safety.
- The areas below are recommendations for focus in radiographer clinical audit based on key areas of patient safety [8], however, this is not an exhaustive list and local and national needs should be considered.
- There are a number of key guidelines and recommendations which give comprehensive detail and recommended audit tools [9-11].

Themes	Suggested Topics
Health and safety	Ergonomics, MRI safety, hand hygiene, infection prevention and control, staff working alone
Healthcare information technology	Reliability of data transfer, image display devices, data safety, General Data Protection Regulation (GDPR) considerations
Human resource considerations	Appropriate staffing levels and appropriate competencies relevant to each modality, CPD requirements to maintain competence
Image quality	Reject analysis, patient positioning, annotation, collimation, accuracy
Treatment quality	Pre-treatment, treatment and patient follow up processes, like weekly chart checks, end of treatment check, machine QA, patient information, treatment verification
Medical imaging [1,9,10]	Availability of clinical information to support justification and optimisation, report turnaround time
Radiotherapy [13]	Localisation, immobilisation, prescription and planning, deviations in radiotherapy administration
Nuclear medicine [12]	Storage of sources and materials, radiopharmaceutical preparation, administration procedures, managing spills
Patient care and engagement	Patient consent, patient satisfaction, patient communication
Radiation safety practices	Justification, optimisation, patient identification, patient dose assessment, accidental / unintended exposures, staff doses
Workflow procedures	Patient identification, prioritisation of patients, waiting times, appropriate patient preparation
Medicines management	Appropriate use of contrast, eGFR/lab parameters, knowledge about patient medication interfering with contrast agents

Benefits to the Profession

- The radiographer's role in clinical audit is essential to the progression of quality improvement, strategic risk management, high-quality imaging and therapy, and improvements to patient care and outcomes. Engagement in clinical audit supports the definition of the radiographer published by the EFRS [14].
- Clinical audit is an essential component of professional practice. The role of clinical audit should be inherent in the radiographers working role. Radiographers are advised to complete their own clinical audits independently or as part of a clinical audit team and allow their practice to be audited as part of a quality improvement process. Thus, clinical audit promotes a culture of accountability to the profession, to individuals, and departments.
- It is noted that clinical audit is educational for those involved [7]. By having clinical audit as a core component of their daily practice, radiographers are likely to be continually updated on evidence-based practice and be aware of how their own practice adheres to this. This is also an opportunity to take pride in their role, increase job satisfaction, and demonstrate service improvements.
- Whilst it is pertinent that radiographers lead professionally focused audits, there is also place for multidisciplinary collaboration [15].
- Engagement in clinical audit demands attention from policy makers and management, whereby issues are auantified, and strengths are displayed. Information is generated so that decisions can be made with the best available evidence. This gives power to the radiographer profession to identify needed resources, guide the development of best practice guidelines, encourage research, and elevate the importance of the radiographer profession at local and European level. It also ensures that services are continually improved for patients whilst demonstrating the key contribution of radiographers in supporting service developments for patients.
- Engagement in clinical audit by radiographers demonstrates a commitment by the profession to patient and staff safety and wellbeing. It also validates a commitment on an international level to an ongoing review of best practice in clinical care and increases the evidence base.

Acknowledgments

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