



Scottish Clinical Imaging network

Scottish Clinical Imaging Network (SCIN)

National Framework for the Musculoskeletal Reporting Radiographer

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Executive Summary

This framework has been produced to enable NHS Scotland to support and develop a consistent reporting radiographer workforce. The training of reporting radiographers has recently received investment from the Scottish Government to build the workforce as part of the Scottish Radiology Transformation Programme (SRTP).

The Scottish Clinical Imaging Network (SCIN) and the Reporting Radiographer Interest Group Scotland (RRIGS) have provided a revised framework for Musculoskeletal (MSK) Reporting Radiography which acts as a reference document to support and enable service development. It is demonstrated throughout Scotland the significant impact reporting radiographers are making to radiology services and the increased potential the workforce can provide has been identified as a key solution within the national radiology workforce plan. This framework aims to support future development in a consistent Scotland wide approach.

Introduction

The national framework for the reporting radiographer was originally produced in 2017 with the aim to standardise and maximise the role of the reporting radiographer across NHS Scotland. To achieve this, a standardised job description and role specification were both agreed. The role specification included agreed educational pathways, an agreed minimum scope of practice and agreed governance and supervision requirements.

Updates

It would be advised this pack will be reviewed by SCIN every two years. As this document will evolve over time any thoughts, comments on suggestions would be helpful.

Please feedback information to: <u>nss.scin@nhs.scot</u>.

Terms of Reference

Aim

The aim of this review of the national framework for the reporting radiographer is to update the previous framework, ensuring relevance to the current and future reporting radiographer workforce.

Objectives

The SCIN Reporting Radiographers SLWG will:

Review and update the national framework for the reporting radiographer based on current evidence and standards. The framework has been extensively utilised and referenced in national workforce planning and therefore it is essential that it is relevant to the current and future reporting radiographer workforce.

Membership of Group

Name	Title	Board
Stuart Williamson	RRIGS Chair, Advanced Practitioner Radiographer (Chair)	NHS Lothian
Anne Marie Ross	SCIN RR SLWG SCIN Lead / Superintendant Radiographer	NHS Lanarkshire
Camilla Young	Acting Senior Programme Manager	NHS National Services Scotland
Karen Gray	Medical Clinical Lead SCIN	NHS Lanarkshire
Caroline Blower	Consultant Radiographer	NHS A&A
Freya Johnson	Consultant Radiographer	NHS GG&C
Kelly Burns	Advanced Practitioner Radiographer	NHS Grampian
Ross Carrie	Advanced Practitioner Radiographer	NHS Fife
Ross McGhee	SCOR President	SCOR
Val Blair	NES AHP Programme Director	NES
Jennifer Gilchrist	Chair Radiology Managers Group	NHS Forth Valley
Jonathan Mayers	Reporting Radiographer	NHS Forth Valley
Karen Brogan	Senior Lecturer	Glasgow Caledonian University
Robina Collins	Admin	NHS National Services Scotland
Julie Rankin	SCOR Scottish Officer	SCOR
Stephanie Hales	Programme Support Officer	NHS National Services Scotland

Current Workforce

The previous national framework for the reporting radiographer indicated that there was wide variation across NHS Boards as to how reporting radiographers were employed and utilised across NHS Scotland. There was also variation in their reporting scope of practice.

The reporting radiographer specialist interest group (RRIGS) undertook a workforce survey in 2023 which demonstrated that variation remains as to how reporting radiographers are employed, the number of reporting sessions undertaken and their reporting scope of practice. At the time of publication, there are currently approximately 65 reporting radiographers in Scotland who are members of RRIGS. However, there is no accurate data on how many MSK reporting radiographers are actively reporting.

Educational Pathways

The minimum qualification required by reporting radiographers is a masters SCQF level 11 postgraduate certificate (PgC) in the specialist area of reporting.

Educational pathways should incorporate the "<u>The Standards for the education and</u> <u>training of reporting practitioners in musculoskeletal plain radiographs</u>" in adherence with the course accreditation requirements of the College of Radiographers.

Job Description / Job Planning

An exemplar job description is available which can be used by NHS Scotland organisations (Appendix 1). Where utilised, this should be assessed by appropriate job matching, consistency and workforce / organisational change panels within individual NHS Scotland organisations.

As an aid to achieve consistency regarding the varied roles of reporting radiographers in NHS Scotland, job planning should be utilised.

Job plans are professional agreements of an individual employee's duties, responsibilities and accountabilities and have mutual benefits to the department, organisation, staff and patients. Job plans should be created for each individual pro rata, should be assessed annually and adapted based on actual activity and service needs and should be deployed using an appropriate operational deployment system (rota). Local service needs may require temporary alteration of job plans.

Within a job plan, the various aspects of a reporting radiographer's role can be divided into four main categories: direct clinical care (DCC), supporting professional activities (SPA), additional NHS responsibilities (ANR) and external duties (ED). The proportion of each may vary locally, but it is recommended that reporting radiographers should actively report ≥50% of their contracted hours.

Job planning allows for reporting radiographers and managers to discuss all aspects of their role and the proportion of time which should be dedicated to each. It allows for effective and efficient use of an individual's time, working at the top of their license.

All NMAHP staff should include all four pillars of practice and as such, not all work undertaken will involve direct clinical care. However, various non-clinical activities add value to service deliverables and should be included in job planning. See appendix 2 for an exemplar job plan. For further information regarding the levels of practice please refer to the <u>SOR Education and Career Framework</u>. The levels of practice within the SOR Education and Career framework are not directly linked to levels of practice within agenda for change.

Role Specification

Policy / Protocol development

The scope of practice for each Reporting Radiographer must be defined within the local governance process (and IR(ME)R Employers Procedures) as determined by IR(ME)R Operator role entitlement.

Scope of Practice – Productivity

The sessional requirement of a Reporting Radiographer is determined by service need. It is accepted that individual reporting outputs may vary and there will be multiple factors that impact on productivity.

Average Number of Reports:

Modality (one body part)	Per Hour
Projectional Radiographs	20
MRI	3 - 4

It is stressed that these figures are an average. There are multiple reasons why productivity may be adversely affected which include interruptions, fielding queries (either in person or by phone) and teaching. Similarly, the type and complexity of examinations, the time of day, stress, fatigue and digital eye strain can also have a detrimental effect on the number of examinations reported. It is therefore rare that reporting is undertaken continuously for the entirety of a session.

Scope of Practice – Operational

Reporting of images by radiographers is recognised as part of the reporting team and reporting radiographers are autonomously responsible for their own actions and work. Radiographers must be Health and Care Professions Council (HCPC) registered.

Reporting radiographers may report within a defined scope of practice. If the reporting radiographer is uncertain about the presence of an abnormality and is unable to produce a meaningful clinical report a second opinion must be sought. A second opinion may be provided by suitably qualified reporting practitioners when necessary. Scope of practice will be dependent on NHS organisation and clinical need.

Depending on the clinical scenario, it may also be necessary for radiologists to make recommendations for further imaging where it is outside the scope of the reporting radiographers.

All image reports that have been reported by a radiographer should be verified and accessible on the Radiology Information System (RIS) within the shortest possible timescale.

The reporting radiographer must maintain their professional knowledge and skills through continuous education, professional development and training programmes.

This should be validated within a formal appraisal and personal development plan structure.

Unexpected significant findings must be immediately communicated by agreed organisational protocols to the referring clinician, in line with National Patient Safety Agency (NPSA) Safer Practice Notice 16 "Early identification of failure to act on radiological imaging reports". This action should be clearly recorded on the verified report as having taken place.

If the reporting radiographer is uncertain about the presence of an abnormality and is unable to produce a meaningful clinical report a second opinion must be sought.

Preceptorship

Preceptorship allows a clinician a period in which to consolidate knowledge without the pressure of autonomy. It is recommended that all newly qualified reporting practitioners undertake preceptorship which will be a period of double reporting and structured support to assist in the transition to practice following each qualification.

For a newly qualified reporting radiographer, a named mentor shall be agreed to support the reporting radiographer during the preceptorship period. This mentor will not be able to double report all of the examinations required so regular meetings to assess the progress of the trainee during the period of preceptorship, and the use of assessment forms by other suitably qualified reporting practitioners supporting the practice, will be required to ensure adequate support and monitoring are in place.

The number of cases required to allow autonomy will vary, it may be that some practitioners require more support than others. The mentor should not be put under pressure to 'sign off' a trainee until both they and the trainee are happy that they will be able to maintain the required level of competency.

The framework recommends newly qualified reporting practitioners undertake:

- Projectional Radiography: A minimum of 400 cases within a period of no more than 6 months before the radiographer is entitled to report under IR(ME)R. Cases should include a range of examinations within the scope of practice.
- Cross Sectional: A minimum of 200 cases within a period of no more than 6 months before the radiographer is entitled to report under IR(ME)R. Cases should include a range of examinations within the scope of practice.

Further preceptorship should be undertaken when a reporting practitioner is returning to clinical practice, extending scope or are new to an NHS organization. The requirements for these may be lower and should be agreed with the practitioner.

Ongoing Audit/ Monitoring of Practice

After the radiographer has completed their preceptorship and is entitled as an operator under IR(ME)R 2017 (local IRMER procedures) to report independently, there should be clinical governance procedures in place to allow for ongoing continuous audit of practice.

A continuous audit completed a minimum of once per month provides assessment of practice and allows for prompt intervention if a practitioner is found to be having difficulties.

This framework recommends a monthly audit process is described. Where possible, this should be in the form of peer review but it is accepted that may not be possible within many organisations and so this duty may fall to the supervising radiologist.

Initially (6 months post completion of preceptorship) it is recommended that 10% of the reporting radiographer work is audited. If the reporting radiographer is undertaking a large volume of reporting this may be onerous monthly and can instead be done on a weekly basis with the results reported monthly. The reports should be randomly selected from those verified by the practitioner and a record kept of the reports audited.

A sample format for collection of audit data via spreadsheet (appendix 3) allows for calculation of sensitivity/ specificity and accuracy or more appropriately the concurrence rate.

The expectation that radiographers will achieve an overall accuracy of 95% for MSK reporting is an arbitrary reference level that was used by HEI's in marking reporting exams and the recent joint document from the RCR/COR setting out standards for the <u>education of reporting practitioners in musculoskeletal plain radiographs</u> states a pass mark of 90%. However, a robust continuous mechanism of clinical support that considers trends and patterns of the reporters work is preferable. This can identify areas for development and make consideration of further preceptorship if necessary. Anecdotally, reporting radiographer's accuracy is around 98%, but reporters should be measured in line with the team average and overall accuracy should not be below 95%.

The results of these ongoing audits should be fed back via departmental clinical governance and a frequency of 6 months is suggested initially, then annually.

After the initial 6-month period and presuming the practitioner is meeting the department standard for specificity and sensitivity, the volume of work audited can be reduced.

As stated previously, peer review is the best form of continuous practice surveillance so discussion should take place with the supervising radiologist. Where appropriate, other members of the team may be needed to put in place a system for random review of cases. It is suggested that a maximum of 10 cases a week will provide an appropriate level of confidence in, and for, the practitioner and for quality control.

In addition to the ongoing peer support the practitioner should be:

- attending relevant MDTs
- able to apply the notification and escalation of serious and unexpected findings
- participating in peer learning and radiology event and learning meetings (REaLM)
- undertake ongoing continuous professional development and annual appraised

Governance

Professional Governance

The <u>standards of conduct, performance and ethics</u> require that the professional is accountable for their individual practice; for keeping their knowledge and skills up to date and relevant to their practice through continuing professional development. The reporter must ensure that their reports are actionable and that failsafe alerts are incorporated.

Advanced and consultant practitioners can apply for accreditation via the SCOR. The <u>CoR Accreditation scheme</u> was established to ensure national transferability in the standards of practice. <u>The Education and Career Framework</u> identifies explicitly the components of enhanced, advanced and consultant practice aligned to the four pillars of practice and the four nation's <u>Multi-professional framework for advanced</u> <u>clinical practice in England</u>.

Employer Governance

Radiology management responsible for provision of clinical imaging and reporting services take responsibility for ensuring effective governance arrangements are in place.

It is the employer's responsibility to entitle radiographers under the lonising Radiation (Medical Exposure) Regulations (IR(ME)R) as operators for clinical evaluation. They must also ensure, through audit, that individual radiographers are sufficiently expert to interpret imaging investigations and agree to record the results of their interpretations. The radiology leadership will be involved in mentorship and assessment as part of the reporting team. The scope of practice for each reporting radiographer must be defined within the local governance process.

To contribute to patient management, accuracy of image interpretation is crucial. Audit, reporting of discrepancies and feedback on errors is essential within each employing NHS Organisation. Clinical governance frameworks: Case mix, selection bias and inter / intra observer bias makes robust standard setting difficult. This framework describes the training and audit required to demonstrate competency of practice and maintain a high quality of service to patients.

Responsibilities – Organisational

The employer must ensure robust policies and procedures to comply with governance and regulatory requirements are in place.

There must be a written protocol and related procedures document as per service need according to the unique and specific area of practice for the reporting radiographer. The clinical lead for radiology (or nominated person) is responsible for ensuring this framework is applied as per the protocol, working in partnership with the reporting radiographer (NHS Scotland Staff Governance). This ensures radiographers are suitably qualified, audited performance is recorded, ensures no compromise to patient safety and is consistent with professional relationships and

accountability. An exemplar protocol and related procedures document is available in appendix 4.

Employers must maintain clear, accurate records of all employees who are trained. Such records should be readily available to all relevant staff affected by the skills mix and role development initiative, and any other staff to whom the records relate and refer.

Prior to commencement of autonomous reporting the organisation must recognise their reporting radiographers as 'entitled operators' under IR(ME)R for Image Interpretation. The employer must be able to demonstrate adequate training of the operator (Reg 17(1)(2)) and sufficient training and CPD (Reg 6(3)(a)(b)).

The NHS organisation is required to accept vicarious liability for reporting radiographers providing they are working within their entitled scope of practice underpinned by evidence through audit. Workload statistics, audit and practice development should be discussed at annual appraisal and defined within the Personal Development Plan (PDP). The service manager should ensure the scope of practice is adhered to. Clinical competence will require a minimum volume of image reports throughout dedicated reporting sessions per week by the Reporting Radiographer. To maintain clinical competence this will require a minimum of one session of reporting per week by the reporting radiographer.

Resources should be made available to support CPD, audit and revalidation, reregistration and reaccreditation, as required, for all reporting radiographers. It is recommended that periodic review of outcome standards (e.g., sensitivity and specificity peer review, accuracy of written evaluations and satisfaction of referrers and patients) is undertaken. This will allow for revision of protocol and related procedures documentation and ongoing education and training plans with clear lines of responsibility and accountability effective delivery of the service.

Responsibilities – Individual

Reporting radiographers must work within their up-to-date scope of practice agreed within an organisation's protocol and procedure documentation.

Reporting radiographers must maintain standards related to their scope of practice, participating in continued training, audit and CPD.

Reporting radiographers are legally accountable for their own actions and may be deemed negligent if they fail to demonstrate due care and diligence in performing their duties or act out with the agreed scope of practice. Acting within a clinical team does not absolve any individual of personal responsibility and accountability in law.

Reporting radiographers should utilise the NHS Education for Scotland <u>NMAHP</u> <u>Development Framework.</u>

It is required that reporting radiographers have appropriate personal <u>indemnity</u> <u>insurance (</u>i.e. SoR or equivalent) for their scope of practice.

Scope of Practice – Risk Management

A risk of misinterpretation of images exists during any reporting process. Those at risk from image misinterpretation are the patients to whom the images refer. This risk is minimised by knowledge gained through an approved post graduate course of study, appropriate supervision, adherence to protocol and procedures and robust agreed individual and team audit process which link to both Reporting discrepancies should be addressed in accordance with the NHS organisation's discrepancy reporting procedure, guided by the RCR standards for radiology events and learning meetings. All medical professionals must be open and honest when something goes wrong with any part of their treatment or care. They must comply with then professional duty of candour within their NHS organisation and utilise the RCR guidance related to <u>duty of candour</u> as and when necessary.

Continuing Professional Development

The reporting radiographer is responsible for maintaining knowledge and skills relevant to their practice in keeping with the HCPC Standards of Conduct, Performance and Ethics. A mixture of learning activities should be recorded as per the HCPC Standards of Continuing Professional Development and they should align to the four pillars of the Education and Career Framework. Reporting radiographers should participate in MDT meetings, REaLMS and special interest groups and are expected to partake in audits and annual appraisals.

Information on development from enhanced to consultant practice can be found within the <u>SOR Education and Career Framework</u>.

References:

- 1. The Royal College of Radiologists and the College of Radiographers. Standards for the education and training of reporting practitioners in musculoskeletal plain radiographs. London: The Royal College of Radiologists; 2022.
- 2. NHS England and NHS Improvement. *Job planning the clinical workforceallied health professionals.* London: NHS Improvement; 2019.
- NHS Education for Scotland. Nursing, Midwifery and Allied Health Professions (NMAHP) Development Framework. Edinburgh: NHS Education for Scotland; 2023. [cited 2023 July 19] Available from: <u>nesd1748-nmahp-development-framework_updated-12-04-23.pdf (scot.nhs.uk)</u>.
- NHS Education for Scotland. Four Pillars of Practice. [homepage on the Internet]. Glasgow: NHS Education for Scotland; 2023. [cited 2023 July 19] Available from: <u>www.nmahpdevelopmentframework.nes.scot.nhs.uk/post-regframework/four-pillars-of-practice/</u>
- 5. College of Radiographers. *The Education and Career Framework for the Radiography Workforce.* 4th Edition. London: The College of Radiographers; 2023.
- 6. The Royal College of Radiologists. *Standards for the communication of radiological reports and fail-safe alert notification.* London: The Royal College of Radiologists; 2016.
- Woznitza N et al. Clinical reporting of radiographs by radiographers: Policy and practice guidance for regional imaging networks. *Radiography.* 2021: 27(1): 645-649.
- 8. Piper K et al. Chest reporting by radiographers: Findings of an accredited post graduate programme. *Radiography*. 2014: 20(2): 94-99.
- 9. Donnelly L et al. Practical Suggestions on How to Move From Peer Review to Peer Learning. *American Journal of Roentgenology*. 2018; 210(3): 578-582.
- 10. Health and Care Professions Council. *Standards of conduct, performance and ethics.* London: Health and Care Professions Council; 2023.
- 11. The Royal College of Radiologists. *Standards for interpretation and reporting of imaging investigations*. Second Edition. London: The Royal College of Radiologists; 2018.
- 12. The Royal College of Radiologists and the Society and College of Radiographers. *Team working in clinical imaging*. London: The Royal College of Radiologists and the Society and College of Radiographers; 2012.
- The Society and College of Radiographers. Ionising Radiation (Medical Exposure) Regulations 2017; briefing for radiographers who undertake commenting or reporting. 2nd Edition. London: The Society and College of Radiographers; 2019.
- 14. The Society and College of Radiographers. *Medical Image Interpretation and Clinical Reporting by Non-Radiologists*. London: The College of Radiographers; 2006.
- 15. <u>The Royal College of Radiologists, 202</u>2. <u>Radiology reporting figures for</u> <u>service planning 2022</u>
- 16. Health and Care Professions Council. *Professional Indemnity* [homepage on the internet]. London: Health and Care Professions Council; 2023 [updated 2018 June 14; cited 2023 July 19]. Available from: <u>www.hcpc-</u> <u>uk.org/registration/your-registration/legal-guidelines/professional-indemnity/</u>.

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- 17. The Royal College of Radiologists. *Standards for radiology events and learning meetings.* London: The Royal College of Radiologists; 2020.
- 18. The Royal College of Radiologists. *Professional Duty of Candour: Guidance for Radiologists.* London: The Royal College of Radiologists; 2022.
- 19. McConnell J. A longitudinal review of Scottish reporting radiographer output between 2015 and 2019. *Radiography*. 2021; 27(1): 200-207.
- 20.NHS Scotland. Diagnostic Imaging Workforce Plan for NHS Scotland. Edinburgh: Scottish Radiology Transformation Programme; 2023.
- 21. Health and Care Professions Council. *Standards of continuing professional development* [homepage on the internet]. London: Health and Care Professions Council; 2023 [updated 2018 June 14; cited 2023 July 19]. Available from: www.hcpc-uk.org/standards/standards-of-continuing-professional-development/.
- 22. NHS England. *Multiprofessional framework for advanced clinical practice in England*. London: NHS England; 2017.

Appendix 1 Job Description

1. JOB IDENTIFICATION	
Job Title:	Advanced Practitioner / Reporting Radiographer
Clinically Responsible to:	[Local Board to Determine]
Department(s):	Imaging Departments
No of Postholder(s):	[Local Board to Determine]
Last Update:	[Local Board to Determine]

2. JOB PURPOSE

- Provide a Radiographic Reporting Service.
- To provide reports for one or more Radiographer image reporting disciplines.
- To support developments in radiographer reporting to enhance patient care across the service.
- Support the reporting team, management and clinical leads in meeting operational and strategic targets and improving the quality of patient care within Radiology.
- To establish an environment of support for reporting radiographer trainees and for other professions with whom the post holder would have close contacts.
- To supervise and perform a wide range of radiographic examinations, providing a high-quality Diagnostic Imaging service.
- To work, in partnership, with the Multi-disciplinary Team across traditional boundaries in all key functions.

3. DIMENSIONS

General

- Provide a high quality, efficient and effective Radiographic Reporting Service.
- Clinical governance strategy ensures a high standard of care for patients undergoing Radiological examinations and promotes multidisciplinary team working.
- Promote Departments' reputation for change and innovation and introduction of new technology and procedures.
- A Lead Radiographer will agree an annual personal development plan (PDP) and EKSF.

Clinical Areas

Imaging is provided at the following sites using a variety of imaging modalities. Reporting provides an expert opinion on this imaging to the referring clinicians and non-medical referrers.

Imaging Sites

[each HB to add list of sites here]

Imaging Modalities

[each HB to add to or delete list from below]

- General radiography (plain imaging)
- CT Scanning
- MR scanning

- Fluoroscopy
- Angiography
- Interventional Radiology
- Cardiac Catheterisation
- Mammography
- Dental
- Dexa
- Ultrasound

The range of Medical Imaging examinations performed for the referring Clinicians provides a comprehensive diagnostic facility for many Primary Care, Out-Patient and In-Patient sources which includes imaging patients from paediatric to geriatric who have varying degrees of ability and understanding.

- To provide a 24/7 Diagnostic Imaging service.
- The examinations undertaken by the Diagnostic Imaging Department, including provision of images and reports are essential to allow optimal diagnostic and patient care processes to occur.
- All radiographic practice is undertaken in accordance with National Legislation: IR(ME)R 2017 (Ionising Radiation (Medical Exposures) Regulations 2017) and IRR 2017 (Ionising Radiation Regulations) and is subject to inspection by the IR(ME)R and HSE Inspectors.

Clinical Activity

- To provide a comprehensive Imaging service to patients and clinicians.
- To provide a Diagnostic Imaging service to in-patients and the A/E departments, including evening and weekend working.
- To provide a report following imaging examinations in accordance with agreed Policy and Protocol for Independent Image Interpretation by Advanced Radiography Practitioners.

Clinical Provision

7 days per week service

Staff Responsibility

Within a highly specialised Radiographic Imaging Modality the post holder has associated management responsibility for:

- Training, induction, competency, and supervision of Radiographers and HCSW's rotating through their specialised areas.
- Supervise the workload of Band 6 Radiographers, Band 5 Radiographers, HCSW's and direct porters as required.
- Student Radiographers on clinical placement and students from other disciplines i.e. Medical, Nursing, and AHPs.
- Health and Safety.
- IRMER and IRR.
- Liaising with other staff groups, including Medical, Nursing, Clerical and Portering.

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National Framework for the Musculoskeletal Reporting Radiographer

4. ORGANISATIONAL POSITION

[Local Board to provide]

5. ROLE OF THE DEPARTMENT

- Provide a high quality, efficient and effective Radiology service to the local population.
- Diagnostic imaging equipment is used to carry out radiological examinations on patients and reports are provided to referring clinicians. The report assists the referrer in providing a diagnosis of the patient's condition in order to decide on an effective course of treatment and care.
- The postholder will enhance the service provided to the public, by reducing the turnaround time between examination and formal report on projectional radiograpic films.

6. KEY RESULT AREAS

It is the postholder's responsibility to minimise radiation dose and risks to patients, staff, relatives, general public and self. This minimises the risk to current and future generations.

Clinical

- To provide an autonomous reporting service for one or more Radiographer reporting disciplines by analysing, interpreting and issuing an independent report from within the reporting team structure and when necessary discussing the findings with the referring clinician.
- To communicate in writing (via RIS) the final clinical reports on general radiography reporting to referring clinicians / non-medical referrers.
- Provide expert advice to clinicians on the nature of diagnostic images/reports.
- To recognise and ensure urgent findings are communicated to the appropriate person, and patients are directed accordingly.
- To provide expert clinical advice in relation to one or more Radiographer reporting disciplines Emergency Care and to support the multidisciplinary team.
- Participate in the development of the radiographer led reporting service.
- Support the establishment of standards and guidelines for best practice in Radiographer Reporting.
- Comply with protocol and procedure and associated clinical governance, risk assessment and audit in own specialist field.
- Deliver presentations / training sessions to enhance knowledge of image reporting to Radiographer colleagues and clinicians.
- Responsible for delivering findings of audits of practice to groups of staff, working parties etc.
- Ensure that the level of Radiographer Reporting Service provision meets imaging department standards.
- To plan own workload and prioritise the reporting of patients with acute illness or injury in line with locally agreed triage systems.
- Liaise with other staff specialties and draw on experience where clarification is required to ensure the most appropriate treatment or further assessment in

line with established care pathway, determining the need for additional projections based on image appearance.

- To use specialist knowledge to review and comment on continuing appropriateness of imaging protocols.
- Demonstrate ability to act as a recognised expert within diagnostic imaging, providing specialist advice to clinicians as appropriate.
- Act as patient advocate in Radiation Protection issues advising and further referring where necessary.
- Care for the needs and welfare of every patient.
- Carry out a wide range of Radiographic Procedures using a variety of specialised equipment.
- On a daily basis multitask between using pieces of highly specialised equipment and dealing with frequent interruptions for advice/information on any aspect of the services provided.
- Be familiar with the range of technical applications available on Imaging equipment in own specialised area.
- Supervise Band 6 Radiographer, Band 5 Radiographers, Assistant Practitioners and HCSWs.
- Be actively involved in acquiring diagnostic images, and physically position the full range of patient presentations accurately for examinations, taking into account patient limitations and adapting standard techniques where necessary.
- Within area of expertise train, monitor and evaluate professional standards and provide professional advice contributing to effective 24-hour service delivery.
- Work as part of a team to ensure effective communication and delivery of care, prioritising work depending on severity of patient condition.
- To make decisions in complex and unpredictable circumstances, e.g., rearrange workload in event of equipment failure/accommodating emergency referrals, which would have an impact on other service users, e.g., Orthopaedic, Medical and Surgical.
- Maintain accurate patient records by input of accurate information to reflect the service provided and meet professional standards.
- Ensure appropriate infection control measures are implemented to maintain a clean and safe working environment for both patients and staff.

Managerial

- Be actively involved in new patient care strategies and care pathways and be involved in promoting the Radiographer Reporting service.
- To influence the national policy agenda in Radiographic Reporting as appropriate.
- Participate in the development of the Radiographer Reporting service in collaboration with other members of the team.
- Produce and deliver presentations on the Radiographer Reporting service and other topics to multi-disciplinary groups.
- Be actively involved in ensuring Radiographers are committed to departmental audit and Quality Assurance to maintain effective Clinical Governance.
- Plan and participate in delivery of education, training, multi-disciplinary and research activities.

- Maintain knowledge of technological and technical advances to promote a culture of continuous improvement.
- In the absence of modality leads take responsibility for the Radiographic team in that area, i.e., Band 6 Radiographers, Band 5 Radiographers, Assistant Practitioners and HCSW's.
- Supervise other practitioners, radiographic staff and student radiographers and be responsible for the safe use of imaging equipment by other Radiographic staff and provide clinical training. If required reorganise and deploy staff appropriately, to ensure that staffing levels are adequate to meet the 24-hour service requirements.
- Oversee an effective patient appointment or scheduling system.
- Contribute to the development, implementation and maintenance of departmental policies, procedures, standards and protocols, and 'Local Radiation rules' all of which have an impact on other service users. Be involved where feasible in monitoring and ordering of supplies / consumables and to assist in the delivery of a quality service within budgetary constraints.
- To ensure that images are presented for reporting purposes in a timely and accurate manner.
- To attend multidisciplinary and management meetings as required.
- To report equipment malfunctions and to help maintain a comprehensive and accurate record of faults, ensuring that all appropriate staff are kept up to date as to the working status of equipment.
- Comply and implement Hospital policies and procedures with respect to patient care, i.e.:
 - Health and Safety
 - Infection Control
 - Control of Substances
 - Hazardous to Health (COSHH)
 - IR(ME)R 2017 and IRR 2017
 - Risk Management
 - Radiation Protection Procedures
 - Quality Assurance Programme
 - Clinical Governance
 - Research and Development
 - Education and Training

Human Resources

To be Involved in:

- Recruitment and retention (through interview process).
- To motivate and inspire the Radiographic team through extended professional role.
- To develop for staff utilising mentorship, appraisal and personal development plans (PDP).
- To promote individual accreditation of advanced practice by the College of Radiographers

Information Resources and Skills

- In-put patient data and supervise other members of staff using:
 - Radiology Information System (RIS) used to input and access patient information relating to radiological examinations in order to review

previous procedures and clinical history, record current examination details, view and dictate reports.

- Computerised Radiography Systems (CRS) Images are viewed on remote operator panels prior to being accepted onto the archiving system. This allows for all details to be checked and images to be manipulated to enhance diagnostic quality.
- Picture archive and communication system (PACS) used daily to retrieve previous examinations and store current images. Used to copy images onto film for use in theatre or for transfer to other hospitals.
- Regularly use computer software programmes such as Microsoft Word and Excel to create documents and tables. e.g., for Quality assurance and audit purposes.
- Use of voice recognition technology, have a comprehensive knowledge of the Radiology Information, Reporting Systems and PACS; utilise systems to input and retrieve patient details, reports and statistics; retrieve and analyse data for the purpose of audit.
- If available, use proprietary brand document control systems to record radiation policies, procedures and other documents.
- Involved in own specialised area for the daily management/ housekeeping and troubleshooting of imaging modality IT systems creating seamless acquisition, storage, retrieval, and display of digital patient images.
- To ensure that imaging modality systems are backed up regularly and that all patient demographics/information/images are correct and accurate.
- Access the internet, e-mail and Hospital intranet with relevance to personal and professional development and departmental business e.g., ordering of supplies etc.

Research and Development

- Regularly undertake Clinical Effectiveness and Quality Assurance.
- Use audit to continually improve practice and development of radiographer reporting service.
- Actively participate in the technical and patient focused aspects of the department's audit programme.
- Provide guidance, supervision and support for staff undertaking research, audit or teaching activities.
- Assist and advise Lead Radiographer(s) by contributing to the planning and organising of service provision, e.g., monitor and evaluate service demand including staffing levels and assessing workload.
- Maintain clinical expertise whilst continuing with research and development to influence national policy.

Educational

- Actively involved in training and education, to influence and support educational developments of the multidisciplinary team in relation to the Radiographer Reporting Service.
- Must be able to communicate specialist condition related information presents specialist
- and highly complex information to large groups such as MDT meetings.
- Maintain an extensive and contemporary knowledge of current practice by participating in ongoing personal education and development including

mandatory training and actively pursuing continuous professional development keeping an up-to-date personal record, (PDP).

- The post holder as a senior member of the team will supervise the work of other qualified staff, assistant practitioners, and students. In addition, they will use their clinical knowledge to help train others and provide more specialist training to others undertaking a course of study to allow them report.
- Support the education and clinical training of both undergraduate and postgraduate students, both within the Health Board and local Higher Education Institutions as required. Supporting new programmes of education and training to facilitate changes in practice, developing a lifelong learning culture within the Imaging department.
- Maintain knowledge of technological advances in methods of diagnostic imaging to promote a culture of continuous improvement within the department.
- Develop and maintain robust training and educational frameworks that are responsive to individual and service needs as appropriate.
- Maintain an in-depth knowledge of specialist equipment used.
- As a reviewer carry out annual PDP interviews with Radiographers, Assistant Practitioner's and HCSW's.
- In conjunction with the Site and modality Lead Radiographers be involved in implementing Role Development for Radiographers.

7. SYSTEMS, EQUIPMENT AND MACHINERY

A variety of specialised investigative and diagnostic imaging equipment is utilised which comprise

of multifunctional controls. The equipment is operator dependent and requires specific skills to achieve images of diagnostic quality. Below is a list of the radiology equipment. Post holders use the majority of the equipment relevant to their department. Radiographic equipment ranges from £30,000 to £1.5million.

- Reporting Workstations.
- Picture Archiving and Communication System (PACS).
- Radiology Information Systems (RIS) with voice recognition.
- General purpose x-ray equipment (includes x-ray tubes, tables, operator consoles)
- Digital Radiography Systems (CR/DR)
- Dedicated resus x-ray equipment
- Digital fluoroscopy units
- Dedicated digital Angiography Unit
- Multi slice CT scanner
- MRI
- High Pressure Injector Pump
- Mobile x-ray units (mainly for use in wards)
- Mobile image intensifiers (mainly for use in theatre)
- Personal Computers
- Label printers associated with Radiology Information System (RIS)
- Manual Handling Aids: Mechanical patient hoists, PAT slides, GLIDE sheets
- Immobilisation devices e.g., foam pads

- Protective equipment, incl. Lead rubber aprons
- Suction, Oxygen, emergency drugs tray

8. ASSIGNMENT AND REVIEW OF WORK

- Operate autonomously within the team structure at clinical expert level, within broad guidance and principals to manage the responsibilities of the post.
- There will be on-going supervision for the postholder within their department.
- Make autonomous decisions on a daily basis, including provision of advice to junior staff in clinical decision making for a multi-disciplinary team including medical staff, regarding patient care on a daily basis.

9. DECISIONS AND JUDGEMENTS

- Independently analyse and interpret images as agreed by Policy and Protocol for Independent Image Interpretation by Advanced Practice Radiographers.
- Issue autonomous reports and when necessary discuss findings with referring clinician. This involves incorporating the clinical history, findings and knowledge of normal anatomy, pathology and disease processes to perform the task effectively and accurately. This enables prompt and appropriate action as regards further examinations and /or management.
- Advise and implement protocols and procedures for the optimum demonstration of pathology.
- Clinically evaluate images produced by self and team members to assess quality and determine need for further imaging prior to patient departure from department.
- Within own specialised area monitor and evaluate professional standards and provide Professional advice. Where a clinician disagrees, have the depth of specialised knowledge required to debate and convince otherwise.
- Apply analytical judgement to problem solving and improving service delivery.
- Act as Mentor to Radiographers not performing to accepted standards of work and teaching/training them to achieve appropriate standards and assessing and advising the Lead Radiographer as to their ability and competency.
- Act independently in the assessment of referrals for x-ray examinations, taking full responsibility for the justification of x-ray examinations in order to reduce unnecessary ionising radiation exposure of patients in accordance with IR(ME)R 2000.
- Exercise personal responsibility and make decisions based on knowledge and experience in complex and unpredictable circumstances when undertaking clinical duties.
- Assess mental, physical and emotional condition of patient prior to and during examination, and to adapt techniques accordingly, in order to provide the best possible image with minimum radiation dose.
- Identify and respond to significant service difficulties in a proactive manner taking into account individual, service and organisational risk factors.
- To make decisions on managing the service while giving support to referrers and radiographic colleagues in the event of equipment breakdown.
- Delegate tasks to Radiographers, and Assistants and ensure that appropriate skill mix is maintained at all times to achieve the desired quality of patient care.

- Frequently reassess workload to provide optimum utilisation of Radiographic resources.
- Assess ability and competence of students to perform radiographic tasks.

10. MOST CHALLENGING / DIFFICULT PARTS OF THE JOB

- Maintaining a minimum reporting accuracy level of 95% which will be audited as defined in the agreed Policy and Protocol for Independent Image Interpretation by Advanced Radiography Practitioners.
- Frequent need for long periods of intense concentration to report on examinations within a limited timescale.
- Maintaining a balance between reporting and other clinical duties.
- Working under pressure to ensure waiting times are kept to a minimum whilst dealing with urgent requests for acute cases.
- To be able to multitask between using highly specialised equipment and dealing with frequent interruptions for advice/information on any aspect of the service provided.
- On a daily basis be prepared to operate Imaging equipment in differing and demanding environments and being able to manage an unpredictable workload effectively.
- Train, supervise and assess other staff with varying degrees of experience and levels of competence, performing x-ray examinations whilst maintaining patient care and throughput.
- Provide supervision and assistance to Radiographers performing x-ray examinations as well as being actively involved oneself.
- Cope with the mental and physical demands of working in acute areas independently, sometimes having to obtain images on severely injured, abusive or violent patients.
- Exposure to cases where the patient's prognosis is poor.
- Combining training in new techniques or newly procured equipment with normal patient workload, keeping up to date with CPD and ever-changing technology.

11. COMMUNICATIONS & RELATIONSHIPS

Daily contact with Medical Staff / Other Health Care Professionals

- Issue autonomous reports from within the team structure and when necessary discuss findings with the referring clinician.
- Provide advice on the nature of an image/report.
- Advise/ discuss incorrect or unnecessary referrals.
- Provide advice on guidelines for relevant x-ray examinations.
- Relate highly sensitive patient information to and discuss this with referring clinicians and colleagues.
- Deliver CPD sessions to colleagues and clinicians.
- Liaise with medical and nursing, clerical and portering staff to ensure service delivery and efficient and timeous patient transfer and examination preparation.

Radiology Staff (Internal / External)

- Discuss images with Consultant Radiologist as required as per agreed Policy and Protocol for Independent Image Interpretation by Advanced Practice Radiographers.
- Receive information from and delegate tasks to Radiographer's, Assistant Practitioner's and HCSW's.
- Supervise, teach, and provide advice and reassurance to Specialist Registrar's, Radiographer's, Assistant Practitioner's and HCSW's.
- Pass on patient information when transferring patient care to colleagues.
- Provide handover information at the change of a shift.
- Impart information of a technical nature to students and Radiographers regarding specialist
- equipment and Radiographic Practice.
- Undertake training of student Radiographers and provide constructive criticism as part of the
- formal assessment process.
- Attend departmental meetings.

Patients

- Providing complex information by explanation of procedures, listening to the patient's requirements in order to encourage compliance with the imaging process, e.g., concerns over radiation dose or regulations regarding pregnancy.
- Where patients have a barrier to understanding or are unable to communicate e.g., English is not their first language or they are confused, the Radiographer must try to allay fears by ensuring that patients have the benefit of informed choice.
- Providing and receiving highly complex and sensitive information e.g., dealing with non- accidental injuries in children and dealing with IV drug abusers.
- Communication skills are adapted to meet the needs of patients who may be anxious, aggressive or intoxicated, and with a variety of mental and physical abilities. The barriers to understanding must be overcome using clear, comprehensive, sympathetic and persuasive skills.
- Patients will have injuries or illness that will require the adaptation of the imaging technique and utilisation of developed motivational and persuasive skills to ensure the correct position and to reduce mobility, thus producing a high quality diagnostic image.

Relatives / Carers

- Provide information using tact and diplomacy in the context of the standards of professional and personal conduct and within the regulations governing the Data Protection Act.
- Highly developed skills are required for providing and receiving complex and sensitive information and showing empathy to patients and relatives, e.g., when explaining procedure to patient and relative and the associated side effects and gaining consent for the procedure to go ahead.
- Provide reassurance and receive information about patient's capabilities.
- Ask and instruct relatives / carers for assistance as required, while observing Radiation Protection Guidelines.

Other Relevant Departments, for example, liaise with equipment engineers and estates on priority and deployment of radiographic resources, e.g., service arrangements/interventional cases.

- Estates, Supplies, Human Resources, Fire Officer, Infection Control
- Non-NHS Staff
- Communicate and liaise with Equipment Manufacturers:
 - Engineers
 - Equipment Sales Representatives
 - Company support staff

12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB

Physical Skills:

-

- Enhanced keyboard skills for data entry to relevant systems, as well as to produce clinical
- and statistical reports.
- Using a high level of skill and accuracy when handling severely injured patients to minimise
- the risk of exacerbating injuries, whilst achieving the goal of acquiring the correct images.
- Positioning of patients demands a high degree of accuracy to minimise radiation dose.
- Have the expertise to handle and operate highly specialised and expensive equipment.

Physical Demands:

- Long periods of time spent in front of a workstation requiring high levels of concentration whilst reporting images.
- Maintain a level of physical fitness to frequently move ceiling mounted X-Ray tubes throughout three dimensions during all shifts.

Mental Demands

- Balancing constantly changing priorities whilst maintaining a high-quality service.
- High level of concentration is required when analysing complex clinical images, producing reports or providing highly specialised advice.
- Be able to manage an unpredictable workload effectively and interact successfully with fellow healthcare professionals with referrers who all believe their patient should take priority.
- Prioritising workload requires diplomatic skills in discussion with referrers from a variety of clinical areas.
- Intense concentration when analysing complex clinical images/reports.
- Dealing with interruptions to concentration which results in a change of practice e.g., urgent phone calls from patients, consultants seeking advice etc.

Emotional Demands

• Perform Radiographic examinations with care and understanding when dealing with patients who may be anxious, distressed or terminally ill.

- Working under pressure to ensure that waiting times are kept to a minimum whilst dealing with urgent requests for acutely ill patients and frequently performing examinations in traumatic circumstances for critically injured patients.
- To deal with a variety of patients from paediatric to elderly, mental health patients, prisoners, requiring sensitive handling in all situations, where verbal abuse could occur.

Daily Working Conditions

- Work within a darkened environment that is optimum for viewing and assessing diagnostic images on VDU, can work constantly in artificial lighting with little or no natural daylight.
- Frequent exposure to unpleasant odours, uncontained body fluids and infections.
- Occasional Risk of physical abuse from patients/carers who may be intoxicated, confused, or be IV drug abusers.

13. KNOWLEDGE, TRAINING AND/OR EXPERIENCE REQUIRED TO DO THE JOB

Essential

- D.C.R. or BSc (Hons) in Diagnostic Radiography.
- Postgraduate qualification in one or more Radiographer reporting disciplines.
- HCPC registration.
- The post holder must have significant post graduate clinical experience.
- Evidence of CPD and post- graduate study in a specialist area.
- Current and wide range of highly developed specialist technical and Healthcare knowledge.
- Excellent verbal and written communication and presentation skills.
- Be able to organise and motivate others to deliver plans.
- Ability to take responsibility and make decisions.
- Team worker with developed and appropriate leadership style.
- Evidence of a high level of analytical problem-solving skills.
- Interpersonal skills to negotiate influence and inspire.
- Effective advocate for patients and staff in a wide range of arenas.
- Computer literate and able to use databases and spreadsheets.
- Have a positive attitude to flexible working to meet the demands of the service.
- Ability to work across professional and organisational boundaries internally and externally.

14. JOB DESCRIPTION AGREEMENT

A separate job description will need to be signed off by each postholder to whom the job description applies.

Job Holder's Signature:	Date:
Head of Department Signature:	Date:

Appendix 2: National Framework for the Reporting Radiographer – Job Planning

Consultant / Advanced Practitioner / Reporting Radiographers should undertake all four pillars of consultant / advanced practice.

These are:

- Clinical Practice
- Leadership
- Facilitating Learning
- Evidence, Research and Development

The percentage of each aspect of the four pillars may vary locally, but reporting radiographers should actively report \geq 50% of their contracted hours.

Example Job Plan – Advanced Practitioner Radiographer

10 sessions:

- 6 Reporting
- 1 Reporting related CPD, Audit, 1-1 teaching, SpR report checking
- 2 Image acquisition
- 1 Supporting professional activities (SPA) Research, service development, educational material preparation, SOP review, HEI work

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	Reporting	SPA	Reporting	Image	Reporting
			Related	Acquisition	
PM	Image Acquisition	Reporting	Reporting	Reporting	Reporting

Alignment of the four pillars of practice with the example job plan:

Reporting - Clinical practice, leadership, facilitating learning

Reporting related - Clinical practice, facilitating learning, research / development Image Acquisition - Clinical practice, leadership and facilitating learning Supporting professional activities (SPA) - Leadership, facilitating learning, and research / development

Example Job Plan – Consultant Reporting Radiographer

10 sessions:

- 6 Reporting
- 1 Reporting related CPD, Audit, 1-1 teaching, SpR report checking
- 1 Administrative duties
- 1 Education Trainee education (SpR/Reporting Radiographers), HEI

1 – Supporting professional activities (SPA) – Research / research support, service development, educational material preparation, peer project support

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	Admin	Reporting	Reporting	Education	Reporting
PM	Reporting	SPA	Reporting Related	Reporting	Reporting

NMAHP-Development-Framework.pdf (scot.nhs.uk)

Appendix 3: Sample format for collection of audit data

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Appendix 4: Exemplar Policy and Related Procedures Document

NOTE: Policy and related procedure documents with a similar format to the exemplar can be created for chest plain radiograph reporting, DXA or any other relevant reporting undertaking by radiographers. Alternatively, all could be combined in a single document to meet the requirements of the NHS organisation.

Background

The purpose of this document is to allow suitably trained Radiographers to issue clinical reports for specific examinations in a timely manner, thus, improving the patient pathway.

In accordance with a joint publication from the Royal College of Radiologists (RCR) and the College of Radiographers (CoR), (2012), '*Team working within clinical imaging: A contemporary view of skills mix*', there must be a protocol for Advanced Practitioner reporting set within a system of work. This should be unique to the specific area of practice for the Advanced Practitioner.

This policy aims to:

- Recognise the specialist practitioner role; carrying out projectional radiographic reporting, assessment of their own specialist workload of patients, producing and maintaining associated report/patient records
- Ensure that Consultant/Advanced Radiographer Practitioners report radiological examinations they have been adequately trained and authorised to do so.
- Ensure reports produced adhere to best practice (appendix 1)
- Optimise resources.
- Ensure safe working practices are maintained and reports are issued within protocol requirements.

Responsibilities

The Clinical Director for the service the policy operates within and the Medical Imaging Lead are responsible for ensuring that the operation of the policy does not compromise patient safety, and is consistent with professional relationships and accountability.

The Consultant in charge of the patient's care is ultimately accountable for their care. The medical staff or non-medical practitioner is responsible for the interpretation of the examination in the given clinical context.

A Consultant/Advanced Radiographer Practitioner who is authorised under IRMER to report selected radiological investigations is responsible for ensuring that they are competent to undertake their duties. They are also responsible for ensuring that they have a clear understanding of the ethical and specific legal issues surrounding requesting radiological investigations, and that the procedure is carried out within the

terms of this policy and according to their code of professional practice and conduct (HCPC, 2018).

Inclusion Criteria for MSK Plain Radiograph Reporting

Only those members of staff that fulfill the following criteria are permitted to report radiological investigations:

- Have undergone (or are undergoing) a Masters level course (PgC, PgDip or MSc) approved by the College of Radiographers and have met the required competencies. These will be assessed and approved by a nominated mentoring Radiologist/ Consultant Radiographer
- Have Consultant/Advanced Radiographer Practitioner status or are in training
- Are able to provide evidence of continued post-registration experience / education

Inclusion Criteria for MRI Lumbar Spine Reporting

- Have undergone (or are undergoing) a Masters level course (PgC, PgDip or MSc) approved by the College of Radiographers and have met the required competencies. These will be assessed and approved by a nominated mentoring Radiologist
- Have Consultant/Advanced Radiographer Practitioner status or are in training
- Are able to provide evidence of continued post-registration experience / education

Record of Competency

A log of appropriately trained staff will be kept by the Medical Imaging Lead for each of the clinical areas working within this policy/procedure document. It is the responsibility of the non-medical healthcare practitioner to maintain competence in the relevant skill and to comply with radiology policy and IR(ME)R.

Training of Radiographers / Radiology Registrars

Once the radiographers are entitled under IRMER to report MSK images they will be asked to assist in the training of others where appropriate.

The Radiology registrars at A&A have been supported by the radiographer reporting team for several years and part of that function is for the radiographers to verify reports for the registrars but also radiographers in training which fall within their scope of practice.

Monitoring and Audit – MSK Plain Radiographs

In order to monitor practice an audit will be completed in collaboration with radiology and relevant clinical areas. The audit will be completed and reported within agreed timescales and recommendations for future practice will be made.

The Consultant Radiographer will review 10% of reports per month for the first 6 months and after any progression (i.e. when the practitioner progresses to paediatric reporting and then non trauma)

Thereafter approximately 5% of each practitioner's reports will be peer reviewed monthly (10 cases per week).

A summary audit will be produced every 6 months for the clinical governance group, with an expected minimum accuracy rate of 95%. The audit will examine previously determined accuracy, specificity and sensitivity levels. In addition to this the following will be carried out:

- Peer review; 10-15 cases.
- Self audit via review of discrepancy spreadsheet and clinical case notes.

Monitoring and Audit – Cross-Sectional

In order to monitor practice an audit will be completed in collaboration with radiology and relevant clinical areas. The audit will be completed and reported within agreed timescales and recommendations for future practice will be made.

Nominated Radiologist will review 10% of reports per month for the first 6 months. Thereafter, approximately 5% of each practitioner's reports will be reviewed monthly.

A summary audit will be produced every 6 months for the clinical governance group, with an expected minimum accuracy rate of 95%. The audit will examine previously determined accuracy, specificity and sensitivity levels. In addition to this the following will be carried out:

- Peer review; 10-15 cases
- Self audit via review at MDT meetings

Scope of Practice – MSK Plain Radiographs

Reporting of images by Radiographers is an established service within [NHS Scotland Organisation] and is supported by the Clinical Director of Radiology, Consultant/Advanced Practitioners' scope of practice includes:

Skeletal examinations requested for patients presenting for imaging, from Accident and Emergency, General Practitioners, Wards and Out-patient Clinics on any of the acute or community hospital sites.

Consultant/Advanced Practitioners may report images for adult or paediatric patients of the; Appendicular skeleton (upper limb, up to and including the shoulder girdle; lower limb (up to and including the hip joint) and the Axial skeleton (including pelvic girdle, spine, skull, facial bones) for: -

- Foreign body identification in any of the above; excluding soft tissue neck (Oesophageal FB's) and pre MRI scan images
- Patients who have presented with an injury
- Patients requiring review post operatively/ post fracture

- Potential calcific tendonitis in the shoulder (over 16's only)
- Potential stress fractures
- Patients with potential bone infections referred from the Emergency department (over 16's only)
- Patients presenting with potential Osteoarthritic changes (limited to Appendicular Skelton, shoulder, pelvis and cervical spine)
- Patients presenting from rheumatology OP clinics and GP services where inflammatory arthropathy is suspected.

Consultant/Advanced Practitioners will follow the standards and procedure for reporting set out in appendices 1 &6 and must work within any limitation to the above as agreed with the Clinical Director of Radiology.

Consultant/Advanced Practitioners will follow the procedure for highlighting potentially missed abnormalities to the Emergency Department in a timely and effective manner (Appendix 7) as agreed with the Clinical Director of Emergency Department

Exclusions – MSK Plain Radiographs

- Examinations excluded and which should be reviewed by a Radiologist:
- Chest (under 16 years of age),
- Abdomen
- Paediatric skulls (under 16 years of age),
- Dental examinations.

Scope of Practice – MRI Lumbar Spine

Following a period of preceptorship described in the audit and mentorship section above the Radiographer will report cross sectional examinations which initially will present via adult out-patient sources using standard imaging protocol.

Any subsequent progression to include in-patient and Emergency Department referrals will require additional sign off from the Radiologist mentors.

Exclusions – MRI Lumbar Spine

- In-patient and ED referrals This can be added to Scope of Practice if there is evidence of required competence in reporting of out-patient examinations (if Practitioner, Mentor and Radiology Service Manager in agreement).
- Patients under the age of 18 years old.

Probationary Staff

Probationary staff will work to more limited scope which will be agreed between the Advanced Practitioner and the Clinical Director and/or Consultant Radiographer. The probationer will progress after further training and audit

Dealing with Discrepancies

The weekly audit and bimonthly peer review will on occasion highlight discrepant findings in verified reports. Occasionally these will also be flagged by other means.

Whenever these discrepancies are found a learning form must be completed (shared drive under audits/ discrepancy forms).

If the discrepancy is radiology only- that is the abnormality has been picked up and treated clinically by the referrer- then the discrepancy will be discussed at the next peer review/ discrepancy meeting. Usually no further action needs to be taken or there will be a learning review if it was found to be a cognitive error and shared with the group as a whole.

In the event a discrepancy is discovered that has also been missed by the clinical team there will be immediate communication to the team about the discrepancy and clinical decision will be made to review or treat the patient. This discrepancy will then be discussed at the next peer review/ discrepancy meeting and any learning fed back to the whole group.

All completed forms are forwarded to the Radiologist lead.

Equality and Diversity Impact Assessment

Employees are reminded that they may have patients/carers who require communication in an alternative format e.g., other languages or signing. Additionally, some patients/carers may have difficulties with written material. At all times, communication and material should be in the patient's/carer's preferred format. This may also apply to patients with learning difficulties.

In some circumstances there may be religious and/or cultural issues which may impact on clinical guidelines e.g., choice of gender of health care professional. Consideration should be given to these issues when treating/examining patients.

Some patients may have a physical disability or impairment that makes it difficult for them to be treated/examined as set out for a particular procedure requiring adaptations to be made.

Patients' sexual orientation may or may not be relevant to the implementation of this guideline; however, non-sexuality specific language should be used when asking patients about their sexual history. Where sexual orientation may be relevant, tailored advice and information may be given.

References

- DEPARTMENT OF HEALTH, 2003. Radiography Skills Mix A Report on the Four-tier Service Delivery Model. London: Department of Health and Social Care.
- HEALTH AND CARE PROFESSIONS COUNCIL, 2016. Standards of Conduct, Performance and Ethics. London: Health and Care Professions Council.
- Ionising Radiation (Medical Exposures) Regulations 2017. S.S.I. 2017/1322.
- NIGHTINGALE, J. and HOGG, P., 2003. Clinical Practice at an Advanced Level: An Introduction. *Radiography*, 9(1), pp 77-83.
- THE ROYAL COLLEGE OF RADIOLOGISTS AND THE COLLEGE OF RADIOGRAPHERS., 2012. *Team working in clinical imaging*. London, The Royal College of Radiologists.
- THE ROYAL COLLEGE OF RADIOLOGISTS AND THE COLLEGE OF RADIOGRAPHERS., 2022. Standards for the Education and Training of Reporting Practitioners in Musculoskeletal Plain Radiographs. London, The Royal College of Radiologists.
- THE ROYAL COLLEGE OF RADIOLOGISTS., 2002. *Clinical Radiology: Workforce in Crisis.* London, The Royal College of Radiologists.
- THE ROYAL COLLEGE OF RADIOLOGISTS., 2006. Standards for the Reporting and Interpretation of Image Investigations. London, The Royal College of Radiologists.
- THE ROYAL COLLEGE OF RADIOLOGISTS., 2008. Standards for the communication of critical, urgent and unexpected significant radiological findings. London, The Royal College of Radiologists.

Bibliography

- NIGHTINGALE, J., 2008. Developing protocols for advanced and consultant practice. *Radiography*, 14(1), e55 e60.
- OWEN, A., HOGG, P. AND NIGHTINGALE, J., 2004. A critical analysis of a locally agreed protocol for clinical practice. *Radiography*, 10(2), pp. 139 144.
- PATERSON, A. et al., 2007. Reporting by radiographers: a policy and practice guide. *Radiography*, 10(3), pp. 205 212.
- THE COLLEGE OF RADIOGRAPHERS., 2006. Medical Image Interpretation and Clinical reporting by Non-Radiologists: The Role of the Radiographer. 2ND Edition. London: The College of Radiographers.
- THE ROYAL COLLEGE OF RADIOLOGISTS., 2008. Standards for the communication of critical, urgent and unexpected significant radiological findings. London: The Royal College of Radiologists.