

JOB DESCRIPTION

1. JOB IDENTIFICATION

Job Title:	Specialist Radiographer (Static) (Band 6)
Responsible to :	CT/MRI Team Leader
Department:	Radiology
Directorate:	Diagnostic Services
Operating Division:	Acute Services
Job Reference:	202437

2. JOB PURPOSE

Provide specialist imaging within one of the following clinical areas, including MRI, CT, Nuclear Medicine, Mammography, Cardio-Vascular, Neuro-Angiography and satellite imaging departments.

To justify and perform radiographic examinations, providing direct care and a high quality diagnostic service in order to assist in the management of patients within the directorate of Radiology.

Supervise and act as mentor to junior radiographers ensuring continuity of service.

3. DIMENSIONS

Responsible for safe use of expensive equipment used by self (Radiographic equipment ranges in price from £30,000 to £1million)

Clinical Areas

General Radiography including A+E, GP, Out Patients, In Patients Dental, Fluoroscopy, Theatre, ITU/Ward Portables. CT Scanning Procedures, MRI dept

Clinical Activity:

> 118,000 examinations per annum

Staff Responsibility: To direct and supervise the workload of radiographers, assistant practitioners and radiology department assistant and students

The post is employed within NHS Lothian and there is a requirement to work flexibly across Lothian to meet service demands.

4. ORGANISATIONAL POSITION

**LOTHIAN
Radiology Directorate**

Chief Radiographer

West Sector Radiology Manager

Principal Radiographer

Team Leader
Band 7 Radiographer
CT/MRI

Band 6 Radiographer

Band 5 Radiographer

Assistant Practitioner
Band 4

5. ROLE OF DEPARTMENT

To provide a high quality, efficient and effective Radiology services to the population of Lothian and to deliver a high quality imaging service within the areas serviced.

The departmental clinical governance strategy ensures a high standard of care for patients undergoing radiological and mammographic examination and promotes multidisciplinary team working.

Provide an environment suitable for the training and education of Student radiographers on clinical placement.

6. KEY RESULT AREAS

(All modalities)

1. Assess and understand a wide range of clinical information from a variety of clinical or specialist disciplines and perform examinations autonomously making decisions about the need for further imaging to aid diagnosis, taking into account any pathology identified on the images. This minimises the need to recall patients.
2. Ensure that images acquired are accurate and diagnostic in accordance with best practice and in a manner that meets professional, departmental and legal standards / requirements, taking into account patient limitations, adapting technique where necessary and minimising

radiation dose where possible acting as patient advocate in radiation protection issues.

3. Maintain a high level of expertise in the safe operation of specialist radiology equipment, demonstrate a high level of competency and understanding in a range of specialist procedures and manage faults effectively.
4. Act independently in the assessment of referrals for X-Ray examinations, taking full responsibility for the justification of general X-Ray examinations in order to reduce unnecessary ionising radiation exposure of patients in accordance with IR(ME)R 2017.
5. Work as part of a team to ensure effective communication with patients, relatives, carers and other members of the multidisciplinary team, ensuring any observed changes in the patient's condition are effectively communicated and prioritise workload depending on the severity of a patient condition and the direct impact on their management.
6. Act as a point of advice for radiology staff, imaging referrers and ward staff on radiographic issues i.e. clinical suitability for procedure, radiation issues, MR safety / compatibility.
7. Contribute to the review and implementation of departmental and professional policies and procedures, for example Health +Safety including risk assessment and COSHH, Radiation Protection Procedures, IR (ME) R 2017.
8. Undertake quality assurance (QA) tests in compliance with statutory and manufacturers guidelines, regular clinical audit of own work and participate in departmental audit.
9. Maintain accurate patient records by the input of accurate information on the TRAK system, to reflect the service including personal information and patient dose details.
10. Delegate appropriate tasks and supervise radiographers, assistant practitioners and radiographic department assistants to achieve the desired quality of patient care.
11. Be actively involved in the training and assessment of Student radiographers on clinical placement for 35-40 weeks per year, providing direct supervision at all times. Maintain the required knowledge and skills to provide effective training.
12. Maintain knowledge of technological and technical advances in methods of diagnostic and / or mammographic imaging in order to promote a culture of continuous improvement within the department.

MRI only

1. Responsible for the safety of the equipment, patient and staff in the acute situation where many attendant staff are present and may have no knowledge of the hazards associated with the equipment, including completion of MR safety checklists.
2. Position patients, MR coils and monitoring equipment safely to prevent burns to the patient and ensure total compliance with all MRI safety rules.
3. Be thoroughly familiar with the procedures for management of ITU patients, ITU equipment and cardiac arrest procedures in the MRI unit.

Nuclear Medicine only

1. Responsible for calculation, calibration, administration and ordering of radio-isotopes and prescribed drugs (IV, oral and subdermal) and where necessary take blood samples.
2. Provide advice and information on radiation protection issues related to the injection of radiopharmaceuticals to patients, referrers and other staff.
3. Contamination monitoring to comply with Health and Safety Executive (HSE) and Scottish Environmental Protection Agency (SEPA) guidelines.

7a. EQUIPMENT AND MACHINERY

Carry out Clinical work using a variety of imaging equipment within own area of responsibility and other areas as required. Radiographic equipment ranges in price from £30,000 to £1million. The equipment is operator dependent and requires specific skills to achieve images of a diagnostic quality.

The following are examples of equipment which will be used when undertaking the role:

1. Multi-slice Computed Tomography (CT) Scanner.
2. Magnetic Resonance Imaging (MRI) Scanner and associated coils.
3. SPECT CT Gamma Camera's.
4. Bi-plane angiography/neuro-intervention imaging equipment.
5. Digital mammography and stereotactic units.
6. Ceiling suspended general x-ray tubes, static x-ray tables with rise and fall function and floating top and erect bucky assemblies (upright x-ray film holders with incorporated grid).
7. Fluoroscopy equipment with under couch image intensifier used for screening examinations.
8. Mobile x-ray units for ward, resus and theatre radiography.
9. Mobile image intensifiers used in theatre.
10. Patient hoist, mechanical lifting aids and immobilisation devices.
11. Patient trolleys, beds and wheelchairs.
12. Satellite workstations and consoles – used to process, manipulate, archive and retrieve images.
13. Intra venous injection pumps.

Note: New equipment may be introduced as the organisation and technology develops, however training will be provided.

7b. SYSTEMS

The following are examples of system which will be used when undertaking the role:

Trak (Radiology Information System) – access, enter and update patient data.

Archive patient data / films as per departmental protocol on PACS (Picture Archiving and Communication System).

Risk assessment and incident reporting systems.

Access the Internet and NHSL intranet for relevant information for personal and professional development within statutory guidelines.

Note: New systems may be introduced as the organisation and technology develops, however training will be provided.

8. ASSIGNMENT AND REVIEW OF WORK

The post is self directed and the postholder will organise own workload in response to the demands of the service. Radiography Team Leader will be available to consult on a daily basis and provide direct supervision and training when required.

To work within codes of practice, with discretion to alter their workload to achieve best results, where they are accountable for their own professional actions.

Work review will be by the line manager in line with the agreed KSF Post Outline.

9. DECISIONS AND JUDGEMENTS

Independently evaluate clinical information provided by diverse clinical disciplines to decide whether requested examinations are justified, advising / discussing with referring clinicians if an examination is not justified.

To assess the patient's suitability for receipt of intravenous contrast media taking into account all previous contrast reaction and thereafter calculating dose required.

Prioritise workload in departmental areas.

Ensure a high degree of patient care is maintained and to decide in certain circumstances if whether the examination should be carried out or continued.

10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB

On a daily basis be prepared to operate Imaging Equipment in differing and demanding environments being able to manage an unpredictable work load effectively and interact successfully with fellow health care professionals.

Maintaining knowledge and competency in each specialist clinical area.

Organising and reprioritising changing daily schedule for department to accommodate emergency procedures and equipment failure to ensure continuity of service and quality of patient care.

Combining training in new technologies or newly procured equipment with normal patient workload.

11. COMMUNICATIONS AND RELATIONSHIPS

Patients/Relatives/Carers

Provide information, where there may be barriers to understanding, by explanation of often highly complex procedures or factual information regarding the risk associated with an imaging procedure, listening to the patient's requirements to encourage compliance with the imaging process.

Screening patients for MRI contraindications before entry into the MRI Unit/Magnet room.

Patients will have injuries or illness that will require the adaptation of the imaging technique, utilisation of developed motivational and persuasive skills to acquire correct position and reduce mobility to produce an acceptable diagnostic image.

Departmental Staff

Consult Senior Staff for advice.

Work closely with A&C and portering staff with respect to patient movement & infection control ensuring appropriate level of care e.g. o2, MRSA.

Contribute to regular staff meetings to ensure two-way communication.

Medical Staff/Nurse Practitioners

Query incorrect or unnecessary referrals in order to reduce patient radiation dose and provide advice on guidelines for relevant X-ray examinations.

Liase with referring clinicians regarding appointment times, patient suitability and safety results.

Liase with nursing and medical staff in the management of patient care before, during and after the examination.

External

Provide guidance to external users regarding the priority and deployment of radiographic resources e.g. service arrangements/interventional cases.

Liase with equipment engineers and estates in the absence of the Radiography Team Leader.

12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB**Physical Skills:**

Manipulate and position all patients, including children providing immobilisation when required.

Have the expertise to handle and operate highly specialised and expensive equipment.

Following the appropriate training, perform IV cannulation for patients undergoing IV contrast examinations and / or radio-isotopes.

Be able to work at speed when performing radiographs for a critically injured patient often prior to emergency surgery.

Standard keyboard skills.

Physical Demands:

The majority of the working day and night is spent standing and walking and bending to position patients.

Frequent transfer of patients from trolleys, beds and chairs onto X-Ray tables or scanners, using mechanical aids when required.

Frequently manoeuvring patients on trolleys and chairs from waiting area to x-ray room and back, throughout all shifts.

Be required to wear heavy lead rubber aprons sometimes for 2 to 3 hours during Fluoroscopy or Angiographic Procedures.

Mental Demands:

Frequent concentration is required when assessing patients and performing examinations throughout the majority of shift periods. Interruptions are constant and unpredictable from referring clinicians, administrative staff, patients and their relatives and can be direct or via the telephone.

Prioritising workload requires diplomatic skills in discussion with referrers who all believe their patient should take priority.

Should imaging equipment unpredictably malfunction during an examination, evaluate the situation and provide an immediate solution.

Emotional Demands:

Perform radiographic examinations and care to terminally ill patients.

Provide examinations involving direct contact, for critically injured patients in the accident and emergency department.
Perform radiographic examinations on non-accidentally injured babies/children, when one of the parents is present(RHSC only).

Working Conditions:

Frequent exposure to bodily fluids throughout all shifts.
Constantly moving from cold air-conditioned areas to hot conditions in the working areas.
Working constantly in artificial lighting with little or no natural daylight.
Exposure to verbal abuse from some patients.
A risk of physical abuse from patients, who may be confused, disorientated and/or intoxicated.

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

D.C.R. or BSc in Radiography.
HCPC Registration.
Evidence of post graduate education or equivalent experience demonstrating specialist clinical skills required within the role for example PGc in specialist modalities e.g. CT, MRI, Mammography.
Short courses to enhance efficiency such as venepuncture.
Evidence of ongoing educational and personal development.
Good communication skills.
Team worker.

14. JOB DESCRIPTION AGREEMENT

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

Job Holder's Signature:

Date:

Head of Department Signature:

Date: