

Diagnostic Radiographer Imaging Services

Job Description



Job Description

Job identification

Job title	Radiographer (Diagnostic)
Responsible to	Site Superintendent Radiographer
Department	Imaging
Directorate	Diagnostics

Job purpose

Justify and perform radiographic examinations, providing direct care and a high-quality diagnostic imaging service in order to assist in the management of patients referred from clinicians.

Acquire Magnetic Resonance (MR) and Computed Tomography (CT) imaging under supervision and within the agreed scope of practice.

Scope and range

Clinical Provision

Radiographic services are provided across Greater Glasgow and Clyde 24 hours a day, seven days a week. Your contractual hours will therefore be worked over a proportion of these days. (i.e. incorporating weekend working). There is also a requirement to work on-call/standby to cover nights, weekends and public holidays.

Clinical Areas

- General Radiography including General Practice (GP), Inpatients and outpatients
- Accident and Emergency (A&E)
- Mobile and theatre radiography
- Fluoroscopy
- Computed Tomography (CT)
- Magnetic Resonance (MR - limited scope and range of practice)

Staff Responsibility

- Participate in the direction and supervision of Healthcare Support Workers (HCSW).
- Train and supervise student radiographers on clinical placement in conjunction with [Glasgow Caledonian University](http://www.glasgow.ac.uk) following attendance of clinical assessors workshop.
- Assist in training and induction of new staff members.
- Liaise with other staff including medical, nursing and clerical.

Main duties and responsibilities

Clinical

To work within Radiation protection guidelines in accordance with the local rules and 2017 Ionising Radiation Medical Exposure Regulations ([IR\(ME\)R 2017](#)) to ensure that the correct patient receives the correct x-ray examination with the minimum radiation dose.

To work within MR Safety guidelines in accordance with [MHRA](#) and NHSGGC local rules.

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 the patient in accordance with IR(ME)R, following appropriate induction and assessment.

Maintain a high level of expertise in the safe operation of x-ray equipment and manage faults effectively.

Provide professional opinion to clinicians on the nature of a diagnostic image either verbally or using the “Red Dot” system (or Radiographer Commenting) to identify possible pathology – this may impact on patient management.

Work as part of a team to ensure effective communication and delivery of care.

Prioritise workload depending on severity of the patient’s condition and direct impact on their management.

Liaise with fellow healthcare workers and referring clinicians to provide a high quality imaging service to patients.

Maintain accurate patient records by input of accurate information.

Work independently when providing a standby/on call service to patients requiring urgent imaging due to acute trauma or illness.

Undertake cannulation and aftercare of patients following injection of contrast media with respect to intravenous cannulation removal, and awareness of possible adverse reactions e.g. nausea, anaphylaxis etc.

Be actively involved in the training and assessment of student radiographers on clinical placement, providing direct supervision at all times. Maintain the required knowledge and skills to provide effective training, keeping up to date with current advances in technology and diagnostic techniques.

Managerial

Be able to exercise personal responsibility and make decisions in complex and difficult circumstances e.g. imaging in A&E and theatre during a multiple trauma situation.

Regularly participate in ongoing departmental audit and quality assurance programmes which may lead to proposals of change to current working practises.

Delegate appropriately and supervise Healthcare Support Workers to achieve the desired quality of patient care

Comply and contribute to implementation of departmental and professional policies and procedures such as:

- [Professional Code of Conduct](#).
- Health and Safety including Risk Assessment, Control Of Substances Hazardous To Health ([COSHH](#)) regulations, Fire Regulations, Infection Control and Clinical Effectiveness, Moving and Handling
- Training and Cardiac Pulmonary Resuscitation training updates.
- Radiation protection local rules and IR(ME)R 2017
- MR Safety local rules
- NHS Greater Glasgow and Clyde policies
- Quality Assurance programmes.

Be responsible for coordination of initial stages of major incident procedure for the Imaging Department.

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

Educational

Participate in mandatory training and actively pursue Continuous Professional Development (CPD) keeping an up to date personal record.

Keep up to date in new imaging techniques, technology and hospital and departmental policies.

Systems and equipment

For all imaging examinations radiographers use and handle the following equipment in accordance with their rotation

Clinical

- Imaging equipment
- Ceiling suspended general x-ray tubes, floor to ceiling track x-ray tubes, rise and fall x-ray tables, static height tables, floating top tables, erect and supine buck assemblies and operator consoles
- Mobile image intensifiers for theatre fluoroscopy
- Mobile x-ray units for ward/theatre radiography and resuscitation unit
- Orthopantomography (OPT) units for dental/maxillo-facial referrals
- Film processors
- Computed Radiography (CR) readers-image manipulation and storage software
- Direct Digital Radiography (Electronic image post processing/storage and retrieval)

- Fluoroscopy equipment
- Stationary grids/cassette holders
- CT
- MRI

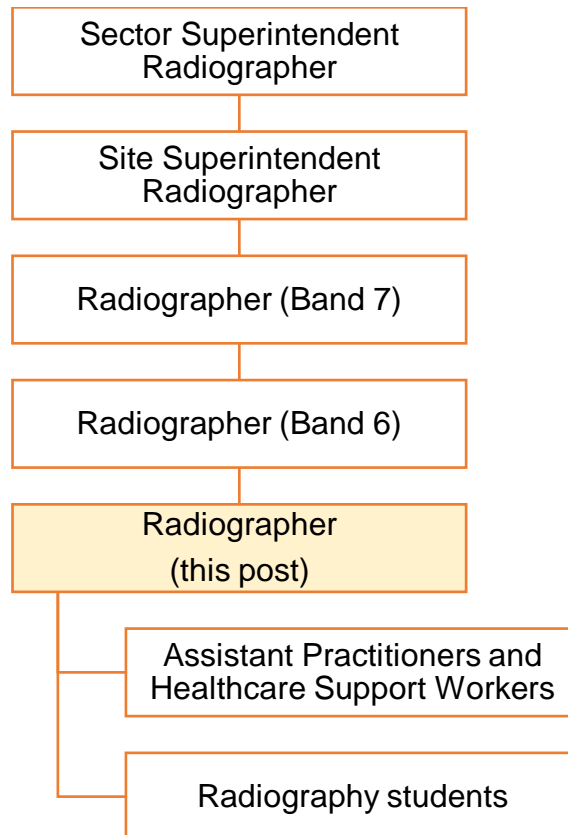
Ancillary Equipment

- Patient hoists and transfer equipment
- Immobilisation devices such as foam pads
- Label printers associated with Radiology Information System(RIS)
- Suction, oxygen and emergency drug trolleys
- Lead rubber equipment for radiation protection purposes
- MR compatible equipment

Computer Systems

- Radiology Information System (RIS) to register patient details and data management
- Use software programmes such as Microsoft Word to create documents and tables for quality assurance and audit
- Access internet and NHSGGC intranet for personal and professional development

Organisational structure



Decisions and judgement

- Be accountable for own professional actions especially when working independently.
- Use skills to assess patients condition and decide on appropriate method to obtain an image.
- When acting in the role of Operator and Practitioner under IR(ME)R 2017 decide whether the x-ray request is justified as the correct examination to diagnose patient's condition and ultimately decide whether to proceed with the x-ray examination.
- When single-handed plan and prioritise workload.
- Assess and be involved in the development and implementation of radiographic procedures.
- Perform MR and CT examinations under supervision and as directed by senior staff.

Communications and relationships

Patients

Provide information by explanation of complex procedures, listening to the patient's requirements to encourage compliance with the imaging process. Some patients will have difficulty in understanding the process or be unable to communicate e.g. those with learning difficulties, dementia, non-English speaking.

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 reduced mobility to produce an acceptable diagnostic image. These patients may have severely challenging behaviour e.g.: Physically/mentally disabled, dementia – which may make them obstructive or physically aggressive. They could also be uncooperative or violent if under the influence of drugs or alcohol.

Provide reassurance and information as to the necessity of an examination involving the risks associated with potential harmful effects.

Relatives / Carers

Provide reassurance, give and receive information.

Ask for assistance with, and instruct in methods of immobilisation while maintaining safety of patient, public and staff.

Radiography Staff (internal / external)

- Consult senior staff for advice.
- Act under the guidance and supervision of senior staff whilst in CT and MR.
- Discuss department policies and suggest improvements.
- Delegate tasks to Assistant Practitioners and Healthcare Support Workers.
- Pass on information relating to patient transfer to colleagues.

Medical Staff / Nurse Practitioners

- Query incorrect or unnecessary x-ray referrals in order to reduce patient radiation dose.

- Provide advice on guidelines for relevant x-ray examinations.
- Provide advice on the nature of an image.
- Seek help and advice with patients in pain or immobile.

Student Radiographers

- Decide whether the student is capable of performing an examination safely with the patient's consent and after giving suitable tuition.
- Undertake student clinical assessments and provide constructive criticism.
- Educate the student as to the best professional practice in any situation.

Physical, mental, emotional and environmental demands of the job

Physical Skills

- Prior to the exposure of x-ray radiation, continuously using a high degree of accuracy, manipulate and position all patients providing immobilisation when required
- Have the expertise to safely handle and operate highly specialised, high voltage, expensive and heavy equipment
- Be able to work at speed using dexterity and precision whilst performing radiographs on a critically injured patient often prior to emergency surgery
- Possess keyboard skills for the entry of data into the RIS, Picture Archiving and Communication System (PACS) and CR.

Physical Demands

- Maintain a level of fitness to move ceiling / floor mounted X-Ray equipment for every examination throughout the shift.
- Walk long distances when pushing mobile units to carry out ward radiography throughout a shift when required. This equipment weighs up to 477 kg.
- For the positioning of every patient there is a requirement to stand, walk and bend.
- 20-90% of the working day can be spent pushing / pulling patients on trolleys/chairs, depending on the area of work. Patients weigh 40kg – 160kg.
- Frequent light lifting and occasional moderate lifting during clinical duties such as carrying QA Phantoms/MRI Coils (5-15kg) and assisting patients on and off the table.
- Up to 75% of patients may need transferred from trolleys, beds, and chairs onto x-ray tables using mechanical aids when available.
- Carry cassettes/grids to and from x-ray facility to processor or CR reader.
- Carry cassette/grid combinations to and from wards/theatres over distances the length of the hospital. These cassette/grid combinations weigh up to 7 kg.
- Push cart loaded with several cassettes and lead rubber aprons long distances across the hospital.
- For every examination outwith the x-ray department a lead rubber apron must be worn. These aprons weigh up to 7kg and are worn for approximately 5-8 theatre cases per day on average for times ranging from 20 minutes to 2 hours and ward radiography from 8-20 patients per work day.

Mental Demands

- Constant concentration is required when assessing and performing examinations throughout the shift with constant interruption from telephones and pagers.
- When on stand by at night take responsibility for the entire radiography service alone, managing patients and equipment. This involves maintaining concentration for up to a 16-hour period with the potential for no breaks or sleep, 9 hours of which will be worked single-handed.
- Should imaging equipment malfunction during an examination (occasionally during a theatre case) evaluate the situation and provide an immediate solution.

Emotional Demands

- Several times a day perform radiographic examinations and care to terminally ill patients.
- Provide examinations for severely injured patients in an A&E department
- Move quickly from a routine examination to an acute session due to sudden and unpredictable demand e.g. x-ray of a painful finger with no history of trauma to a victim of a road traffic accident with severe injuries requiring multiple x-rays, independently taking responsibility for the diagnostic imaging service for that patient.
- Perform radiographic examinations on injured, distressed and uncooperative adults, involving family members/carers where necessary.

Working Conditions

- Direct contact with unpleasant odours and bodily fluids throughout all shifts.
- Be required to wear heavy lead rubber aprons during ward radiography and fluoroscopy procedures sometimes in a hot theatre environment.
- Risk of exposure to scattered Ionising Radiation particularly during fluoroscopic procedures.
- Moving from cold air-conditioned areas to hot conditions in the working areas.
- Working single handed and moving about a large geographic site in order to provide a mobile imaging service.
- Working constantly in artificial lighting with little or no natural daylight.
- Exposure to verbal abuse from some patients, this could be once a week or more.
- A risk of physical abuse from patients, who may be confused, disorientated, under the influence of alcohol etc. This could be an average of 2-3 times/shift in Accident/Emergency at evening and weekends.

Most challenging parts of the job

- Cope with the mental and physical demands of working single-handed overnight in an acute area and having to provide images sometimes on severely injured, abusive or violent patients. This involves working a 16hour shift on site, 9 hours of which will be working single-handed ,with the potential for no breaks or sleep.
- Ability to cope with clinicians demands while prioritising workload.
- It is essential that the post holder understands the departmental Healthcare Information System (HIS), RIS and Computerised Radiographic Systems and

the importance of correct patient identification across all these modalities especially in a PACS environment.

- As the only radiographer working overnight in the hospital, meet the high work rate demands of A&E while also covering urgent inpatient referrals, portables in the wards.
- Work in unpleasant conditions such as being in contact with body fluids and body odours.
- Directly train and supervise student radiographers while maintaining a high throughput of patients.
- The physical demands of the job due to the moving and handling requirements and the volume of mobile radiography.
- Working a cross site rotation if required which includes commitment to an out of hours roster for one or more sites.

Person Specification

Job identification

Job title Radiographer (Diagnostic)
Responsible to Site Superintendent Radiographer
Department Imaging
Directorate Diagnostics

Attribute	Essential	Desirable
Qualifications and Experience	<p>HCPC (Radiographer) registration.</p> <p>BSc (Hons) in Diagnostic Radiography, <i>or</i> BSc (Hons) in Imaging Sciences <i>or</i> Diploma of the College of Radiographers (DCR) <i>or</i> equivalent pre-registration qualification</p>	<p>General radiographic experience (<i>unless newly qualified</i>)</p>
Knowledge	<p>Understanding of the role and responsibilities of the post.</p> <p>Working knowledge of IT packages.</p> <p>Evidence of clinical training and personal motivation.</p>	
Skills / aptitudes	<p>Ability to work as part of team.</p> <p>Ability to work autonomously when working alone.</p> <p>Effective organisational skills.</p> <p>Ability to communicate with staff at all levels of the organisation.</p>	<p>One-year post qualification experience prior to being considered for rotation into Magnetic Resonance (MR).</p>
Interpersonal	<p>A positive attitude to flexible working to meet the contingencies of the department.</p>	