**XXX Hospitals NHS Foundation Trust**

**Standard Operating Procedure**

***Scope of entitlement***

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|  **Operational Areas Included**   |
| *This SOP identifies the persons entitled to act as duty holders, and defines the roles, responsibilities and entitlements of Referrers, Practitioners and Operators under IR(ME)R 2024, within Radiology at XXX at the following locations:* * *XXX Hospital*
* *XXX General Hospital*
* *XXX Health and Care NHS Foundation Trust*
* *XXX Hospital Trust Ltd.*
* *XXX NHS Trust*
* *XXX– Community Diagnostic Centre (CDC)*

*It applies to the undertaking of all diagnostic imaging investigations, including examinations carried out using mobile equipment in the ED, theatres, wards, clinics and Vascular Interventional cases.*  |
| **Roles Responsible for Carrying out this Process**  |
| *This SOP relates to the following staff groups* * *Medical staff working within XXNHSFT*
* *GP’s*
* *MSKAT service*
* *Community social teams for NAI*
* *Dentists*
* *Consultant Radiologists*
* *Non-Medical Referrers*
* *Registered Radiographers*
* *Pre-registration Radiographer Students*
* ***Assistant Practitioners***
* *Trainee Assistant Practitioners*
* *Medical Physics Expert*
 |
| **Operational Areas Excluded**  |
| This SOP applies to all procedures within the Radiology department within XXX Hospitals NHS Foundation Trust (XXNHSFT),XXX Health and Care NHS Foundation Trust and the Community Diagnostic Centre (CDC) operated by XX NHSFT staff. Portable ward and Theatre locations are also included where a XXNHSFT employed Radiographer, Assistant Practitioner and Trainee Assistant Practitioner is involved in the procedure. All other areas are excluded.  |
| **Associated Procedures/Policy**  |
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| --- | --- |
| Author (Job Title):  |  |
| Department:  | Radiology  |
| Division:  |  |
| Approval and review process:  |  |
| Issue date:  |  |
| Review date:  |  |
| Review cycle:  | 3 years  |
| Main contact:  | Tel: Email:  |

# Document Control

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version Number**  | **Date**  | **Document Status**  | **Author / Modifier / Reviewer**  | **Details**  |
| 0.1  | 28/10/2019  | FINAL  |  | Approved at Radiology Quality and Radiation Safety Committee  |
| 0.2  |  |  |  |  |
| 0.3  |  |   |  |  |
| 0.4  |  |   |  |  |

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# Summary

## *PURPOSE*

This SOP has been written to identify who is entitled to act as a referrer, practitioner and operator for medical exposures, and to define their roles, responsibilities and entitlements under IR(ME)R 2024.

This document will describe who are identified to be able to act as duty holders.

## Personnel identification

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| --- | --- |
| Employer:  | Any person who carries out or engages others to carry out exposures under regulation 3 of IR(ME)R, or practical aspects at a given radiological installation. The employer is given in this and associated documents as XXX Hospitals NHS Foundation Trust.  |
| Referrer:  | A registered medical doctor or dental practitioner OR a registered non-medical healthcare professional that is entitled under the Employer’s procedures, to refer individuals for ionising radiation examinations in accordance with a set protocol (agreed by the Radiation Protection Lead Consultant Radiologist).  |
| Practitioner:  | A registered healthcare professional who is entitled in accordance with the employer’s procedures to take responsibility for an individual exposure. This includes the justification of the exposure.  |
| Operator:  | Any person who is entitled, according to the employer’s procedures, to carry out practical aspects of an exposure. This does not have to be a registered healthcare professional, but must be adequately trained under schedule 3 of IR(ME)R.  |

## Introduction

The employer is responsible for ensuring compliance with IR(ME)R 2024, and the obligations and entitlements for duty holders are outlined within the employer’s procedures.

Duty holders (practitioners, operators) must have had the appropriate training as described in schedule 3 of IR(ME)R 2024 and must hold the relevant professional qualifications. In addition to this, all referrers, practitioners and operators must have undertaken the relevant radiation protection training as per the Trust training package and must be refreshed every 3 years to maintain competence.

All referrers, practitioners, and operators must comply with the employer’s procedures.

Training records are monitored by the governance lead for Radiology; however duty holders are also responsible for maintaining their own training records, along with their continuing professional development.

The lead Radiographer will monitor and maintain lists of entitled duty holders and their scope of practice for the Radiology department.

Medical physics staff will be authorised to act as operators for quality assurance measurements only. The Head of Diagnostic Radiology Physics will monitor and maintain lists of medical physics staff qualified to act as operators in diagnostic radiology for the purpose of making quality assurance measurements.

## REFERRERS, PRACTITIONERS, OPERATORS

### REFERRERS

The radiation protection lead Consultant Radiologist (RPLCR) will decide on behalf of the Trust, from whom the Trust will accept referrals for diagnostic ionising radiation examinations. XXX NHSFT recognises the following groups of professionals as referrers:

* All XX NHSFT medically qualified doctors
* Any medically qualified doctors working in general practice (with exception of interventional procedures)
* Registered dentists for exposures relating to the treatment of oral problems
* Other healthcare professionals when following a protocol approved by the RPLCR

All non-medically qualified referrers must have completed the Trust’s IR(ME)R training course for non- medical referrers to refer patients for imaging and have the approval and sign off from the radiation protection lead Consultant Radiologist. Recertification is required every 3 years. A list of non-medical referrers is available on the radiology Shared DriveThis list includes:

* Their status as a non-medical referrer
* What they are able to refer for
* Under what protocol or scope of practice they are working
* Dates of their non-medical referrer training, and the time frame during which they are able to practice as a non-medical referrer

All referrers must adhere to the standard operation procedure for ‘ making a referral for Diagnostic Imaging.

Medical Referrers must have completed training via the Trust’s mandatory training elearning.

**PRACTITIONERS**

Under IR(ME)R 2024, all practitioners must be registered healthcare professionals, that have received adequate training under schedule 3, and are responsible for undertaking their own continuing professional development.

The RPLCR will decide on behalf of XXX NHSFT who is qualified to act as a Practitioner in the field of Diagnostic Radiology.

The practitioners recognised by XXX NHSFT include the following:

* Consultant Radiologists
* Radiology Registrars who have passed part 1 of the fellowship examinations of the Royal College of Radiologists

The individuals will be identified on the list of Radiology Practitioners, and the names and details of qualifications, continuing education and training and specialist fields will be supplied to the RPLCR who will maintain this information.

For the outsourcing companies, the Radiology Specialty director will review all CVs and training records to ensure compliance. They will only authorise CRIS and PACS access for those deemed to be suitably trained. This is reviewed quarterly.

The lead Radiographer and deputy may also add individuals to this list at the request of the RPLCR. Details of the Radiology department Practitioners will be kept on the shared drive in Radiology.

These individuals will also be authorised to be operators by the RPLCR, in fields relevant to their work, as documented in their scope of practice.

Practitioners Training consists of links to relevant e-Learning for health modules. The completion certificates should be printed out and handed to the line manager as evidence of training.

### OPERATORS

Under IR(ME)R 2024, operators must be adequately trained as per schedule 3, must have evidence of up-to-date equipment competencies, and are responsible for undertaking their own continuing professional development.

Where there is more than one operator involved in the examination, the CRIS record must reflect this, and operator 1 must be the Radiographer that performs the exposure.

The lead Radiographer, or deputy, will decide on behalf of the Trust, who is entitled to act as an operator (making patient and quality assurance exposures) for the Radiology department. XXX NHSFT Radiology department recognises the following healthcare professionals, by virtue of their qualifications and training, to be entitled to act as operators within their area of expertise:

* **Consultant Radiologists and SpRs** – Entitled to carry out fluoroscopic and interventional procedures subject to their scope of practice, supported by appropriate training and completed training records.
* **HCPC Registered Radiographers** – Entitled to carry out all aspects of general radiography, theatre imaging and fluoroscopy, Cardiac labs, CT and interventional (subject to their scope of practice, supported by appropriate training and completed training records).

**Pre**-**registration Radiographer Students** - When they are carrying out an exposure ‘The supervising Radiographer will be responsible for the practical aspects carried out by the student and therefore is the “Operator” for that medical exposure’. There is scope for an Employer to entitle pre-registration Radiographer Students to carry out aspects of radiographic exposures within a limited scope of practice. See [student\_radiographers\_trainee\_assistant\_practitioners\_as\_operators\_under\_i rmer\_2024.pdf\_2 (sor.org)](https://www.sor.org/getmedia/d8fa4aa7-05e4-4cd7-b25d-6be11fc0bcb1/student_radiographers_trainee_assistant_practitioners_as_operators_under_irmer_2017.pdf_2)

* **Fully Qualified Pre-Registration Radiographers** - are employed as Assistant Practitioners until their registration comes through. See below for entitlement.
* **Assistant Practitioners** – Entitled to carry out all aspects of general radiography, fluoroscopic and interventional procedures under an appropriate level of supervision, under their defined scope of practice, and having completed training records.
* **Trainee Assistant Practitioners** – When they are carrying out an exposure ‘The supervising Radiographer will be responsible for the practical aspects carried out by the trainee and therefore is the “Operator” for that medical exposure’. There is scope for an Employer to entitle Trainee Assistant Practitioners to carry out aspects of radiographic exposures within a limited scope of practice. See

[student\_radiographers\_trainee\_assistant\_practitioners\_as\_operators\_under\_i rmer\_2024.pdf\_2 (sor.org)](https://www.sor.org/getmedia/d8fa4aa7-05e4-4cd7-b25d-6be11fc0bcb1/student_radiographers_trainee_assistant_practitioners_as_operators_under_irmer_2017.pdf_2)

* **Medical physics staff** – Entitled to operate radiographic equipment for purposes of testing and QA

The Head of Diagnostic Radiology Physics will decide on behalf of the Trust, which members of the medical physics team can act as operators in Radiology, for the purpose of making quality assurance, critical examination, commissioning and safety measurements. They are not entitled to provide medical exposures for patients. The Head of Diagnostic Radiology Physics will maintain a list of physics staff, their qualifications and training, and status as operators and is available on request.

**APPENDIX A:**

**RESPONSIBILITIES OF DUTY HOLDERS**

## Referrers

* Must follow the referral criteria specified by Radiology
* Accurately identify the patient for referral ([SOR Pause and Check Poster)](https://www.sor.org/getmedia/b76dc559-0fcb-43bc-bd68-cc914661626d/a4_pause_check_irmer_referrers_hr.pdf)
* Supply the practitioner with sufficient information for the referral such as previous imaging information or medical history, to allow the justification of the examination
* Clearly state the clinical question to be addressed
* Give an indication of pregnancy status
* Indicate the requirement for a comforter or carer where possible
* Indicate relevant current test results for the individual e.g., eGFR values
* To make every effort to contact the practitioner and operator when a referral error is discovered
* To uniquely identify themselves
* To provide any relevant information concerning the patient that could affect their management e.g., infection status, mobility, security issues
* Where appropriate, inform an individual where there has been a radiation incident
* Must ensure that a clinical evaluation of the outcome of each exposure is recorded in the notes – [See SOR Pause and Check Poster – Draw to a Close section](https://www.sor.org/getmedia/b76dc559-0fcb-43bc-bd68-cc914661626d/a4_pause_check_irmer_referrers_hr.pdf)

### Referrers

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| **Staff Group**  | **Registration**  | **Scope of Referral**  |
| Medical Consultant  | GMC Registration  | Diagnostic examinations Interventional examinations within speciality  |
| Non-Consultant Hospital Doctor  | GMC Registration  | Diagnostic examinations (not Interventional procedures)  |
| General practitioners  | GMC Registration  | Diagnostic examinations  |
| Dental practitioners  | GDC Registration  | General radiography of the jaw + CXR for inhaled FB  |
| Radiographers  | HCPC Registration  | See attached Protocols[:](file://glos.nhs.uk/ghnhst/Radiology%20Joint/General/NON%20MEDICAL%20REFERRERS/REFERRAL%20PROTOCOLS%20ACCEPTED/UP%20TO%20DATE%20PROTOCOLS)   |
| Emergency /nurse practitioners  | NMC Registration  | See attached Protocols |
| Physiotherapists  | HCPC Registration  | See attached Protocols |
| Podiatrists  | HCPC Registration  | See attached Protocols |
| Speech and language therapists  | HCPC Registration  | See attached [:](file://glos.nhs.uk/ghnhst/Radiology%20Joint/General/NON%20MEDICAL%20REFERRERS/REFERRAL%20PROTOCOLS%20ACCEPTED/UP%20TO%20DATE%20PROTOCOLS) Protocols |
| Occupational Therapist  | HCPC Registration  | See attached Protocols |

## Practitioner

* Must comply with the employer’s procedures
* Responsible for the justification and authorisation of an exposure showing sufficient net benefit, while taking into consideration the following:
	+ Specific objectives of the exposure and the characteristics of the individual involved
	+ Total potential diagnostic or therapeutic benefit, including direct health benefits to the individual, of the exposure
	+ Individual detriment that the exposure may cause
	+ The efficacy, benefits and risks of alternative techniques having the same objective but involving no ionising radiation or lower dose
	+ Recommendations from appropriate medical scientific societies or relevant bodies where a procedure is to be performed as part of any health screening programme
	+ Whether there is likely to be exposure to a carer or comforter, the likely direct benefits to the patient, the possible benefits to the comforter or carer, and the detriment that exposure may cause
	+ In the case of the asymptomatic individual, where a radiological examination is to be performed as part of a health screening programme or in the early detection of disease
	+ The urgency of the exposure, where appropriate in cases involving an individual where pregnancy cannot be excluded, taking into account the exposure of both the patient and the unborn child
* Must undertake CPD in their field of practice
* Must only carry out exposures or practical aspects of exposures if trained to do so
* Must comply with relevant radiation protection refresher requirements
* Must ensure that doses arising from the exposure are kept as low as reasonably practicable, and consistent with the intended purpose
* Ensure all operational aspects as described in the SOP IRMER-RAD-SOP 07 Exposure Optimisation and SOP IRMER-RAD-SOP 13 Minimising Unintended Dose are adhered to, paying particular attention to:
	+ Exposures to paediatrics
	+ Exposures involving high doses of ionising radiation o Individuals in whom pregnancy cannot be excluded
* Reject referrals that are inappropriate or incomplete
* Provide written instructions for operators who authorise diagnostic exposures under the general examination guidelines on the practitioner’s behalf with the aim of keeping doses ALARP where applicable
* Participate in clinical audit to ensure best practice
* To report infringements of the IR(ME)R regulations when they are discovered via Datix
* To hold a ‘practitioner’ licence to administer radioactive materials (if relevant) **Practitioner**

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| **Staff Group**  | **Registration and Training**  | **Scope of Justification**  |
| Consultant Radiologists  | FRCR and GMC registration  | Diagnostic examinations Interventional examinations  |
| Dental Practitioners  | Dental degree and GDC registration  | General radiography of the jaw  |
| Vascular Surgeons  | Membership of RCP and GMC registration  | All vascular procedures  |

## Operator

* Must comply with the Employer’s procedures and departmental protocols and procedures
* Authorise that a request has been justified using authorisation guidelines provided by a practitioner as per SOP IRMER-RAD-SOP 05 Justification & Authorisation, or check the exposure to the patient and the carer and comforter has been justified and authorised as indicated by the green “thumbs up” icon on the request list in CRIS (on the protocol screen the ID of the person who has authorised the exposure will be indicated as “justified by” [ID])
* Must only carry out exposures or practical aspects of exposures if trained to do so
* Is responsible for each practical aspect of an examination which they carry out
* Must correctly identify the individual and examination required against the information provided by the referrer prior to the exposure using SOP – IRMERRAD-SOP 03 Identification of Patients in Radiology. Any discrepancies or concerns must be resolved with the referrer prior to the exposure.
* If the patient does not have the capacity to consent refer to the Trust mental capacity policy
* Must review Previous imaging history on CRIS and PACS
* Must make pregnancy enquiries where relevant according to the SOP IRMERRAD-SOP 04 Pregnancy Enquiries
* Patients should be asked about any allergies or contraindications to the investigation e.g., latex, IV contrast, as well as relevant medications e.g., Metformin / Beta-blockers
* Patients should be given adequate instruction, with consideration of disabilities or language difficulties. Interpreter services should be used as appropriate
* Must ensure permanent anatomical markers are correctly positioned in the irradiated field, not obscuring any part of the anatomy as appropriate to the examination
* Must operate equipment in a safe and controlled manner, in keeping with the ALARP principle and within the limits of individual competence and training
* Must carry out the examination as directed by the practitioner, where appropriate
* Must undertake CPD in their field of practice
* Must undertake relevant radiation protection refresher training
* Post exposure, will record the operators involved, the exposure factors for each exposure or series of exposures, image quality, and rejections on CRIS
* Must adhere to DRL’s and where these are breached, ensure this is recorded as per SOP – IRMER-RAD-SOP 10 DRLs
* Must ensure that doses arising from the exposure are kept as low as reasonably practicable, and consistent with the intended purpose
* Must check images, repeat or undertake additional views as required (This may require additional justification / authorisation)
* Ensure that a comment is provided for NG position check, or ask a Senior Radiographer to document this for you
* Must send the images to PACS, and check they are available on PACS, ensuring all images are in the correct patient’s folder
* Check that the examination has been assigned the correct reporting pool on CRIS
* Must select equipment and methods to ensure that for each exposure the dose of ionising radiation to the individual undergoing the exposure is as low as reasonably practicable, with regard in particular to: o Quality assurance
	+ Assessment and evaluation of patient dose
	+ Adherence to diagnostic reference levels, reporting when these are breached, as per SOP IRMER-RAD-SOP 10 DRLs
* Ensure all operational aspects as described in the SOP IRMER-RAD-SOP 07 Exposure Optimisation and SOP IRMER-RAD-SOP 13 Minimising Unintended Exposure are adhered to, paying particular attention to: o Exposures to paediatrics o Exposures involving high doses of ionising radiation o Individuals in whom pregnancy cannot be excluded

### • ON CRIS MUST ENSURE

* The patient ID check is recorded in accordance with the SOP IRMER-

RAD-SOP O3 Identification of Patient in Radiology o Make enquiries into patient pregnancy status and is recorded when within age range in accordance with SOP IRMER-RAD-SOP 04 Pregnancy enquires

* The room the examination has taken place in is accurate
* The CRIS code for the examination is accurate and represents the examination performed
* Complete the examination start and end times
* Factors relevant to patient dose are recorded in accordance with SOP

IRMER-RAD-SOP 08 Recording and Assessment of Dose o Details of contrast administration are recorded o Number of images obtained, and any repeats are recorded

• For every exposure authorised, to ensure a written evaluation has taken place (where one is required according to policy – circulation of radiological reports)

### Operator

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| **Staff Group**  | **Registration and Training**  | **Scope of Operation**  |
| Radiographer  | HCPC Registration and completion of preceptorship/in-house training programme  | Operator/ authorise exposures according to departmental protocols (including GP's)   |
| Assistant Practitioner  | Accredited Radiography HE course – level 5/FD equivalent plus signed local training records | Operator/ authorise exposures according to departmental protocols within a defined scope of practice for patient cohort and radiographic techniques (including GP's)   |
| Pre-registration Radiographer Students  | Awaiting registration  | A limited scope of practice  |
| Trainee Assistant Practitioner  | Accredited Radiography HE course – level 5/FD equivalentplus signed local training records | A limited scope of practice  |

**MPE**

* Be involved in practices of high dose interventional procedures and high dose computed tomography
* Be involved as appropriate for consultation on optimisation in all other radiological practices
* Give advice on dosimetry and quality assurance matters relating to radiation protection concerning exposures
* Give advice on physical measures for the evaluation of dose delivered
* Give advice on medical radiological equipment
* Contribute to the optimisation of the radiation protection of patients and other individuals subject to ionising radiation exposures, including the application and use of diagnostic reference levels
* Contribute to the definition and performance of quality assurance of the equipment
* Contribute to acceptance testing of equipment
* Contribute to the preparation of technical specifications for equipment and installation design
* Contribute to the analysis of events involving or potentially involving accidental or unintended exposures
* Contribute to the selection of equipment required to perform radiation protection measurements
* Contribute to the training of IR(MER) duty holders and other staff in relevant aspects of radiation protection
* Contribute to the provision of advice to an employer relating to compliance with these regulations

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| **Staff Group**  | **Registration and Training**  | **Scope of Operation**  |
| Medical Physics Expert  | Registered with RPA 2000  | For Medical Physics purpose only – not for patient exposures   |
| Clinical Scientist  | HCPC Registration and completion of in-house training programme  | For Medical Physics purpose only – not for patient exposures   |