

Inspection Report

29 April 2026



Mater Infirmorum Hospital Diagnostic Imaging Department

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Assurance, Challenge and Improvement in Health and Social Care

Information on legislation and standards underpinning inspections can be found on our website <https://www.rqia.org.uk/> and [The Ionising Radiation \(Medical Exposure\) Regulations \(Northern Ireland\) 2018](#) known as IR(ME)R

1.0 Service information

Organisation/Registered Provider: Belfast Health and Social Care Trust (BHSCT)	Department Inspected: Mater Infirmorum Hospital (MIH)– Diagnostic Imaging Department
Name of Employer: Ms Jennifer Welsh Chief Executive BHSCT	Interim Imaging Service Manager (ISM): Mr Gary Burke
Brief description of how the service operates: The Mater Infirmorum Hospital (MIH) radiology department provides services to adult and paediatric patients. The paediatric imaging provision is limited, with services restricted to patients aged between 16 and 18 years. All radiology services operate within defined core hours, with out of hours' provision for emergency care. The Emergency Department (ED) is supported by two dedicated general X-ray rooms, as well as access to a standalone MRI scanner located outside of the main radiology department. A 24-hour CT service is available on site, located within the main radiology department. The main radiology department comprises of one Computed Tomography (CT) scanner, two general X-ray rooms, one fluoroscopy suite and two ultrasound rooms. Theatre imaging support is limited and primarily facilitates cholangiograms and joint injections. These procedures are undertaken collaboratively, with the anaesthetic team performing joint injections and general surgeons leading on cholangiograms. One dental orthopantomogram (OPT) unit is situated within an ED general X-ray room, providing imaging in the ED for emergency cases and occasional inpatient use only. Before the inspection Mr Burke, ISM and his team were asked to complete a self-assessment form (SAF). The submitted SAF confirmed that the MIH radiology department has carried out 37117 general radiography examinations, 679 general fluoroscopy procedures, 10028 CT scans, and 85 dental examinations over the period of 2024/25. There are 28-29 whole time equivalent (WTE) radiographers and 10 WTE reporting radiographers staff the department. There are 8 WTE consultant radiologists. Two general radiologists are based full-time at the site, while the remaining six rotate across additional hospital sites, including those providing breast imaging services. Breast imaging is not provided at this site. Contracted third-party provider consultant radiologists undertake clinical evaluation and if required justification of imaging out-of-hours and occasionally within core hours to support the service. There is always a substantive consultant radiologist on call as support. A Medical Physics Expert (MPE) contracted from Regional Medical Physics Service (RMPS) based in the Belfast Health and Social Care Trust (BHSCT) supports the team.	

2.0 Inspection summary

On 29 April 2026, warranted Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) inspectors from the Regulation and Quality Improvement Authority (RQIA), with advice being provided by the United Kingdom Health Security Agency (UKHSA) staff, carried out an IR(ME)R inspection of MIH radiology department, as part of RQIA's IR(ME)R inspection programme.

For the 2025/26 inspection year the inspections will focus on the following key themes:

- IR(ME)R governance, including arrangements for compliance with IR(ME)R, services provided outside of the main department, communication with other departments, commissioning of new services.
- Justification and authorisation process including use of authorisation guidelines where appropriate
- Management of equipment performance
- Patient identification including pause and check
- Nuclear medicine therapies and radiotherapy - the study of risk
- Radiotherapy – focus on the breast pathway
- Any other areas identified through the review of the submitted SAF and supporting documentation

The purpose of our focus is to minimise risk to service users and staff, whilst being assured that ionising radiation services are being provided in keeping with IR(ME)R (Northern Ireland) 2018.

Previous areas for improvement (if applicable) will also be reviewed.

The service was notified of the inspection date and time; and requested to complete and submit a SAF and include supporting documentation to be reviewed in advance of the inspection. The site inspection process included:

- Discussion with management and staff
- Examination of relevant radiology documentation
- Review of the department and facilities
- Review of patient records to ensure compliance with IR(ME)R
- Discussion with patients/representatives (where appropriate)

IR(ME)R is intended to protect individuals undergoing exposure to ionising radiation as follows:

- Patients as part of their own medical diagnosis or treatment
- Individuals as part of health screening programmes
- Patients or other persons voluntarily participating in medical or biomedical, diagnostic or therapeutic, research programmes
- Carers and comforters
- Asymptomatic individuals
- Individuals undergoing non-medical imaging using medical radiological equipment

3.0 How we inspect

RQIA is responsible for monitoring, inspecting and enforcement of IR(ME)R. The inspection process includes the gathering and review of information we hold about the service, examination of a variety of relevant written procedures, protocols and records, and discussion with relevant staff. RQIA inspection reports reflect on how a service was performing at the time of inspection, highlighting both good practice and any areas for improvement.

The information obtained is then considered before a decision is made on whether the service is operating in accordance with the relevant legislation and professional standards. Examples of good practice are acknowledged and any areas for improvement are discussed with the relevant staff in charge and detailed in the quality improvement plan (QIP).

As already stated, prior to the inspection, the service was requested to complete a SAF and provide RQIA with all relevant supporting information including written policies and procedures. This information was shared with UKHSA prior to the inspection and was used to direct discussions with key members of staff working within the nuclear medicine department and provide guidance for the inspection process.

It is the responsibility of the Employer to ensure compliance with legislation, standards and best practice, and to address any deficits identified during our inspections.

4.0 What people told us about the service

As this was a busy radiology department, patients were awaiting or immediately recovering from diagnostic procedures, it was deemed inappropriate to seek to speak to these patients on the day of the inspection.

5.0 The inspection

5.1 What has this service done to meet any areas for improvement identified at or since the last inspection?

There has been no IR(ME)R inspection conducted to this department under the current IR(ME)R legislation.

5.2 Inspection findings

5.2.1 Are there appropriate IR(ME)R governance arrangements in place to ensure compliance with the legislation?

Organisational Structures and Governance Committees.

The overall responsibility for ensuring compliance with IR(ME)R lies with the Employer. The role of IR(ME)R Employer in the BHSCT is held by the Chief Executive.

The MPE confirmed that he had met with the IR(ME)R Employer in March 2026 to outline the IR(ME)R Employer's role and responsibilities. The BHSCT Radiation Safety Policy sets out the organisational structures, lines of accountability and governance structures.

Management confirmed that the Trust Board is responsible for establishing the organisation's strategic direction and aims in conjunction with the Executive Management Team. The Chair of the Trust Board works closely with the Employer (Chief Executive) to ensure the effectiveness of the Assurance Framework.

The Assurance Committee provides oversight of governance and assurance through review of information from the steering groups to support the Trust Board of Directors. The Safety and Quality Improvement Steering Group acts on behalf of and reports to the Assurance committee. Facilitating the implementation of Ionising (Radiation) and Non-ionising Radiations regulations and overseeing the development, implementation and review of the Trust Radiation Safety Policy.

The Radiation Protection Committee (RPC) is the overarching strategic committee for all matters pertaining to ionising radiation and non-ionising radiation. The RPC is co-chaired by the Deputy Medical Director and a consultant radiologist. The RPC reports its activities to the Safety and Quality Improvement Steering Group.

The Diagnostic Radiology & Nuclear Medicine (DRNM) committee meets biannually. The DRNM committee has been constituted by the RPC to provide assurance to the Trust and Employer through providing oversight on meeting statutory duties in relation to ionising radiation use within Diagnostic Radiology and Nuclear Medicine services. Imaging sub-groups report to DRNM, which includes Image Optimisation teams (IOTs) and the Radiation Incident Governance Group (RIGG). Each governance committee have terms of reference, which outlines roles and responsibilities.

The minutes for the most recent IOT meeting held in April 2026 were reviewed. The meeting was found to be well attended with robust scrutiny being applied to the matters discussed.

Governance arrangements for radiology services provided outside of the radiology department were discussed. Effective informal communication was described by the site between Imaging, Surgery, Anaesthetics, and the Emergency Department. However, no formal multidisciplinary meetings are routinely held between these services. Changes within the ED are communicated via a monthly email alert. An area of improvement has been identified to ensure communication arrangements between Radiology and services outside the department are further formalised, including the use of scheduled meetings, documented minutes, and clearly defined mechanisms for acknowledging and tracking updates.

The Radiology Imaging Governance Group (RIGG) invites representation from services external to Radiology where relevant. Issues arising outside of RIGG are escalated via the Datix incident reporting system, with a Radiology representative assigned as an investigator where appropriate. Such incidents are reviewed within the weekly Senior Governance Meeting, which includes attendance from a Co-director, who has overarching governance responsibility.

Communication

Management and staff confirmed there was good communication within the radiology department.

Daily morning safety huddles take place, with minutes made accessible to all staff. In addition, a weekly “messages of the week” communication is issued to highlight incidents, learning points, and key safety messages. A fortnightly Imaging Briefing Paper is distributed to the imaging workforce and wider teams, including staff based off-site. This document focuses on key communications and policy updates and includes embedded hyperlinks for ease of access. A formal “read and sign” process accompanies this briefing paper to provide assurance that staff have read and understood the content. The inspection noted that this document included updates to Employer’s procedures implemented following recommendations from a previous inspection at a BHSCCT site in 2025. Staff spoke very positively of the Imaging Briefing Paper and these communication processes are recognised as areas of good practice.

The team meetings occur on a bimonthly basis where possible. Team meetings are minuted and the minutes shared. There is a set template for the agenda. Other methods of communication with staff include Sharepoint and email. Divisional governance huddles are held every Wednesday.

BHSCCT documentation is managed via SharePoint and MS teams, updated documents are listed in the fortnightly briefing paper and key documents e.g. Employers Procedures updates will be highlighted in monthly modality lead meetings and emailed to Lead Radiographers and Clinical Leads. Audit schedules are managed on MS teams with biannual reports published in SharePoint and distributed to all areas.

Entitlement

Entitlement is the term used to describe the process of endorsement by an appropriate and specified individual within an organisation. They must have the knowledge and experience to authorise on behalf of the Employer, that a duty holder or group of duty holders, have been adequately trained and deemed competent in their specific IR(ME)R duty holder roles.

Evidence of induction, training, competency and continuing professional development for radiographers and consultant radiologists were reviewed. Evidence of radiographer training and competency was found to be in line with duty holder roles. Systems are in place to check the professional qualifications and registration of all employees with their appropriate professional bodies.

Individual entitlement records for consultant radiologists, radiographers and non-medical referrers (NMRs) were reviewed. The group entitlement records for MPEs and third-party providers were also reviewed. The entitlement records were overall well completed.

Radiographers are entitled by the Assistant Services Manager as part of the Trust’s introductory training programme. This process includes the completion of modality-specific competency records, which are reviewed as part of the annual Staff Development Review (SDR) process. Formal re-entitlement documentation is completed every five years.

Radiologists are entitled through a process aligned with that used for radiographers. Locum radiologists are similarly inducted, with a structured induction process and clinical mentoring provided by a substantive radiologist. Radiologists, including locum staff, are entitled by the Clinical Director of Imaging Services. It was noted that the entitlement form reflects the separate tasks falling under the duty holder role of operator, to include either practical equipment use or clinical evaluation. An area of improvement has been identified to amend the

entitlement forms to only include sign-off of equipment and duties that the individual is fully trained and competent to use or perform.

A clear process of entitlement of non-medical referrers was demonstrated. They receive formal written confirmation of their entitled scope of practice. Non-medical referrers are limited to Emergency Department Nurse Practitioners and Cardiology Nurse Practitioners, with the latter entitled to refer for MRI examinations only. The entitlement process requires completion of an application form supported by evidence of IR(ME)R training, which is delivered via an online regional training platform. Applications are co-signed by the relevant Consultant and the individual's line manager to provide assurance of clinical competency, and subsequently approved by the Chair of the Radiation Protection Committee (RPC). Once approved, the individual's name is added to a central database, which is accessible to all staff. Re-application and re-entitlement occurs every three years, aligned with the mandated training refresh cycle. Any changes in role or scope are required to be declared by the individual via a shared mailbox.

Third-party radiology providers are entitled by the Clinical Director of Imaging Services. Training records for these providers are maintained by the external organisation. A group entitlement is used, supported by a database containing individual radiologists' names. The current database does not include individual scopes of practice and an area of improvement has been identified to add individual scope of practice to strengthen governance and clarity of entitlement.

Management confirmed that monthly performance and activity meetings are held with the third-party provider. Governance issues are recorded and monitored via an online platform (Insight), which is used jointly between the Trust and the external provider.

Management outlined that outside of the main radiology department, imaging activity within theatres involves surgeons and anaesthetists acting in dual roles as both referrer and practitioner for cholangiograms and joint injections respectively. Referrals are documented within the patient's clinical notes (however, this was not evidenced). It was confirmed that there are no authorisation guidelines in place for theatre-based imaging. Although surgeons are acting in the practitioner role, they have not been formally entitled as practitioners under IR(ME)R. This represents a known and acknowledged gap in compliance that has been identified for several months. The ISM confirmed that an action plan has been initiated and that the radiology service has agreed to support surgical services in establishing appropriate entitlement, governance, and oversight arrangements.

There is currently inconsistency and lack of clarity regarding responsibility for IR(ME)R compliance within theatre services. Theatres do not have their own Employer's Procedures or a standalone IR(ME)R governance framework and instead operate under the BHSCT Radiology Employer's Procedures. As such, responsibility for ensuring IR(ME)R compliance for theatre-based imaging must appropriately sit within the radiology service remit.

At the time of inspection, compliance with IR(ME)R requirements for theatre services could not be assured. This issue was previously identified during an IR(ME)R inspection at another BHSCT site in January 2025; however, sufficient progress has not yet been demonstrated to achieve compliance.

RQIA requires assurance that this matter is progressed as a priority. A formal action plan addressing theatre IR(ME)R compliance, entitlement, governance ownership, and timelines was requested to be submitted to RQIA within one week. An action plan was submitted to RQIA on 6 May 2026 and outlined timely action to be taken on this matter. An area of improvement has

been identified to fully implement the action plan in relation to ensuring the imaging activity in theatres is compliant with IR(ME)R and establish clear oversight arrangements.

Artificial intelligence (AI)

AI decision-support software is in use within the ED to support the clinical evaluation of appendicular imaging. The software is utilised by ED doctors and ED Nurse Practitioners as a clinical decision aid. Discrepancies between AI outputs and clinical outcomes are subject to audit, with findings followed up as part of the site's quality assurance processes.

The ED nurse practitioners are entitled non-medical referrers (NMRs) however have not been entitled as operators to undertake clinical evaluation under the Trust's Employer's Procedures. It was also identified that NMRs are performing elements of clinical evaluation out of hours. This represents an area requiring further clarification and formalisation within the Employer's Procedures, including explicit documentation of roles, responsibilities, training in all elements and entitlement related to clinical evaluation activities.

Oversight from the radiology service in relation to AI-supported clinical evaluation requires strengthening to ensure appropriate governance, assurance, and compliance with IR(ME)R requirements. Clear lines of accountability and escalation should be defined, particularly where AI outputs influence imaging decisions. An area of improvement has been identified to ensure entitlement of operators to perform clinical evaluation alongside AI decision-support tools should be undertaken by appropriately trained individuals with a clear understanding of the regulatory and professional nuances associated with AI-assisted practice and there should be clear robust governance arrangements in place.

Clinical Audit

IR(ME)R tells us that clinical audit means the systematic examination or review of medical radiological procedures which seek to improve the quality and outcome of patient care through a structured review.

It was evident the radiology service has an underpinned culture of quality improvement. Management and staff demonstrated an inclusive, enthusiastic and proactive approach to patient centred service improvement.

A MIH audit schedule for 2026 is in place. The schedule was noted to reflect clinical and IR(ME)R compliance audit. It was noted that the current clinical audit programme is partially established. While image reject analysis audits are performed on a structured and routine basis, other clinical audits are undertaken in a more ad hoc manner. A designated clinical audit radiologist is currently in post for the site. An area of improvement has been identified to enhance the current audit schedule by clearly distinguishing between IR(ME)R compliance audits and clinical audits, with separate and defined schedules for each; and establishing a fully structured and forward-planned approach to clinical audit scheduling be established, to ensure consistent coverage, oversight, and alignment with governance requirements.

Examples of clinical audits reviewed noted that they were well completed. Areas of identified non-compliance are followed up promptly, with re-audit typically undertaken within a timeframe of one to three months to confirm that corrective actions have been implemented effectively. Audits are not marked as complete until all associated actions have been fully addressed and evidenced as closed. Audit findings are a standing agenda item at staff meetings, supporting dissemination of learning and engagement with improvement actions.

Biannual audit summary reports are produced by the Quality and Safety Imaging (QSI) Lead and escalated through the established governance structure. Staff at the site also have access to presentations of clinical audits undertaken by radiologists at other Trust sites, which are available for shared learning.

Immediate or significant concerns identified through audit activity are escalated via the weekly Radiology Imaging Governance Group (RIGG) and weekly senior governance meetings, or directly to the Chair of the Radiation Protection Committee (RPC) where appropriate. Medical Physics Expert (MPE) advice is readily available to provide support and expertise as required. Datix incident reports are completed for all relevant incidents associated with clinical audit outcomes, and learning outcomes may be shared locally through informal “lunch and learn” sessions.

IR(ME)R Audit

IR(ME)R audit process was described as above, with a similar approach to the aforementioned clinical audit process. Areas of non-compliance are followed up and re-audited within the one to three month timeframe to confirm that corrective actions have been implemented effectively. The standard methodology for completing IR(ME)R audits was described as a combination of live and retrospective record review. IR(ME)R compliance is always set at 100%.

Incident and near miss management

Management and staff confirmed that incidents involving ionising radiation are reported by the individual involved to their line manager and subsequently escalated to the site lead. A decision regarding statutory notification is made collaboratively with Medical Physics Expert (MPE) input as required. In all cases, a Datix incident report is completed by the individual involved to ensure formal recording within the Trust's incident management system.

A radiation investigation form is completed jointly by the relevant modality lead and the site lead. The MPE provides expert oversight and assurance regarding classification, mitigation, and escalation.

All incidents are reviewed at the Radiology Imaging Governance Group (RIGG) meetings. Services external to Radiology are encouraged to attend RIGG meetings where relevant. Notifiable incidents are reviewed in line with required timelines to ensure compliance with regulatory expectations.

Incident data is collated into a biannual governance report, which includes a live action plan informed by information drawn from the incident tracker. This enables ongoing monitoring of actions, themes, and improvement activity.

Near-miss incidents are reported via Datix and are investigated and documented using the same structured approach as incidents. A senior leadership team has recently undertaken a focused review of near-miss events at the site to improve oversight, identify learning opportunities, and strengthen preventative controls.

Radiation incident report is presented at DRNM, however only shared more widely if there is content specific to that service.

Review of the incidents and trend analysis found a 'duty-holder blame' process was evident. With operator error or referrer error routinely outlined as the reason for the occurrence of the incident. Management acknowledged that they were aware of the limitations of this process. Discussions on moving away from this process to a more systems-based approach to incident and near miss investigation and analysis took place. An area of improvement has been identified to develop a robust systems-based approach to the management of incidents to ensure meaningful findings and shared learning.

The process for the management and notification of significant accidental or unintended exposures is detailed in the Policy and Procedures for Reporting and Investigating IR(ME)R incidents. Employer's Procedures Kii radiation incident investigation and reporting and EP L clinically significant accidental and unintended exposures, are in place for the management of incidents. EP Kii was found not to include clear information on investigation of incidents and near misses. Employer's procedures will also require updating to reflect the new systems-based approach to the management of incidents. An area of improvement has been identified on this matter

Risk register

The arrangements for ensuring the Trust risk register reflects risks associated with non-compliance with IR(ME)R was reviewed. The management outlined clear information to ensure that the Trusts risk registers are examined, and updated, to ensure all identified risks associated with IR(ME)R compliance are appropriately captured and that specific actions to mitigate the risks are identified and appropriate systems of assurance are put in place. The ISM and Interim Imaging Governance and Quality Lead are responsible for the management and oversight of the risk register in relation to diagnostic imaging services.

The ratification process for Employers Procedures (EPs) and other IR(ME)R documentation

It was good to note Employer's procedures for Diagnostic and Interventional procedures are in place. Management confirmed that all policies and procedural documents are formally ratified through the Radiation Protection Committee (RPC). Where amendments are proposed, the Trust's Internal Guidance Team is notified and determines whether the changes constitute minor or major amendments. Both the Policy and External Guidance Group (PEGG) and relevant stakeholders are involved in discussions as appropriate to the nature and scope of the proposed changes. Final approval and sign-off authority rests with the RPC.

Version control is managed centrally through SharePoint. Any amendments to documents are clearly identified on the front page, with details of the changes documented. Hyperlinks to updated documents are disseminated via the Imaging Briefing Paper to ensure timely access by staff. Hard copies of documentation are not maintained, supporting effective version control and reducing the risk of outdated guidance being used in practice. Documents that are no longer current are removed from active use within the site SharePoint and archived in line with an established and defined process.

The introduction of a radiology service

New radiology services are commissioned through the operational services senior team with involvement from additional relevant teams where required. A business case is signed off by the ISM, which goes for trust approval and sign off via the executive board.

The estates team, as well as input from MPEs and clinical experts, is involved and decisions are in line with the appropriate procurement and tendering processes. IR(ME)R compliance aspects are considered at every step before a new service is introduced operationally.

The governance arrangements for the new service will be fully reviewed including ensuring compliance with IR(ME)R. Once a new service is introduced it will be subject to audit.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced that there are good governance arrangements with respect to the entitlement service and these arrangements are regularly reviewed and, if necessary, improvements are made. However, compliance with IR(ME)R for radiology services provided outside of the main radiology department requires to be strengthened. It is hoped the areas of improvement made will enhance and strengthen governance systems. The inspection team acknowledge the commitment of staff in this regard.

5.2.2 Does the service adhere to legislation in relation to the justification and authorisation of ionising radiation procedures?

Justification is the intellectual activity of weighing up the expected benefits of an exposure against the possible detriment of the associated radiation dose and is the primary role of the practitioner. Authorisation is a process separate to justification and is the documentation confirming that the intellectual activity of justification has taken place.

The duty holder roles of operator and practitioner was examined in relation to the justification and authorisation of exposures. It is not always possible for a practitioner to review every imaging referral, so regulations allow for an appropriately entitled operator to authorise an exposure following written authorisation guidelines issued by a named practitioner. Authorisation guidelines must be clearly written using precise statements that are unambiguous in order to allow the operator to confirm whether the referral can be authorised. The practitioner is responsible for the justification of any exposure that is authorised by an operator following the authorisation guidelines. The operator is responsible for the authorisation and following the authorisation guidelines accurately.

It was confirmed that for diagnostic procedures, justification and authorisation of referrals is recorded electronically in RIS. Justification is recorded (authorised) by a practitioner or by an entitled operator who authorises against authorisation guidelines provided by the practitioner. A range of authorisation guidelines reviewed were found to be clear and well written. The practitioner for exposures undertaken using all sets of authorisation guidelines was clearly identifiable. Authorisation guidelines are shared on SharePoint and by email.

Staff confirmed that if a referral does not meet the criteria in authorisation guidelines, they contact the practitioner or consultant radiologist on call. All notes of contact or queries are held in RIS.

Out-of-hours CT imaging requests are discussed with the teleradiology provider via a secure portal. The responsible practitioner is clearly identifiable through an authorisation stamp recorded within the patient's imaging record. This was clearly demonstrated during the review of record keeping component of the inspection. The site undertakes routine audit activity to verify the identification of the practitioner associated with each imaging record.

Management confirmed that no authorisation guidelines are in use for paediatrics attending the site, as the 16-18 year olds imaged on site are currently authorised under adult guidelines. An area of improvement has been identified to review current adult authorisation guidelines to ensure they are appropriate and that they are fit for purpose in respect of the 16-18 year old paediatric age group and if required updated accordingly.

It was noted that some IR(ME)R documentation did not fully reflect IR(ME)R terminology. An area of improvement has been identified to ensure IR(ME)R terminology is reflected in IR(ME)R documentation to ensure complete clarity on the implementation of IR(ME)R legislation.

Exposures to carers and comforters require individual justification. Justification of the exposure of carers and comforters who knowingly and willingly provide help and support should consider both the direct benefit to the health of the individual undergoing the medical exposure as well as the indirect benefit to the carer or comforter. The exposure of a carer or comforter should only be permitted when this net benefit can be clearly identified. There are authorisation guidelines in place for carers and comforters. They apply to individuals who will be accompanying the patient in for the exposure; and are over 18 years old and not pregnant. Entitled operators authorise exposures to carers and comforters using these guidelines.

A carers or comforters authorisation form is completed, signed by the carer or comforter and operator; and stored in the patient record in PACS. Guidance for the exposure of carers or comforters is detailed in Employer's Procedure N.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced that the justification and authorisation process is well understood by staff and largely implemented in accordance with the Employer's procedures. The areas for improvement will assist on this matter. The inspection team acknowledge the commitment of staff in this regard.

5.2.3 Does the service adhere to legislation with regard to equipment QA?

The Employer must keep an up-to date inventory of all medical radiological equipment including ancillary devices that can directly control or influence the exposure. It was noted that the equipment inventory reflected all information required under IR(ME)R.

Management and staff confirmed there is an appropriate amount of equipment available for the workload of the diagnostic imaging department.

There is a formal, written equipment quality assurance (QA) programme in place. This is detailed in the SharePoint management system. Records of quality checks (QC) undertaken are also kept within SharePoint.

Quality assurance (QA) oversight is led by the MIH Lead Radiographer, who is supported by a small team of appropriately entitled operators responsible for undertaking routine quality control (QC) checks. Any issues, concerns, or emerging themes identified through QC activity are escalated and discussed at the RIGG.

Audit oversight of QC activity is also provided by the MPE who undertakes periodic review of the site QC tracker. Where minor areas for improvement are identified, these are formally documented. Resulting actions are monitored and followed up by the site lead in collaboration with the lead radiographer to ensure timely completion and governance assurance.

Concerns relating to inadequate or defective equipment are escalated to the Medical Physics Expert (MPE) and, where required, to the equipment manufacturer. Equipment may be removed from clinical use if predefined thresholds are reached or if patient or staff safety could be compromised. In such circumstances, an alert is issued to all relevant staff to ensure the equipment is not used, and a Datix incident report is raised to support formal tracking and investigation.

EP Dii - equipment QA, is in place which was found to be a comprehensive and clear framework for staff to follow.

It was noted there is clear governance and oversight of the equipment QA programme.

Staff and management demonstrated understanding of their roles and responsibilities in relation to equipment QA.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced a clear and robust equipment QA programme is in place. The inspection team acknowledge the commitment of staff in this regard.

5.2.4 Does the service adhere to legislation with regard to patient identification including pause and check?

IR(ME)R requires the Employer to establish a procedure to identify correctly the individual to be exposed to ionising radiation. The procedure should specify how and when an individual is to be identified. Employers Procedure Aii - patient identification, is in place and provides a clear comprehensive framework for staff to follow. Correct identification (ID) of the patient or individual to be exposed is an operator task and must be undertaken prior to any exposure.

Management and staff confirmed that it is the responsibility of the operator to ensure the correct patient is being examined against the referral. Patient identification checks are performed using information displayed on the NIPACS system. Responsibility for completing and documenting all required identification checks rests with the operator undertaking the examination.

Where a handover between operators occurs part-way through an examination, the incoming operator performs an additional patient identification check. This secondary check is also documented within the patient record to provide assurance of continuity and compliance.

A three point ID check must be carried out by the operator undertaking the exposure. Staff confirmed that the patient must be asked to state their name, address and date of birth rather than confirm these details. They outlined the following questions:

- What is your name?
- What is your address?
- What is your date of birth?

It was confirmed that supplementary safety checks are also carried out such as:

- Why are you here?
- Have you been scanned recently?

When the patient is incapable of confirming their ID, the operator must confirm ID by other means. This may include checking the patient wristband, checking with a relative, nurse or interpreter. Staff confirmed that the ID check can be repeated multiple times by different operators as the patient goes through the imaging pathway.

Staff confirmed that the professional guidance on Pause and Check is used and promoted in the radiology department. It was good to note that Pause and Check notices were displayed in the department.

For other scenarios, for example such as patients who lack capacity and children, a clear patient ID process was outlined for each situation.

Review of a random sample of patient records confirmed that patient ID had been recorded as checked for all those reviewed.

A patient ID audit is carried out as part of the annual IR(ME)R audit schedule. There was a very high compliance level noted.

Staff explained the process for discrepancies in the patient's ID, this included; check if known as any other name, check with carer/relative, check on (PACS), make a record of the changes required, and send a request to the Encompass team to change the demographics. There is a section in RIS for incorrect demographics. However, it was very clear from responses that the exposure would not be undertaken if the patient ID could not be confirmed.

There is evidence to show that incidents involving referral of the wrong patient are among the largest percentage of all diagnostic errors notified to IR(ME)R regulators. As stated previously, the radiology department have robust systems in place to report, record, investigate and learn from incidents and near misses. Patient ID processes have been strengthened using learning from patient ID incidents and near misses, such as the implementation of Pause and Check; further staff training, raising awareness of their responsibilities and liaising with other departments to promote safe practice.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced clear and robust patient identification processes are in place. The inspection team acknowledge the commitment of staff in this regard.

5.2.5 Additional areas reviewed - other areas identified through the review of the submitted self-assessment form and supporting documentation

Diagnostic Reference Levels (DRLs)

Diagnostic reference levels (DRLs) are defined as radiation dose levels, or for Nuclear Medicine the administered activity, for typical diagnostic examinations for groups of standard size adults and paediatrics for broadly defined types of equipment.

They are not expected to be exceeded when good and normal practice regarding diagnostic and technical performance is applied. DRLs should be used with professional judgement, and all operators must be familiar with and be trained in their appropriate use.

DRLs are used as a guide to help promote improvements in radiation protection practice and can help identify issues relating to equipment or practice by highlighting unusually high radiation doses.

DRLs do not apply to individual patient exposures and any assessment against the DRL should be based on the results of patient dose surveys for groups of patients.

It was good to note a detailed EP F in relation to DRLs was in place. It was noted it contained an out of date reference. An area of improvement has been identified to update EP F DRLs to ensure it references current guidance. A discussion on the site's use and understanding of DRLs took place. It was confirmed the DRLs in place for adult general radiography were adopted from the national DRLs in 2023. Since then, the national DRLs have been updated in 2025, however this update was not reflected in the DRLs adopted by the Trust. Currently the site holds no formally documented justification for the site's use of DRLs over and above the recommended National DRLs. It was confirmed the lead MPE is in the process of overhauling all dose audits and DRL processes for this site. The lead MPE confirmed that they deemed it preferable not to adopt the National DRLs that came in to place in 2025, and rather wait for the dose audits to be completed and ratified so that these can be adopted. The matter has been discussed at a recent IOT meeting and action planned. However, the timescales for this work to be completed were unclear.

RQIA requested the submission of a detailed action plan with timescales on the proposed action to be taken in relation to DRLs within one week. RQIA received a detailed action plan with timescales. To ensure implementation of the action plan an area of improvement has been identified on the matter.

6.0 Conclusion

There were 12 areas of improvement identified as a result of this inspection. These are fully outlined in the appended QIP.

The management team and staff are to be commended for their ongoing commitment and enthusiasm to ensuring that the radiology department is well managed and operating within the legislative framework; and maintaining optimal standards of practice for patients.

The inspection team would like to extend their gratitude to the management team and staff for their contribution to the inspection process.

7.0 Quality Improvement Plan/Areas for Improvement

Areas for improvement have been identified where action is required to ensure compliance with The Ionising Radiation (Medical Exposure) Regulations (Northern Ireland) 2018 known as IR(ME)R and other published standards which promote current best practice to improve the quality of service experienced by patients.

Total number of areas for improvement	12
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Areas for improvement identified during this inspection are detailed in the QIP. Details of the QIP were discussed with senior management as part of the inspection process. The timescales commence from the date of inspection.

It is the responsibility of the Employer to ensure that all areas for improvement identified within the QIP are addressed within the specified timescales.

The QIP should be completed and detail the actions taken to address the areas for improvement identified. The Employer should confirm that these actions have been completed and return the completed QIP via BSU.Admin@rqia.org.uk for assessment by the inspector.

Quality Improvement Plan	
Action required to ensure compliance with The Ionising Radiation (Medical Exposure) Regulations (Northern Ireland) 2018	
Area for improvement 1 Ref: Regulation 6 Stated: First time To be completed by: 29 July 2026	The Employer must ensure communication arrangements between Radiology and services outside the department are further formalised, including the use of scheduled meetings, documented minutes, and clearly defined mechanisms for acknowledging and tracking updates. Ref 5.2.1
	Response by Employer detailing the actions taken: Terms of reference for Diagnostic Radiology & Nuclear Medicine Committee (DRNM), Radiation Incident Governance Group & Radiation Protection Committee (RPC) membership under review.
Area for improvement 2 Ref: Regulation 6 Schedule 2(1) b Stated: First time To be completed by: 29 June 2026	The Employer must amend the entitlement forms to only include sign-off of equipment training and duties that the individual is fully trained and competent to use or perform. Ref 5.2.1
	Response by Employer detailing the actions taken: Consultant Radiologist Entitlement Forms reviewed and where required, ammended to reflect Operator competency. A total of 8 entitlement forms ammended.
Area for improvement 3 Ref: Regulation 6 Schedule 2(1)b Stated: First time To be completed by: 29 July 2026	The Employer must outline an individual scope of practice for third-party radiologists to strengthen governance and clarity of entitlement. Ref 5.2.1
	Response by Employer detailing the actions taken: Development of third party Radiologist database and scheduled quarterly audit process assessing individual scope of practice.

Area for improvement 4 Ref: Regulation 6 Schedule 2(1)b Regulation 11(1) Stated: First time To be completed by: 29 June 2026	The Employer must fully implement the action plan in relation to ensuring the imaging activity in theatres is compliant with IR(ME)R and establish clear oversight arrangements. Ref 5.2.1 Response by Employer detailing the actions taken: 3 consultant surgeons have now completed e-IR(ME)R training and confirmation of reading and understanding of below policies: - BHSCT Employers Procedures - Local Rules - BHSCT Radiation Safety Policy - BHSCT Policy and procedure for the reporting and investigation of IR(ME)R related incidents. 3 staff to be entitled by the Clinical Director week commencing 29th June 2026. Clinical Director of General Surgery and Service Manager proactively engaging with outstanding surgeons to accommodate training and outstanding entitlement by the end of July 2026. Fortnightly meetings arranged with Theatre services to review and track training progress using the the Non Imaging IR(ME)R Practitioners and Operators training matrix.
Area for improvement 5 Ref: Regulation 6 Schedule 2(1)b Stated: First time To be completed by: 29 July 2026	The Employer must ensure entitlement of operators to perform clinical evaluation alongside AI decision-support tools should be undertaken by appropriately trained individuals with a clear understanding of the regulatory and professional nuances associated with AI-assisted practice and there should be clear robust governance arrangements in place. Ref 5.2.1 Response by Employer detailing the actions taken: Draft AI procedure in progress.
Area for improvement 6 Ref: Regulation 6 and 7 Stated: First time To be completed by: 29 July 2026	The Employer must enhance the current audit schedule by clearly distinguishing between IR(ME)R compliance audits and clinical audits, with separate and defined schedules for each; and establishing a fully structured and forward-planned approach to clinical audit scheduling be established, to ensure consistent coverage, oversight, and alignment with governance requirements. Ref 5.2.1 Response by Employer detailing the actions taken: Drafting action plan to review clinical audit schedule.

Area for improvement 7 Ref: Regulation 8(3) Stated: First time To be completed by: 29 July 2026	The Employer must develop a robust systems-based approach to the management of incidents to ensure meaningful findings, analysis and shared learning. Ref 5.2.1 Response by Employer detailing the actions taken: Review the service Radiation Incident Investigation Form to drive meaningful learning from incident investigation.
Area for improvement 8 Ref: Regulation 6 & 8(3) Schedule 2(1)(k) and 2(1)(l) Stated: First time To be completed by: 29 July 2026	The Employer must update EP Kii to include clear information on investigation of incidents and near misses; and reflect the new systems-based approach to the management of incidents. Ref 5.2.1 Response by Employer detailing the actions taken: Employers procedures under review pending the new systems for improved shared learning. Documentation will require internal guidance, pending the need for Policy and External Guidance review.
Area for improvement 9 Ref: Regulation 11(5) Regulation 12(8)(a) Stated: First time To be completed by: 29 June 2026	The Employer must review current adult authorisation guidelines to ensure they are appropriate and that they are fit for purpose in respect of the 16-18 year old paediatric age group and updated accordingly if required. Ref 5.2.2 Response by Employer detailing the actions taken: Authorisation Guidelines for entitled authorising operators for General Radiography at MIH have been reviewed by the Practitioner and now incorporate 16 - 18 year old age group (section 1.4). Communication shared with staff and document updated on the GRP-Imaging Service Documentation sharepoint.
Area for improvement 10 Ref: Regulation 6 Stated: First time To be completed by: 29 June 2026	The Employer must ensure IR(ME)R terminology is reflected in IR(ME)R documentation to ensure complete clarity on the implementation of IR(ME)R legislation. Ref 5.2.2 Response by Employer detailing the actions taken: Both the 'X-ray Imaging Work instructions for Adult and Paediatric Diagnostic Procedures, MIH' and ' Authorisation Guidelines for Entitled Authorising Operators - Radiographer Authorising referrals for Video Fluoroscopy examination' updated to reflect IR(ME)R 2018 terminology. Communication shared with staff and document updated on the GRP-Imaging Service Documentation sharepoint.

Area for improvement 11 Ref: Regulation 6(5)(c) Schedule 2(1)(f) Stated: First time To be completed by: 29 July 2026	The Employer must fully implement the action plan on DRLs. Ref 5.2.5 Response by Employer detailing the actions taken: The service will review and implements the DRL action plan under the advice of the MPE.
Area for improvement 12 Ref: Regulation 6 Schedule 2(1)(f) Stated: First time To be completed by: 29 July 2026	The Employer must update EP F DRLs to ensure it references current guidance. Ref 5.2.5 Response by Employer detailing the actions taken: Upon completion of the DRL action plan the Trust will update the Employers Procedures accordingly.



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