

Inspection Report

13 May 2026



Craigavon Area 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: Southern Health and Social Care Trust (SHSCT)	Department Inspected: Craigavon Area Hospital (CAH)– Diagnostic Imaging Department
Name of Employer: Mr Steven Spoerry Chief Executive SHSCT	Interim Head of Diagnostics Services (IHDS): Ms Lorraine Hynds
Brief description of how the service operates: The CAH radiology department operates within defined core hours for imaging outpatients, with 24/7 imaging cover for the emergency department (ED), inpatients and theatre. The Computed Tomography (CT) outpatient imaging service runs an extended working day (8 am – 8 pm) with reporting radiographer cover 8 am – 9 pm seven days per week. The radiology service provides the regional extracorporeal shock wave lithotripsy (ESWL) service. Paediatric patients are imaged across all modalities at the CAH site. Before the inspection Ms Hynds, IHDS and her team completed a self-assessment form (SAF). The submitted SAF confirmed that the CAH radiology department has carried out 77859 general radiography examinations, 20045 general fluoroscopy procedures with 1889 in theatre, 251 lithotripsy procedures, 2644 interventional radiology procedures, 30290 CT scans, 240 interventional CT scans and 616 dental examinations over the previous year. 71.08 whole time equivalent (WTE) radiographers staff the department. One WTE advanced practitioner – reporting fluoroscopy, 0.4 WTE advanced practitioner— reporting CT Head, 8.62 WTE advanced practitioners - reporting plain film, 24.66 WTE advanced practitioners – reporting ultra-sonographers and 0.5 WTE advanced practitioner acting as a practice educator, all work Trust wide. There are 24.83 WTE consultant radiologists including locum/agency who work Trust wide. There are six WTE specialist registrars for the Trust. Contracted third-party provider consultant radiologists undertake clinical evaluation and if required, justification of CT 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 13 May 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 CAH radiology department, as part of RQIA's IR(ME)R inspection programme.

For the 2026/27 inspection year the inspections focused on the following key themes:

- Entitlement
- Clinical Audit and IR(ME)R audit
- Diagnostic Reference Levels(DRLs)
- Management of Significant Accidental or Unintended Exposures (SAUE), incidents and near misses
- The administration of radioisotopes (Nuclear Medicine only)
- Breast radiotherapy pathway (Radiotherapy only)
- Any other areas identified through the review of the submitted SAF and supporting documentation

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

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.

The service was notified of the inspection date and time; and requested to complete and submit a SAF and include supporting documentation, which was 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 radiology 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?

The last IR(ME)R inspection to CAH radiology department was conducted on 6 March 2019. This was a follow up inspection to review areas for improvement identified on an inspection carried out 6 December 2018. All areas of improvement were found to have been fully addressed.

5.2 Inspection findings

5.2.1 Are there appropriate Entitlement arrangements in place to ensure compliance with the legislation?

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.

The SHSCT has a formal entitlement process to ensure that all referrers, practitioners and operators are appropriately entitled to undertake their roles in accordance with IR(ME)R. This process is defined within the Trust's Employer's Procedure C.

The Chief Executive, as IR(ME)R Employer, holds overall responsibility for entitlement. Entitlement responsibilities are formally delegated to named senior staff including, clinical director of radiology, head of diagnostic service, modality leads and advanced practitioners.

These individuals act as 'Entitlers' within their defined areas of responsibility and are themselves appropriately trained, competent and formally entitled.

The management described the process of entitlement, noting entitlement is provided following the provision of evidence of training and competency. The entitlement will include a defined scope of practice and this must be agreed between the individual and the individual entitling. This process is documented on individual entitlement forms.

Evidence of induction, training, competency and continuing professional development for radiographers and consultant radiologists was reviewed and 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. A review was undertaken of group entitlement records for MPEs and third-party providers. The entitlement records were overall well completed.

Radiographers

Radiographers have individual entitlement records with clear signed competency in accordance with the duty holder roles and a defined scope of practice. There was evidence of annual review of individual entitlement arrangements. Radiographers are entitled as operators for a range of operator functions. They are also entitled to act as practitioners for carers and comforters (C&C) imaging. They have undertaken specific training for this role. However, a review of training records noted one radiographer had been entitled before they had completed C&C training. Management gave assurances this was an oversight and training and competency would be part of the entitlement process. Staff demonstrated understanding of their duty roles and responsibilities. They confirmed they felt well supported to carrying out their duty holder duties. Entitlement was found to be carried out as outlined in Employers Procedure C.

Radiologists

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 radiology. Specialist registrars, who rotate site every 6 months, have separate entitlement documents. Their entitlement commences on the day of joining the SHSCT. They receive a detailed induction and a tour of the department. They have individual entitlement records and are entitled by the clinical director of radiology.

Radiologists from other Trusts

Consultant interventional radiologists from the BHSCT provide interventional radiology services on the CAH site. They have been entitled under group entitlement arrangements with named staff members, as practitioners and operators by the SHSCT clinical director of radiology. The BHSCT clinical director of radiology provides assurance in relation to professional training and competencies. In addition, the interventional radiologists have received training and have been assessed as competent to use the relevant radiology equipment on the CAH site.

The exposure pathway for these procedures was explored, each procedure is justified and authorised individually by an entitled interventional radiologist acting as the practitioner. An SHSCT operator (radiographer) is present to perform ID checks, operate the equipment and ensure dose recording is completed. An entitled interventional radiologist, acting as an operator, performs clinical evaluation of the exposure on NIPACS.

Third party providers

The clinical director of radiology described the process of entitlement for third party provider consultant radiologists. They are entitled through group entitlement. However, there is a list of third party consultant radiologists held on a database, which is accessible to radiology staff. An up to date database is maintained. Third party provider consultant radiologists are entitled by the clinical director of radiology to act as practitioners and operators with a defined scope of practice. The third party provider's medical director provides assurances to the clinical director of radiology SHSCT in relation to the training and competencies of the duty holders. The service can request these assurances as and when is required. Meetings are held with third party provider's senior management on a quarterly basis. Management confirmed that the audit process with the third party provider services was very robust.

Non-Medical Referrers

A clear process of entitlement of non-medical referrers was demonstrated. They receive formal written confirmation of their entitled scope of practice. The entitlement process requires completion of request supported by evidence of IR(ME)R training, which is delivered via an online regional training platform. Entitlement records are co-signed by the relevant the individual's line manager to provide assurance of clinical competency, and subsequently reviewed and entitled by the clinical director of radiology and the IHSM. Once entitled, 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.

Non- Radiology staff

It was confirmed a number of non-radiology staff undertake the duty holder roles of practitioner and operator with functions such as carrying out clinical evaluation. Management confirmed an entitlement process for these individuals has been established. There have been initial meetings with team representatives for each area. There is currently group entitlement in place for medics acting as practitioners and operators in theatres and fracture clinics. The medical director provides assurance of training and competence. In addition radiology management have met with the orthopaedic theatre team, and provided an educational presentation on IR(ME)R requirements. The service intend to have an IR(ME)R link individual for these services. This individual will be invited to participate in Diagnostic Radiology Nuclear Medicine (DRNM) committee meetings. A similar approach is planned for the urology service regarding IR(ME)R requirements, although it is noted that urology surgeons were included in the group entitlement.

Clinical evaluation of imaging undertaken in the Emergency Department (ED) was explored, particularly in relation to the use of artificial intelligence (AI) software such as BoneView. The lead reporting radiographer provided educational sessions on the use of BoneView to reporting radiographers, registrars, medical team and emergency nurse practitioners, including on the pitfalls such as false negatives and false positives. Management and staff reported these sessions were very successful.

Management confirmed entitled advanced practice radiographers, entitled as operators, carry out prompt clinical evaluation of this imaging undertaken in ED. However, this is not a 24-hour service, and the clinical evaluation of images during uncovered periods was less clear. It was highlighted there is potential for an emergency nurse practitioner or a member of the ED medical team to carry out clinical evaluation with the assistance of AI during these periods. An area of improvement has been identified to ensure any individuals within the ED carrying out clinical evaluation are entitled to do so.

Lithotripsy

As stated previously, a regional ESWL service is provided by the CAH radiology department. Referrals are received from across Northern Ireland. An examination of the IR(ME)R pathway for this service was undertaken. Urologists and NMRs are typically the referrers to the service. The justification and authorisation process of ESWL exposures was not clearly demonstrated. The practitioner for the ESWL exposures could not be clearly identified. Trained sonographers are involved in the service and provide treatment under either ultrasound or fluoroscopic guidance. At the time of inspection, there was a scheme of work available; however, this was confused with authorisation guidelines. On review, authorisation guidelines were not available for the ESWL service. Staff confirmed that the patient is referred for the first stage of treatment. The patient may require an abdominal x-ray and/or follow up treatment. The sonographer acts as the referrer for these exposures and this was evidenced electronically during record keeping checks. An area of improvement has been identified to ensure the ESWL service involving ionising radiation has:

- appropriately entitled referrers, practitioners and operators,
- a clear justification and authorisation process, which if required includes written authorisation guidelines

Speech and language therapy imaging

The entitlement arrangements for speech and language therapy (SLT) imaging service were examined. Management outlined the justification and authorisation of these exposures. SLT examinations are included in the fluoroscopy authorisation guidelines with an identifiable practitioner. Entitled operators authorise these exposures using these guidelines. Discussion with regards the clinical evaluation of these exposures noted the SLTs were performing the clinical evaluation. However, they were not entitled as operators to carry out the function of clinical evaluation for these exposures. It was confirmed that clinical evaluation is recorded on the Encompass system. Historically, the clinical evaluation report was signed by both the SLT and the radiographer, but radiographers are not currently signing reports on Encompass. There was some discussion around whether the radiographers was performing clinical evaluation of the exposures and the position was unclear. An area improvement has been identified to review the clinical evaluation of SLT exposures and ensure there is entitlement of operators to carry out this operator task; and that the entitlement process is underpinned by appropriate training and competency.

Team leads are responsible for ensuring all staff within their teams have appropriate entitlement and this is reviewed annually during appraisal.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced there are good entitlement arrangements within the radiology department. Entitlement arrangements outside of the main radiology department require to be strengthened and it is hoped the areas of improvement identified will assist on this matter. The inspection team acknowledge the commitment of staff in this regard.

5.2.2 Does the service adhere to legislation in relation to Clinical Audit and IR(ME)R audit?

Clinical Audit

IR(ME)R tells us that clinical audit is 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.

Management and staff described the process of clinical audit. The radiology service links with the clinical audit team to provide an audit schedule on an annual basis. The current schedule for 2026-2027 was being finalised at the time of submitting the SAF however, this has since been agreed. The Healthcare Quality Improvement Partnership (HQIP) format is used to categorise audits, as described in the clinical audit procedure within the Employers Procedures.

The IHDS and the clinical director for radiology are responsible for ensuring a programme is in place. Audits are assigned to staff based on clinical expertise. Each audit is assigned a supervisor and a project lead. The specialist registrars carry out audits approved by the clinical director for radiology. Radiographers are also involved in clinical audits. Examples provided include the reporting radiographer team's clinical audits and image quality audits. Management and staff outlined an example of an audit which highlighted interesting findings in relation to antero-posterior (AP) chest x-rays. The results of the audit were shared with the relevant teams via huddles and through education sessions. A clear action plan was implemented. Staff described the action plan implemented as valuable and a re-audit is planned. As the audit was a trust wide audit, the results were shared with the trust audit committee. There are also plans in place to support and educate emergency department staff to encourage this cohort of staff to work with radiographers to achieve optimal positioning. This is a very positive example of clinical audit.

There is a radiologist identified as the clinical audit lead, and the quality coordinator would typically lead clinical audit for radiography staff. A reporting radiographer also supports the quality coordinator with this and supports staff through the audit process.

The clinical director for radiology has oversight of the clinical audits. The clinical audits are presented at the monthly radiologist audit meeting. The radiography clinical audits are presented at the image optimisation team (IOT) meeting. It was good to note a plain film newsletter is published following the plain film IOT meeting (quarterly). This newsletter covers audits, learning, education, incidents, QA and reject analysis findings for general x-ray.

Management have noted there may be a gap with this across the other modalities, although the CT service used the audit mornings to discuss IOTs and other topics. These discussions are documented and are made available to staff who could not attend.

The findings of a hardcopy documentation audit was discussed. Management confirmed all documents are stored on Q Pulse, which are available to all staff. There is also a document containing hyperlinks to the most frequently used procedures and policies to support staff finding these documents easily. Staff are encouraged to use electronic versions; however, hard copies are available.

The audit findings noted hard copies were not always the most current version of the document. There were discussions around how these audit findings had been shared and escalated, as it was unclear from the audit record. The management noted it is the responsibility of the auditor to complete a non-conformance form for any non-conformances identified. This should then feed into an action plan. These documents are uploaded to Q Pulse with the audit number. If the auditor is content with the outcome, they can then close the audit. The form identifies who the audit has been shared with. There is also an audit schedule on Q Pulse and a master copy of the audits performed. Auditors get a reminder alert when an audit is due.

In relation to the findings of this audit, management noted that due to senior staff being on long-term leave, it is likely that the non-conformance action plans are currently assigned to these staff, which may have prevented these results being escalated. It was emphasised that, where key personnel are unavailable, a contingency arrangement must be in place. An area of improvement has been identified to strengthen clinical audit governance and escalation processes to include contingency arrangements in the absence of key audit stakeholders.

IR(ME)R Audit

The Head of Diagnostic Services is responsible for ensuring that the Trust audit schedule in relation to IR(ME)R is maintained. This schedule contains a list of all audits, including IR(ME)R and details for each audit including date of commencement, end and closure. An 'IR(ME)R audit schedule 2026' is held on Q Pulse. IR(ME)R audits are registered and scheduled on the Q-pulse audit module and are available for all radiology staff to review. Results are also uploaded to Q Pulse. Findings are shared with modality leads and head of service. Ad hoc audits can be added to Q Pulse if an issue is identified, which requires further auditing. Occasionally the team perform observational type audits following findings identified by the PACS audits.

IR(ME)R audits may be carried out by any member of radiology staff however, the PACS team members have the responsibility of performing a rolling schedule of data driven audits performed on a yearly schedule. It is expected that these data audits are complimented by a process audit focus to tease out effectiveness, efficiency and compliance with established standards.

Management confirmed IR(ME)R audits had been extended to radiology services provided outside of the radiology department such as theatres and the fracture clinic. Audit has been used to demonstrate the requirement to comply with IR(ME)R for these services. It was good to note a recent clinical evaluation audit for the Fracture Clinic had a 100% compliance rate.

Management described that, where audits are non-compliant, a 'radiology corrective / preventative action closure plan' template is completed to address root cause analysis of any audit non-conformances. This document includes the goal, root cause, list of corrective actions to be implemented and a schedule feedback section, if necessary. Templates should be completed and attached to non-conformance records on Q-pulse before closure. The auditor reviews all completed non-conformances before finally closing an audit record. A non-conformance actions spreadsheet is maintained and is available to everyone within radiology to review on Q-pulse.

Audit outcomes are shared via email with the relevant stakeholders; are cascaded at departmental huddles and team meetings/IOTS/bimonthly modality meetings and includes all modalities in radiology. Staff confirmed they are aware of IR(ME)R audits and that the findings are shared with them including any resultant changes to practice.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced that the clinical audit and IR(ME)R audit process is well understood by staff and implemented in accordance with the Employer's procedures. The area for improvement will assist to strengthen governance and escalation processes 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 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.

The Trust has currently adopted the National DRLs (NDRLs) and have established local DRLs (LDRLs) across a range of modalities. It was good to note that other LDRLs are under development. The Radiology Safety Committee (RSC) has assigned the task of establishing LDRL values to the DRNM sub-committee who have further delegated this to image optimisation teams (IOT) for a range of adult modalities. A paediatric IOT has been set up and has adopted the European DRLs for a range of paediatric imaging.

IOTs are involved in collection of data for a range of examinations that reflect the scope of typical radiographic procedures undertaken within the Trust. Management outlined that local dose surveys are on-going to establish LDRLs to reflect local practice, equipment, patient cohorts in accordance with the principle that all doses should be ALARP. Staff confirmed that they are involved in data collection, which at present is a manual process. The MPE will report on this collated data and feedback to the IOT, who will make the decision whether optimisation is needed. DRNM sub-committee will assess and ratify the LDRLs. The Radiation Safety Committee will be informed accordingly. DRLs are reviewed annually by the image IOTs who will inform the DRNM subcommittee. It is the responsibility of the radiography advanced practitioner modality lead within each service area to feed back to staff on any changes to the DRLs and update any DRL charts displayed within service areas. Current DRLs were noted to be displayed in the department.

Staff receive training on the use of DRLs as part of induction. Management and staff outlined how to identify and escalate where DRLs are consistently exceeded. It was confirmed that work is progressing on this matter. This includes a focus to provide refresher training for staff on the use of DRLs.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced there are well developed processes in place for the establishing, implementing and reviewing of DRLs. We commend the ongoing work on devising LDRLs. The inspection team acknowledge the commitment of staff in this regard.

5.2.4 Does the service adhere to legislation and best practice with regard to the management of SAUEs, radiology incidents and near misses?

Incident and near miss management

Management and staff described the process of incident identification, reporting and investigation. Where an incident is identified, the exposure is stopped and the incident is reported immediately via Datix. This is supported with service documentation a radiation incident investigation form (RIIF), near miss form and the radiation incident action plan (RIAP). The individual involved in the incident will complete the first section of the RIIF and the Datix form, and inform the modality lead. A preliminary investigation is completed as soon as possible by the modality lead. It will be formally triaged by the advanced practice radiographer with input from the MPE and the radiation incident lead. If the incident is deemed notifiable, the notification form will be drafted and submitted to RQIA. A full detailed investigation is carried out. This includes establishing what happened, identifying root causes and contributory factors and dose calculations.

The second notification form is then submitted to RQIA within the 12 -week window in accordance with the significant accidental and unintended exposure (SAUE) guidance. Any follow up actions are completed and documented on the RIAP, which details actions, assigned individuals and timescales required. Some examples of resulting actions were discussed such as targeted training, amendments to procedures and reflections from duty holders. All documentation is signed by the key stakeholders. All notifications are signed by the principal lead.

It was positive to note that currently the service is in a phase of transition regarding incident investigation. They are in the process of embedding the updated national coding taxonomy and moving towards a systems-based approach to their incident investigations. The service is also currently developing the supporting forms to focus where in the exposure pathway the incident has occurred.

Management outlined action taken in relation to emerging themes from incidents such as checking previous imaging. It included reminding staff of the pause and check posters, reminding staff to take their time, including some education on this during induction training and supporting new staff.

The CT lead outlined that she provided a departmental presentation to inform staff of the incident process and enhance understanding of what occurs during and after an incident investigation. The process of 'pause and check' was reviewed in the CT department. The department introduced some additional measures to support staff, such as integrating a two staff member check, whereby they confirm patient checks verbally with each other, with these checks clearly visible on the scan console to remind staff. Checking previous imaging history is included in this check. The department conducts monthly observational audits in relation to this, and the results are fed into the IOT and leads meetings.

The CT lead also noted another CT incident, whereby high numbers of phone calls into the CT console room was identified as a contributory factor. Upon identifying this, the service established a CT coordinator to handle queries and minimise distractions in the console room. In addition to this, a voice message was saved on the console room phone, which reduced a significant amount of the queries reaching the CT console. This is an example taking a systems based approach to incident investigation and implementing meaningful targeted action as a result.

The radiation incident lead produces a summary for the plain film newsletter looking at the plain film incidents over the last quarter, and summarising the key points from the incidents. Shared learning is also disseminated via email with the relevant operational teams.

Governance of incidents

As stated previously incidents are investigated with the modality lead. The radiation incident lead will meet with the MPE every second week to discuss incidents. Discussions are documented on an excel sheet, which the radiation incident leads uses to track incidents, discussions, outcomes, actions and the coding taxonomy for trend analysis. This excel document was demonstrated on site during inspection. The radiation incident lead oversees the incidents via this process and disseminates discussions to the lead investigator. The radiation incident lead attends the quarterly IOTs, and incidents are discussed in this forum. The DRNM also receive an overview of radiation incidents. Anything that requires escalation is escalated via the chair of DRNM to the chair of the RSC. Anything that requires urgent escalation is escalated by the radiation incident lead to the clinical director of radiology as required.

The clinical director of radiology clearly described the process for clinically significant accidental and unintended exposures (CSAUE) including documenting where the decision is made not to inform the patient.

For trend analysis of incidents, the service noted a transition of responsibility with the radiation incident lead now taking the trend analysis forward. In terms of recent trends, the service noted equipment related issues. The service have introduced mitigations to reduce recurrence, which involved the vender, MPE and modality leads. Trend analysis is submitted to DRNM and the RSC. It is available to all staff on Q Pulse. The IOT minutes are also shared with relevant teams. Incidents are shared with radiologists through the directorate meetings, where the quality lead will present every 6 months.

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.

Review of the incidents and trend analysis found that some work has been undertaken on the system based approach of investigations. However, there remains a 'duty-holder blame' approach in place, 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 took place on moving away from this process to a more systems-based approach to incident and near miss investigation and analysis. To support the work already in 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.

Employer's Procedure I for radiation incident investigation and reporting is in place. The objective of this procedure is to ensure that the Trust investigates all accidental or unintended medical exposures to ionising radiation and where SHSCT IR(ME)R employer knows or thinks that it is significant, the incident is investigated and reported to RQIA.

Overall the Trust has a structured and compliant process for the management of radiology incidents, near misses and significant accidental or unintended exposures (SAUE) in line with IR(ME)R.

Review of the submitted SAF, supporting documentation and discussion with key staff during the inspection evidenced clear and robust incident and near misses management processes are in place. We acknowledge the ongoing development of a more system-based approach to investigation of incidents and hope the area of improvement will assist on this matter. 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

Clinical Evaluation

As a result of a review of patient records the following was noted:

Evidence of justification and authorisation of CT perfusion imaging was reviewed. The record evidenced a radiographer authorising under authorising guidelines for the perfusion exposure. Staff described the stroke physician is acting as the practitioner and that staff must document the named stroke physician who has justified the exposure. This was not evident on this record however on another CT perfusion record, the named stroke physician was evident.

Evidence was sought with regards to the clinical evaluation of the CT perfusion exposures. It was particularly difficult to find evidence of clinical evaluation of the perfusion exposures. Staff indicated it should be recorded on the Encompass system. A single sentence was found on the system describing the term 'mismatch' that is potentially describing the AI output, rather than the clinical evaluation. Staff could not determine if this was clinical evaluation, or if the perfusion study had been clinically evaluated. An area of improvement has been identified to ensure CT perfusion studies:

- have clear evidence justification and authorisation
- have evidence of accessible meaningful clinical evaluation
- are included in IR(ME)R audit programme

Exposure charts

Employer Procedure G notes exposure charts should be revised on a two yearly basis. However, this contradicts Employer Procedure F, which notes review of exposure charts on an annual basis. Management confirmed the exposure charts are updated annually. It was advised to ensure the Employers Procedures are consistent with regards the frequency of review for exposure charts.

6.0 Conclusion

There were seven 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	7
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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 Schedule 2(1)b Stated: First time To be completed by: 16 August 2026	The Employer must ensure any individuals carrying out clinical evaluation in the emergency department are entitled to do so. Ref 5.2.1 Response by Employer detailing the actions taken: Entitlement documentation to be completed for individuals carrying out clinical evaluation in the emergency department
Area for improvement 2 Ref: Regulation 6 Schedule 2(1)b Regulation 11 Stated: First time To be completed by: 16 August 2026	The Employer must ensure the ESWL service involving ionising radiation has: • appropriately entitled referrers, practitioners and operators, • a clear justification and authorisation process which, if required, includes written authorisation guidelines Ref 5.2.1 Response by Employer detailing the actions taken: New authorisation guidelines have been developed and signed by the practitioner

Area for improvement 3 Ref: Regulation 6 Schedule 2(1)b Stated: First time To be completed by: 13 August 2026	The Employer must review the clinical evaluation of Speech and Language Therapy exposures and ensure the entitlement of operators to carry out this operator task; and that the appropriate training and competency of staff underpin the entitlement process. Ref 5.2.1 Response by Employer detailing the actions taken: Entitlement documentation to be completed for speech and language staff. Training and competency records to be reviewed by the head of diagnostic services.
Area for improvement 4 Ref: Regulation 6 Schedule 2(1)b Stated: First time To be completed by: 13 August 2026	The Employer must update Employers Procedure C to reflect any changes to the entitlement process as a result of this inspection Ref 5.2.1 Response by Employer detailing the actions taken: Employers procedures currently being updated to reflect any changes highlighted in this inspection
Area for improvement 5 Ref: Regulation 7 Stated: First time To be completed by: 13 August 2026	The Employer must strengthen clinical audit governance and escalation processes to include contingency arrangements in the absence of key audit stakeholders. Ref 5.2.2 Response by Employer detailing the actions taken: New audit documentation developed to be shared with modality leads to ensure oversight of audits for performing areas.
Area for improvement 6 Ref: Regulation 8 Stated: First time To be completed by: 13 August 2026	The Employer must develop a robust systems-based approach to the management of incidents to ensure meaningful findings and shared learning. Ref 5.2.4 Response by Employer detailing the actions taken: The Trust is actively embedding the national taxonomy for incident learning across clinical imaging, MRI and nuclear medicine. . Structured reflection processes, including reflection notifications for duty holders, are being strengthened to ensure learning is captured at individual, team and system level. Action plans are being enhanced to improve tracking, accountability and measurement of effectiveness.

Area for improvement 7 Ref: Regulation 11,12(9),6 Stated: First time To be completed by: 13 August 2026	The Employer must ensure CT perfusion studies: • have evidence clear justification and authorisation • have evidence of accessible meaningful clinical evaluation • are included in IR(ME)R audit programme Ref 5.2.5
	Response by Employer detailing the actions taken: Authorisation guidelines to be amended to ensure there is clear justification and authorisation Referrers for CT perfusion to be informed of the requirement to provide a meaningful clinical evaluation. CT perfusion to be included in the IR(ME)R audit programme.



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