Ionising Radiation (Medical Exposure) Regulations Inspection (Announced)

Radiology Department, The Grange University Hospital – Aneurin Bevan University Health Board

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Healthcare Inspectorate Wales (HIW) is the independent inspectorate and regulator of healthcare in Wales

Our purpose

To check that people in Wales receive good quality healthcare

Our values

We place patients at the heart of what we do. We are:

- **Independent**
- **Objective**
- **Caring**
- **Collaborative**
- **Authoritative**

Our priorities

Through our work we aim to:

Provide assurance:	**Provide an independent view on the quality of care**
Promote improvement:	**Encourage improvement through reporting and sharing of good practice**
Influence policy and standards:	**Use what we find to influence policy, standards and practice**

1. What we did

Healthcare Inspectorate Wales (HIW) completed an announced Ionising Radiation (Medical Exposure) Regulations inspection of the Radiology Department based at The Grange University Hospital part of Aneurin Bevan University Health Board on 16 and 17 November 2021.

Our team for the inspection comprised of two HIW inspectors and a Senior Clinical Officer from the Medical Exposures Group (MEG) of UK Health Security Agency (UKHSA), who acted in an advisory capacity.

HIW explored how the service:

- Complied with the Ionising Radiation (Medical Exposure) Regulations 2017
- Met the Health and Care Standards (2015).

Further details about how we conduct Ionising Radiation (Medical Exposure) Regulations inspections can be found in Section 5 and on our website.

2. Summary of our inspection

Evidence provided throughout inspection demonstrated that there was good compliance with IR(ME)R 2017.

There was positive feedback provided by patients about their experiences when attending the department. We saw arrangements in place to promote privacy and dignity of patients, and found that staff treated patients in a kind, sensitive and professional manner.

Overall, staff were happy with the level of support provided by their immediate line manager and senior managers within the service. However, concerns were highlighted in relation to a few staff stating that they had face discrimination in the workplace within the last 12 months.

Discussions with staff throughout our inspection provided assurance that arrangements were in place to ensure that examinations were being undertaken safely. However, some areas for improvement were highlighted including the need to review the process for Emergency Department referrals.

This is what we found the service did well:

- Information provided indicated that there were adequate arrangements in place to help staff meet the communication needs of patients attending the department, with plans to further improve these arrangements in the near future.
- Evidence of detailed clinical audits being undertaken as part of an overall audit schedule
- Clear evidence to demonstrate that there was good interaction and engagement between MPEs and the department
- Clear evidence of a robust equipment Quality Assurance (QA) programme with regular Quality Control (QC) checks being carried out by a team of trained radiographers.

- Clear evidence of optimisation including Local Diagnostic Reference Levels (DRLs) in place for commonly performed examinations and ongoing work to set Local DRLs for interventional examinations.
- Clear evidence of a positive reporting culture
- Duty holder training, competency and entitlement records reviewed were clear and comprehensive.
- Appropriate arrangements implemented to allow for effective infection prevention within the department.

This is what we recommend the service could improve:

- Arrangements should be implemented to routinely collate patient feedback on the services provided within the department and to ensure information regarding feedback and any subsequent actions taken is being shared with patients and staff.
- Ensure employer's procedures and associated documents are updated, where required, so that information accurately reflects current practice and arrangements in place within the department.
- Put mechanisms in place to provide non-medical referrers within information setting out their entitlement and scope of practice
- Ensure that all staff are up to date with mandatory training and personal appraisal development reviews (PADRs).
- A number of areas were highlighted where additional detail was required in written documentation to ensure that information is accurate.

3. What we found

Background of the service

Aneurin Bevan University Health Board was established on 1 October 2009 and provides primary, community, hospital and mental health services to the people of Blaenau Gwent, Caerphilly, Monmouthshire, Newport, Torfaen and South Powys.

The health board as a whole serves a population of more than 600,000 people and many of the inpatient and specialist services at The Grange University Hospital (The Grange) support the entire catchment area.

The Radiology Department at The Grange consists of equipment including:

- Computed Tomography (CT) scanners
- Fluoroscopy units
- Ultrasound and dental units
- Magnetic Resonance (MR) scanners
- Dedicated interventional and cardiac units

The department employs a number of staff including Radiographers, an Advance Practice Radiographer, Consultant Radiologists, Specialist Registrars, as well as nursing and clerical staff.

The department also has advice and support from four Medical Physics Experts (MPE)[1], provided through a Service Level Agreement (SLA) between the health board and the Radiation Protection Service based in Cardiff.

[1] An MPE is a person having knowledge, training and experience to act or give advice on matters relating to radiation physics applied to medical exposure in diagnostic radiology, nuclear medicine and radiotherapy, whose competence in this respect is recognised by a competent authority. All employers who carry out medical exposures are required in IR(ME)R to appoint a suitable medical physics expert.

Quality of patient experience

We spoke with patients, their relatives, representatives and/or advocates (where appropriate) to ensure that the patients' perspective is at the centre of our approach to inspection.

Overall, there was positive feedback provided by patients about their experiences when attending the department.

We saw arrangements in place to promote privacy and dignity of patients, and found that staff treated patients in a kind, sensitive and professional manner.

Information provided indicated that there were adequate arrangements in place to help staff meet the communication needs of patients attending the department, with plans to further improve these arrangements in the near future.

The service should ensure that mechanisms are implemented to routinely collate patient feedback and make sure that arrangements are in place to share the results and inform patients and staff about actions taken as a result of patient feedback.

As part of the inspection process HIW issued both online and paper surveys to obtain patient views on the services provided by the department. In total, there were 37 responses received.

Patients were asked in the survey to rate their overall experience provided by the service. With the exception of one response, all patients that responded rated the service as 'very good' or good'. Patient's told us:

> *"Staff very kind and courteous"*
>
> *"Friendly and sociable staff who helped a great deal in making you feel less nervous. Just what you need!"*

Staying healthy

There were information posters displayed in waiting areas within the department, these included details around the benefits and risks of medical exposures being

carried out for adults and children. Additionally, posters were displayed throughout the department advising patients of the importance of letting staff know if there was a likelihood they may be pregnant. This is important to prevent potential harm to an unborn child and is required under IR(ME)R.

Overall we identified that there was limited information for patients in regards to general health care advice and support. The health board should consider providing further information on topics such as healthy lifestyles, smoking cessation, alcohol and drug support and mental health support.

Improvement needed

The health board should consider providing additional general health care advice and support information within the department.

Dignified care

During our time within the department we observed staff engaging with patients in a polite, sensitive and professional manner.

We did not overhear any sensitive conversations taking place during the inspection. We observed patients being taking into available treatment rooms for private conversations when required. X-Ray room doors were closed when procedures or consultations were taking place. Out of the 36 patients who answered the question on our survey, 33 said that they felt that they'd been able to speak to staff about their procedure without being overheard by other people.

There were rooms available within the department to allow patients to change in private, prior to their examination if required. Whilst we did not observe patients having their examinations, we saw staff greeting patients in a friendly manner. With the exception of one, all patients who responded to the relevant questions on our survey said that they had been treated with dignity and respect by staff, and confirmed that they had been able to maintain their own privacy and dignity during their appointments.

Patient information

As previously detailed, we saw posters displayed within the department, which included information regarding the benefits and risks of the exposure to ionising radiation for the examinations being undertaken.

Senior managers explained that, due to the range and complexity of patients that are imaged within the department, in some instances conversations regarding

the benefits and risks are not practical. The employer had a written procedure in place in relation to providing guidance for informing patients of the benefits and risks from an exposure to ionising radiation, prior to their examination. On review of this document it was highlighted that the content would benefit from further detail in relation to occasions when it may not be practical for staff to have a conversation with the patient around the benefits and risks of an exposure, for example where the patient may have cognitive challenges or trauma where there may be reduced levels of consciousness.

With the exception of one, all patients who responded to the relevant question on our survey stated that they felt that they were as involved as they wanted to be in any decisions made about their treatment. Additionally, 34 out of 37 patients confirmed that they had received clear information to understand the benefits and risks of their examination prior their exposure.

Improvement needed

The employer should ensure that the employer's procedure in relation to providing information on benefits and risks to patients is updated to detail the occasions where it may not be practical for staff to have these discussions with patients.

Communicating effectively

With the exception of one, all patients who responded to the question on our survey confirmed that they felt that they were listened to by staff during their appointment.

Staff we spoke with confirmed that they have access to communication support services, if required, to assist any patients attending the department who are unable to communicate verbally in English. We were also informed that there were staff working on the department able to converse in other languages, including Welsh.

On the first day of our inspection it was highlighted that there were no notices displayed within the department advising patients that they could speak to staff in Welsh, if they wished to do so. This issue was discussed with senior managers and we were pleased to see that new signs were displayed the following day. This allows the service to help deliver an 'Active Offer'[2]. All patients who

[2] An 'Active Offer' means providing a service in Welsh without someone having to ask for it. The Welsh language should be as visible as the English

responded to our survey confirmed that they were able to speak to staff in the language of their choice.

Signage and the majority of posters displayed throughout the department were available in English and Welsh. With the exception of one, all patients confirmed that information was available to them in their preferred language.

There was no hearing loop available within the department to assist people wearing hearing aids to communicate with staff. However, senior managers confirmed that there were plans to purchase one. Additionally, we were informed that a number of staff working within the department had expressed an interest to learn British Sign Language (BSL), to assist them to communicate with individuals who are either deaf or have hearing impairment.

Timely care

All patients who responded to the question our survey told us that it was “very easy” or “fairly easy” to find their way to the department.

As the department is predominately an inpatient only service, we were informed that patients are routinely only brought to the department when staff confirm that they are ready for them. However, staff confirmed that should there be any unexpected delays whilst patients are already in the department, they would be informed immediately. During our time on the department we did not observe any patients waiting significant lengths of time before being taken into the X-ray room.

Individual Care

Listening and learning from feedback

Senior managers we spoke with described the arrangements in place to respond to any verbal concerns raised by patients. We were informed that attempts were made, where possible, to try to resolve the issues with the patient quickly and efficiently. Where this is not possible patients are signposted to the health board concerns process. Information was displayed throughout the department in relation to the NHS Wales complaints and concerns procedure, known as Putting Things Right (PTR)[3].

[3] 'Putting Things Right' (PTR), is the integrated process for the raising, investigation of and learning from concerns. Concerns are issues identified from patient safety incidents, complaints and, in respect of Welsh NHS bodies, claims about services provided by a Responsible body in Wales.

We were informed that there had not been any recent surveys completed to collate patient feedback on their experiences using the department. However, senior managers confirmed that a new tailored digital survey had been developed and there were plans to undertake this survey on a quarterly basis.

Responses received via our staff survey highlighted that 13 out of 16 said that they either ‘did not’ or ‘did not know’ whether regular updates were provided on patient feedback received by their department, nor whether patient feedback was used to make decisions about changes within their department. The health board should ensure that arrangements are in place to routinely collate patient feedback. Additionally, feedback received and any subsequent action taken as a result should be shared with patients and staff working within the department.

Improvement needed

The health board should ensure that arrangements are in place to provide staff and patients with regular updates on the patient experience feedback received by the service, as well as any subsequent actions taken.

Delivery of safe and effective care

We considered the extent to which services provide high quality, safe and reliable care centred on individual patients.

Evidence provided and discussions with staff demonstrated that overall compliance with IR(ME)R 2017 was good. Staff had an adequate awareness of their duty holder roles and responsibilities.

Information provided indicated that appropriate arrangements had been implemented by the service to allow for effective infection prevention and decontamination within the department.

Discussions with staff throughout our inspection provided assurance that arrangements were in place to ensure that examinations were being undertaken safely. However, a few areas were highlighted including the need to review the process for Emergency Department referrals.

Compliance with Ionising Radiation (Medical Exposure) Regulations

Duties of employer

Patient identification

The employer had an up to date written procedure for staff to follow to correctly identify patients prior to their exposure. This is aimed to ensure that the correct patient has the correct exposure, in accordance with the requirements of IR(ME)R 2017. The procedure set out that staff were expected to confirm the patient's full name, date of birth and home address. This approach is in keeping with current professional body guidance[4] on IR(ME)R.

Information detailed within the procedure also set out the steps staff should take if they encounter different types of patients including individuals lacking capacity,

[4] https://www.rcr.ac.uk/system/files/publication/field_publication_files/irmer-implications-for-clinical-practice-in-diagnostic-imaging-interventional-radiology-and-nuclear-medicine.pdf

paediatric patients, individuals with sensory impairments such as hearing or sight loss and individuals unable to communicate in English.

As part of the inspection we reviewed a sample of current and retrospective patient records. All records reviewed evidenced that patient identification checks had been carried out by staff, in accordance with the written procedure. Additionally, every patient who answered the question on our survey confirmed that they had been asked to confirm their personal details prior to their procedure being undertaken.

Individuals of childbearing potential (pregnancy enquiries)

The employer had a written procedure in place in relation to the process for identifying whether an individual of childbearing potential is or maybe pregnant, prior to undergoing any exposures. This aimed to ensure that such enquiries were made in a standard and consistent manner.

The procedure set out the process staff should follow depending on the individual's responses. Details included the age range of individuals who should be asked about pregnancy which was between the ages of 12 and 55 years, and also the exposure area requiring the enquiry, which was between the diaphragm and knees. This is important to minimise the potential harm to an unborn child from an exposure of ionising radiation.

Evidence of a departmental pregnancy enquiry flow chart was provided. This document also set out the relevant steps staff should take, depending on the responses from the patient.

As previously detailed, posters were displayed throughout the department advising patients of the importance of letting staff know if there was a likelihood that they may be pregnant.

Staff we spoke with were able to describe their responsibilities in regards to the pregnancy enquiries, which were in line with the employer's procedure described above. However, two of the patient records reviewed as part of our inspection, for individuals who should have been asked about their pregnancy status, did not evidence that the enquiry had been undertaken.

Improvement needed

The employer must ensure that all staff are routinely completing pregnancy enquires, where required, and that patient records are consistently updated to demonstrate that an enquiry has been completed.

Non-medical imaging exposures

There was an up to date employer's procedure in place which detailed that there were no non-medical exposures[5] undertaken within the health board.

Referral guidelines

There were established referral guidelines in place and adequate arrangements were described for making these available to individuals entitled to refer patients to the department. The referral guidelines used are based on the Royal College of Radiologist (RCR) iRefer[6] 8th edition publication.

Senior managers confirmed that referral awareness information was provided to all medical staff on their induction and within their entitlement letters. We were also informed that iRefer was accessible via the health board intranet page and could be accessed using any health board computer.

There was an employer's written procedure in place setting out the referral process for staff to follow. Details included within this document set out that referrals must be submitted in accordance with the set guidance. The information required for each referral included full patient demographicis; including name address and date of birth, appropriate clinical history and a statement of the examination being requested.

Referrals can be submitted to the department both electronically and hand written. Following receipt of an electronic referral, it is subsequently printed off and processed onto the Welsh Radiology Information System (WRIS). Electronic referrals for inpatients are made via the clinical workstation portal, however, referrals from the adjacent Emergency Department for diagnostic imaging are submitted via a specific Emergency Department computer system (Symphony[7]).

Within the last year, two notifications have been reported to HIW and numerous near miss events following incidents which involved incorrect patients being referred from the adjacent ED for an X-ray examination. Both patients

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[5] Non-medical imaging exposures include those for health assessment for employment purposes, immigration purposes and insurance purposes. These may also be performed to identify concealed objects within the body.

[6] https://www.rcr.ac.uk/clinical-radiology/being-consultant/rcr-referral-guidelines/about-irefer

[7] https://www.emishealth.com/products/symphony/

subsequently received exposures that they did not require. As a result of these incidents, the Radiology Department has instigated additional processes into the ED referral process in an attempt to mitigate the number of wrong patient notifiable radiation incidents. Following an electronic referral from ED, the referring doctor is now required to follow up the referral with a phone call to the department within 20 minutes to discuss. If this call is not made, the requested examination will not take place until the department can confirm the referral is for the correct patient.

This arrangement was discussed with department managers and we were informed that the revised referral process had had a positive impact thus far, to mitigate the ongoing risk. There have been a number of near misses identified by staff working within the department, where further accidental exposures have been prevented. However, further concerns were highlighted during our inspection of potential risks of duplicate referrals being submitted to the department, following any edits of the initial referral submitted via the ED Symphony system.

We acknowledge that the Radiology Department has implemented steps within the ED referral process and commend the due dilligence of department staff in identifying the significant number of near misses in recent months. However, given the concerns highlighted and the ongoing risk, the employer must provide assurances that this matter will be reviewed, to ensure that the necessary actions are implemented, to mitigate the risk of any further accidental or unintended exposures and to alleviate the additional burden of the supplementary checking process for staff in both departments. This could also include a review of training on the ED referral system, if appropriate.

An additional issue was highlighted following our review of a sample of patient referral records. On the occassions where patients were being referred to the department from theatre, the documentation was being completed by hand by a radiographer. However, it was identifed that the referrer and practitioner justifying the exposure, was not always being recorded on the document.

Improvement needed

The employer must provide HIW with assurance that the Emergency Department referral system will be reviewed to ensure that necessary actions and mitigations have been implemented to prevent further accidental and unintended exposures.

The employer must ensure that all theatre referrals detail the referrer and practitioner for the requested exposure.

Duties of practitioner, operator and referrer

The employer had a system in place to identify the different IR(ME)R roles of the professionals involved in referring, justifying[8] and performing radiology exposures to patients. The health boards' Ionising Radiation Safety Policy detailed the specific roles and responsibilities in line with IR(ME)R, which are referrer[9], practitioner[10] and operator[11] (known as duty holders).

The policy included some details around the requirements that must be met before an individual can be formally entitled to become a duty holder, as well as training requirements for newly appointed duty holder roles. However, it was highlighted that further details were required to ensure that the document specifically set out the training requirements and professional qualifications for specific duty holder entitlement. For example, Fellowship of the Royal College of Radiologists (FRCR) and General Medical Council (GMC) registration would provide suitable evidence to be entitled as an IR(ME)R practitioner. This issue was previously highlighted during the HIW inspection undertaken at the Nuclear Medicine Department in Royal Gwent Hospital in February 2021.

Senior managers confirmed that the policy had been updated following the previous inspection, however, following discussion and further clarity around the additional details required, it was agreed that the document needed to be updated to ensure it reflected the agreed duty holder requirements for the health board.

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[8] Justification is the process of weighing up the expected benefits of an exposure against the possible detriment of the associated radiation dose.

[9] Under IR(ME)R a referrer is a registered healthcare professional who is entitled, in accordance with the employer's procedures, to refer individuals for medical exposures.

[10] Under IR(ME)R a practitioner is registered healthcare professional who is entitled, in accordance with the employer's procedures, to take responsibility for an individual medical exposure. The primary role of the practitioner is to justify medical exposures.

[11] Under IR(ME)R an operator is any person who is entitled, in accordance with the employer's procedures, to carry out the practical aspects of a medical exposure

As part of our inspection, we reviewed a sample of duty holder training, competency and entitlement records. Overall, the records reviewed were clear and comprehensive. Additionally, there were systems in place to monitor training compliance. Overall, staff we spoke with as part of our inspection demonstrated an adquate awareness and understanding of their duty holder roles under IR(ME)R 2017.

Senior managers described the arrangements for notifying staff of any changes to policies and procedures in place. Following any amendments, the updated document is shared with relevant staff via an email notification and staff briefing. Staff subsequently have to sign to confirm that they have read and understood the document. We were informed that any changes are discussed in staff meetings prior to implementation. Department staff we spoke with confirmed that they were able to access hard copy and electronic versions of the policies and procedures in place when required.

Improvement needed

The employer must ensure that the Ionising Radiation Safety Policy is updated to include specific training requirements and professional qualifications for specific duty holder roles.

Justification of Individual Medical Exposures

The employer had a written procedure in place for the justification and authorisation of medical exposures undertaken within the department. This procedure set out the required steps that must be taken by staff to ensure that all examinations involving ionising radiation are justified prior to the procedure being undertaken. Overall, evidence provided demonstrated compliance with IR(ME)R 2017. Additionally, staff we spoke with had a good understanding of the justification and authorisation process to be followed. However, as previously highlighted, issues were identified in some theatre referrals reviewed, where the practitioner justifying the exposure had not been recorded.

For the occasions when it is not practicable for a practitioner to authorise exposures, delegated authorisation guidelines (DAG's) have been issued for a number of CT examinations to allow operators, entitled to act under the DAG, to authorise the exposure. Subsequently the entitled operator is able to authorise the exposure by signing the referral form following the DAG.

Any carer and comforter medical exposures must also be justified. There was an employer's procedure in place which set out the process to be followed by staff in regards to any potential exposures to carers and comforters. This included

providing the individual with sufficient information around the benefits and risks, to ensure that they knowingly and willing participate. If the individual is deemed to be of childbearing potential, a pregnancy enquiry must also be undertaken.

Following the involvement of an individual as carer or comforter for an exposure, an entry must be made in the carer and comforter holding record log. Information that must be recorded in this document included; individuals name and relationship to the patient, their pregnancy status, the name of practitioner justifying the potential exposure, the relevant patients' number and the examination and patient dose.

Senior managers confirmed that, where required, Everlight Radiology[12] act as practitioners for out of hours CT exposures. This is in line with the contract in place between all health boards in Wales and Everlight. We were informed that, if the requested out of hours procedure cannot be authorised by a radiographer under the appropriate DAG, the referrer will contact Everlight to seek justification prior to the procedure being undertaken by the operator. Arrangements were in place to ensure that once justification has been obtained, the relevant details were recorded on the out of hour's protocol, which will include the name of practitioner.

Optimisation

There were arrangements in place for the optimisation[13] of exposures. For example, we were informed that each procedure had a set of standard protocols for staff to follow and also exposure charts were available for each radiography unit, with standard exposures to ensure that patient exposure doses were as low as reasonably practicable.

The relevant MPEs routinely provide advice and contribute to the optimisation of exposures via the Image Optimisation Teams. The MPEs complete routine checks including equipment performance quality assurance tests and patient dose audits, which may result in recommendations to optimise specific procedures. This is done to support exposures being kept as low as reasonably practicable.

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[12] Everlight Radiology is a substantial provider of teleradiology services based in London and Australia.

[13] Optimisation refers to the process by which individual doses are kept as low as reasonably practicable.

For paediatric patients, we were informed that specific paediatric settings could be selected on equipment and these pre-set exposures were optimised. Additionally, there was also relevant guidance, exposure charts and specific protocols available for equipment used for adult and paediatric patients within the department.

Diagnostic reference levels

There was an employer's written procedure in place for establishing and reviewing diagnostic reference levels (DRLs). We were informed that DRLs are established on a three yearly cycle following dose audit reports completed by the service's MPEs. Audit reports are completed more frequently when required; following installation of any new equipment or any changes to clinical practice.

At the time of our inspection local DRLs (LDRLs) had been established for all equipment within the department, with the exception of interventional imaging. However, we were informed that work was ongoing to establish interventional local DRLs in the near future, when sufficient data is available. Currently, we were informed that national interventional DRLs were being used as a guide.

Established DRLs were displayed in each treatment room visited as part of our inspection. Following any changes to DRLs, we were informed that information in relevant rooms is updated and notifications are provided to staff via email and/ or meetings.

A system was in place to ensure that operators record instances where the dose for an examination on an average size patient consistently exceeds the DRL, without an obvious explanation; such as patient size or examination complexity. This information is collated onto the relevant department dose log, available in each room. Subsequently, these documents are reviewed regularly by the relevant Radiation Protection Supervisor (RPS) to identify any DRLs consistently exceeding the established LDRL and further investigations are carried out as and when required, to determine the reason and required action.

Clinical evaluation

There was an employer's procedure in place which detailed the arrangements regarding clinical evaluation[14] of medical exposures carried out within the department. The procedure set out that a clinical evaluation must be recorded for every medical exposure completed. However, the document detailed that in a

[14] Clinical evaluation is important to help inform the next stage of a patient's care and treatment.

number of controlled instances, images were available to the referrer without subsequently being reported by the department. These arrangements only occur following agreements between the Radiology Clinical Director and the relevant directorate Clinical Director. We were informed that individual agreement letters for each group of duty holders, setting out the specifics of the agreement, were available.

We were informed that clinical evaluations can be written reports on the WRIS produced within the Radiology Department by entitled operators such as radiologists, radiographers or third-party operators (Everlight). Additionally, the clinical evaluation can be an evaluation of the exposure written in the patients' record, by the referring medical practitioner, or other qualified individual entitled as an operator for clinical evaluation by the employer. The employer's procedure states these reporting agreements will be annually audited by Radiology to monitor compliance that agreed clinical evaluations, not recorded on the WRIS, are documented in the patient's records.

It was highlighted that further detail was required in the relevant employer procedure, to set out the clinical evaluation arrangements in relation to other directorate consultants and medical doctors entitled as operators to perform clinical evaluation. The process when a clinical evaluation is performed and recorded by an entitled operator outside of Radiology was described in the procedure. However, it was unclear how relevant individuals had been identified and informed of their entitlement and scope of practice. This information should be included within the employer's procedure, as well as the training and competence requirements.

Improvement needed

The employer should ensure that the relevant employer's procedure is updated to reflect the detail of the agreed arrangements for clinical evaluation completed by those entitled operators who clinically evaluate outside of the Radiology Department.

Equipment: general duties of the employer

The employer had an inventory (list) of the equipment within the department. The inventory contained the information required under IR(ME)R 2017 including equipment name and model number, year of manufacture and year of installation. However, it was highlighted that that inventory document did not have a review date.

There was a health board policy in place in regards to the quality assurance (QA)

of equipment within radiology across the whole health board. This document set out the requirements for equipment including guidance and responsibilities regarding maintenance, purchasing, training and equipment testing. The document was clear and comprehensive, however, it was highlighted that although some equipment was specified in the policy, not all of the relevant equipment available within The Grange was included. The employer should consider updating the document accordingly.

Additionally, there was an employer's procedure for QA programmes relating to written documentation and equipment for staff to follow. However, it was highlighted that the review date for this document had passed. The employer must ensure that this document is reviewed and updated. The information relating to equipment, should be updated to include links to the associated policy and include relevant detail reflecting points for inclusion from the professional body guidance on IR(ME)R.

Evidence was provided to demonstrate that there was an established equipment QA and quality control (QC) programme in place for the department. These had been developed with the advice and support of the MPEs. Evidence available showed that QC checks for equipment were up to date and that actions had been taken on the occasions any issues had been highlighted.

During discussions with senior managers, we were made aware of a new piece of diagnostic imaging equipment which had been purchased outside of the radiology department. The equipment was a mini C-Arm[15] machine purchased by the Orthopaedic Department based at the hospital. We were informed that the machine had been tested by a service MPE, however was not currently in use. Queries were raised by senior managers around the governance and radiation protection arrangements for this equipment, including clarity around the required training and entitlement for staff using the equipment and the maintenance of the equipment. The employer must ensure the requirements relating the use of this X-Ray equipment are compliant with IR(ME)R and discussed and agreed between the two departments.

[15] A mini C-Arm is an X-Ray machine that scans a specific body area, while allowing clinicians to view the results in real time, live on the monitor screen during surgery.

Improvement needed

The employer should ensure that a review date is added to the equipment inventory to ensure that the content is routinely kept up to date.

The employer should consider updating the health board QA policy to reflect the relevant equipment available within the department.

The employer must ensure that the employer's procedure relating to quality assurance of documentation and equipment is reviewed and updated.

The employer must ensure clarity is provided to relevant senior staff in regards to the governance and IR(ME)R/IRR requirements for the Orthopaedic Department's mini C-Arm fluoroscopy equipment.

Safe care

Managing risk and promoting health and safety

The diagnostic imaging department was split over two floors with the majority of services provided on the first floor, with the interventional service provided from the second floor. The main department area on first floor was situated adjacent to the ED and Medical Assessment Unit. There was level access throughout all areas of the department observed, allowing patients to be efficiently transferred in wheelchairs or beds, as well allowing patients with mobility difficulties to enter and leave the department safely.

Arrangements were in place to promote the safety of staff, patients and visitors. For example, appropriate signage and restricted access arrangements were in place to deter and prevent unauthorised persons entering areas where radiology equipment was being used.

Overall, the department appeared well laid out, maintained and in a good state of repair. During our time within the department there were no hazards identified in any of the areas we visited.

Responses received via our survey highlighted that three members of staff who responded to the relevant question, said that if they had a concern about unsafe clinical practice, they would not know how to report it. Additionally, only seven out of thirteen staff members who responded to the question on our survey said that they would feel secure raising concerns about unsafe clinical practice.

Further responses received via our survey highlighted that 13 out of 15 felt that care of patients was the organisations top priority, and 10 out of 14 staff members who expressed an opinion said that they would be happy with the standard of care provided by the organisation for them or their friends or family.

Improvement needed

The health board must ensure all staff are provided with information outlining the required steps to report any concerns in relation to unsafe clinical practice within the department.

The health board must provide assurance that mechanisms are in place to allow staff to securely raise concerns about unsafe clinical practice and to ensure that concerns raised are routinely investigated and addressed.

Infection prevention and control

At the time of our inspection, the department appeared visibly clean and free from clutter. Information provided by staff we spoke with indicated that adequate arrangements were in place for effective infection prevention and decontamination within the department. We were informed that these arrangements have been strengthened as a result of COVID-19.

Staff described the arrangements in place, including ensuring that relevant areas are routinely cleaned after every patient and introducing restrictions on the amount of people allowed in a room at one time. All staff who responded to the question on our survey confirmed that they felt that decontamination arrangements were in place for equipment and all relevant areas. Additionally, with regards to COVID-19, almost every staff member who responded agreed that the department had implemented the necessary environmental and practice changes.

At the main entrance to the department, clear plastic screens had been installed on the reception desk to protect staff and patients. Before entry into the department, all staff and visitors are asked a few questions including; whether they have any COVID-19 symptoms or have come into contact with anyone with COVID-19 recently. The individual's temperature is also taken and they are asked to confirm when they last undertook a lateral flow test (LFT). We were informed that staff are required to complete two LFT's a week. The information collated by the receptionist is recorded onto a standard form, which the individual then has to sign before entering the department.

As previously highlighted, the department predominantly deals with inpatients, who will routinely receive COVID tests whilst in the hospital. However, we were

informed that when outpatients are seen, they are required to answer similar questions and have their temperature taken before they can enter the department.

Hand washing facilities and hand sanitiser gel boxes were available throughout the department. Chairs within the department waiting areas had been reduced to allow for social distancing. Additionally, in one of the waiting areas, clear plastic screens had been installed between each chair. All chairs available within waiting areas were wipeable, to allow for adequate cleaning

Signs were displayed throughout the department to remind staff, visitors and patients of the social distancing requirements.

All patients who responded to the question on our survey said that they felt the department was 'very clean' or 'fairly clean'. Additionally, almost all patients who responded stated that COVID-compliant procedures were evident during their time within the department.

All staff are required to complete mandatory infection prevention and control eLearning training. Evidence provided as part of our inspection indicated that 82% of staff working within the department were up to date with the training.

Senior managers confirmed that arrangements were in place to ensure that there was a sufficient supply of personal protective equipment (PPE) available within the department for staff. We were also informed that staff have received training on donning and doffing[16], and have been fit tested for PPE. Nine out of 11 staff who responded to the question on our survey indicated that they felt that there was a sufficient supply of PPE available to them within the department.

Safeguarding children and adults at risk

Staff we spoke with described the actions they would take should they have any safeguarding concerns about an individual. We were informed that there is a safeguarding team based within the hospital, available to provide advice and support as and when required. Additionally, we were told that advice and support was displayed via posters within the department and on the health board intranet.

All staff are required to complete mandatory safeguarding training. Evidence provided as part of our inspection detailed the training compliance percentage

[16] Donning – putting on personal protective equipment (PPE); Doffing – taking off personal protective equipment (PPE)

for safeguarding adults level one was 87 percent, adult level two was 60 percent and safeguarding children was 84 percent. This issue is covered further in our 'Workforce' section.

Effective care

Quality improvement, research and innovation

Clinical audit

There was evidence available of a clinical audit schedule in place and information provided demonstrated that there was good multidisciplinary focus on audit within the department. There was evidence of an IR(ME)R audit in place to ensure compliance and this was routinely being monitored, with improvements being made where required. Examples of department clinical audits being completed were provided as evidence which were relevant and well detailed.

Senior managers informed us that the radiology directorate audit strategy and department IR(ME)R audit programme were currently under review. We were told that the intention was to further develop a more standardised process for audit. This will include assigning individual leads to undertake relevant clinical and IR(ME)R audits within the department. The employer should ensure that relevant documentation is updated to reflect the agreed audits leads, once this decision has been made.

We were informed that there is currently no QA lead to provide a consistent approach to quality improvement across the health board. This meant that it was challenging for clinical staff to complete important quality and compliance tasks, such as IR(ME)R compliance audits, in addition to their clinical roles. The employer should ensure that the lead staff member(s) for each audit, have sufficient capacity to undertake the audit requirements.

Improvement needed

The employer should ensure that relevant documentation is updated to clarify the individuals responsible for completing audits within the departmental audit schedule.

The employer should ensure that relevant staff have sufficient capacity to undertake their clinical and IR(ME)R audit responsibilities.

Expert advice

As previously detailed, there was an SLA in place between the health board and the Radiation Protection Service based in Cardiff, for the provision of routine oversight, direct input and ad-hoc MPE advice and support to the department.

We were informed that MPEs were involved in practical aspects of the service including dose audits, routine performance QA of equipment, optimisation and analysis of accidental or unintended exposures. We were also informed that there was MPE involvement in all relevant meetings relating to radiation exposures including Image Optimisation Teams.

There was evidence to clearly demonstrate that there was good interaction and engagement between MPEs and the department. Staff we spoke with confirmed that they were able to contact an MPE for advice and support whenever they needed to.

Medical research

There was an employer's procedure in place in relation to imaging procedures undertaken for the purposes of medical research studies. Senior managers confirmed that the department does not currently participate in any research relating to medical exposures. However, we were informed that medical research is undertaken in other radiology departments within the health board. The employer should ensure that the employer's procedure is updated to detail that research exposures are not carried out within the radiology department at The Grange.

Additionally, following review of the procedure, it was highlighted that further details should be included to describe how the correct research protocol would be identified for each research study undertaken, as well as where this information is recorded and how to access.

Improvement needed

The employer should ensure that the written procedure in relation to research exposures is updated to detail that these exposures are not undertaken within the department at The Grange.

The employer should ensure that the written procedure in relation to research exposures is updated to include details of how the correct examination protocol for each research programme is identified, where it is recorded and how to access this information.

Quality of management and leadership

We considered how services are managed and led and whether the workplace and organisational culture supports the provision of safe and effective care. We also considered how the service review and monitor their own performance against the Health and Care Standards

An organisation structure was in place for the overall radiology department with clear lines of reporting.

Overall, feedback from staff indicated that they were happy with the level of support and engagement from their immediate line manager and from senior managers within the service.

Systems were in place to routinely monitor mandatory training and personal appraisal development reviews (PADRs), and overall compliance levels within the department was good.

Employer's procedures, policies and protocols provided as evidence were very well detailed. However, a few issues were highlighted including the requirement to ensure that written procedures reflect the agreed practice.

Governance, leadership and accountability

There was a radiology directorate structure in place for the health board, which set out the clear lines of reporting within the service. There was also a radiology governance structure in place which set out the governance arrangements from the relevant radiology departments up to the executive board within the health board.

Senior managers confirmed that arrangements were in place to ensure that there was regular engagement with department staff including via staff meetings and emails. We were also informed that department newsletters have previously been circulated to provide relevant updates to staff, however, this was stopped due to staffing pressures during the COVID-19 pandemic. Senior managers confirmed that there are plans to reintroduce the newsletter to be published on a quarterly basis in 2022.

We were told that efforts were made to ensure senior managers attended every site regularly to provide department staff with the opportunity to raise any queries or concerns with them. Responses received via our survey indicated that 60 percent of staff felt that communication from senior management was effective.

Further responses received via our survey detailed that 86 percent of staff who responded either felt that senior managers “always” or “sometimes” involve staff in important decisions and act on staff feedback.

Prior to our inspection, HIW required senior staff within the department to complete and submit a self-assessment questionnaire. This was to provide HIW with detailed information about the department and the employer’s key policies and procedures, in respect of IR(ME)R 2017. This document was used to inform the inspection approach.

The completed self-assessment was returned to HIW within the agreed timescale. Overall, the document was completed to a high standard. When additional clarity was required regarding some of the responses, senior staff provided the requested information promptly.

On the days of our inspection, senior management staff made themselves available and facilitated the inspection process. They were receptive to our feedback and demonstrated a willingness to make improvements as a result of the issues highlighted.

Duties of the employer

Entitlement

There was an employer’s procedure in place in relation to the process for entitlement under IR(ME)R 2017. There was also an Ionising Radiation Safety Policy document which sets out that the health board Medical Director and Executive Director of Therapies and Health Science are entitled to delegate the task of entitlement for duty holders for specific IR(ME)R 2017 functions. There was an entitlement flow chart available which clearly showed the entitlement process for the service.

The Ionising Radiation Safety Policy also clearly defines the Aneurin Bevan University Health Board as the IR(ME)R employer. This document also details that the Chief Executive has delegated the task of IR(ME)R entitlement through the Medical Director and Executive Director of Therapies and Health Science down to appropriate individuals set out in clearly defined pathways. Including a link in the employer’s procedure to Sections 5 (Duty Holders) and 6 (Arrangements for compliance with IR(ME)R 2017) of the Ionising Radiation

Safety Policy would tie in all IR(ME)R duty holder roles, delegation and entitlement information.

Evidence of an entitlement matrix for staff working within the department was seen. This document provided the required level of detail and specifically set out the tasks that individuals were entitled to undertake.

As previously detailed, duty holder training, competency and entitlement records reviewed were clear and comprehensive. However, it was highlighted that relevant documents need to be updated to ensure that they clearly detail the duty holder training and competence requirements for each duty holder role. The employer should ensure that the documentation in relation to entitlement is updated to specifically set out the training requirements and professional qualifications for specific duty holder entitlement. For example, Fellowship of the Royal College of Radiologists (FRCR) and General Medical Council (GMC) registration would provide suitable evidence to be entitled as an IR(ME)R practitioner**.** The arrangements for notifying duty holders of their entitlement and scope of practice should also be included.

Senior managers confirmed that medical referrers are sent letters confirming their entitlement and scope of practice for referring patients to the department. However, we were informed that it had not been possible to provide non-medical referrers with an entitlement letter. It was therefore not clear how these individuals were aware of their entitlement and scope of practice. The employer should ensure that a system is in place to provide non-medical referrers with details of their entitlement and scope of practice.

Improvement needed

The employer should ensure that the employer's procedure in relation to entitlement is updated to detail training and professional qualification requirements, as well as the process for notifying duty holders of their entitlement and scope of practice.

The employer must ensure that arrangements are in place to provide non-medical referrers with information detailing their entitlement and scope of practice.

Procedures and protocols

In line with the detail included within the Ionising Radiation Safety Policy, senior managers confirmed that the Aneurin Bevan Health Board was designated as the IR(ME)R employer with the Chief Executive (CEO) retaining the responsibility associated with being the employer. The CEO had delegated the associated

tasks, relating to IR(ME)R, to the Medical Director and Executive Director of Therapies and Healthcare Science. This arrangement is acceptable and was clearly detailed in the documentation reviewed as part of our inspection.

As previously detailed, staff we spoke with as part of our inspection confirmed that they were able to access relevant policies and procedures when required. Also, senior managers confirmed that arrangements were in place to notify relevant staff on the occasions where updates were made to written procedures or protocols, as well as to confirm that staff have read and understood these documents.

There was an employer's procedure in place in relation to the QA of written procedures and protocols. This document set out the QA programs for all policies, procedures, protocols and equipment pertinent to IR(ME)R 2017. The document detailed the review frequency and review responsibilities for each type of documents in use within the service.

Additionally, the procedure set out the document control information which must be included on every document, which included; owner, date approved, review date and version number. As previously highlighted, at the time of our inspection this procedure was overdue review. Additionally, it was unclear from reviewing the documents who was responsible for updating the relevant documentation when required. This issue was discussed with senior managers and we were informed that this matter was being addressed and that there were plans to assign this responsibility to groups in the future. The employer should ensure that these arrangements are clearly detailed within the employer's procedure.

Overall, the written policies, procedures and protocols provided as evidence were clear and contained the required detail. However, as highlighted throughout our report, a few issues were identified including documentation available not accurately reflecting clinical practice and the agreed arrangements in place within the department.

Improvement needed

The employer should ensure that the employer's procedure relating to the QA of written procedures and protocols is updated to detail the staff responsible for updating relevant documentation as and when required.

Significant accidental or unintended exposures

There was an employer's procedure in place setting out the required actions for reporting and investigating potential and actual accidental or unintended

exposures. The procedure detailed the process to be followed by relevant staff to ensure that the incident is appropriately investigated, documented, and if required, reported to HIW in a timely manner.

Staff we spoke with described the arrangements in place in regards to accidental and unintended exposures, which reflected the documentation reviewed.

We were informed that all incidents and near misses were record via Datix, the electronic incident reporting system, following which an action plan is developed. Any changes which are recommended, as a result of any incidents or near misses, are routinely shared with radiology department staff across all sites, via learning outcome notices. Senior managers confirmed that monthly meetings with department leads have been introduced to monitor ongoing Datix incidents. These meetings are to ensure that incidents are routinely reviewed and relevant actions are being completed.

Additionally, a summary analysis of trends and areas of concern is completed, which is routinely shared at relevant health board radiology governance meetings. A previous analysis document developed was provided as evidence, which included clear and relevant data.

In the past 12 months there have been seven accidental or unintended exposures that have been appropriately reported to HIW. Information submitted to HIW from the health board has included clear and in-depth investigation reports outlining the actions taken as a result of the incident, as well as action taken to mitigate further incidents of a similar nature. However, as previously detailed, concerns were highlighted following information reviewed and discussions with staff in regards to the ED referral process, following incidents and near misses which have occurred.

Staff and resources

Workforce

As part of our inspection, discussions were held with senior managers for the service, as well as a selection of staff working within the department. Additionally, a staff survey was made available to provide all staff working within the department with the opportunity to provide their views.

Overall, positive responses were received from staff regarding their immediate line manager in relation to providing support, feedback and engagement prior to making decisions which affect their work.

However, responses received from our survey highlighted that that three members of staff said that they had faced discrimination at work within the last 12 months. Additionally, four members of staff disagreed that there was fair and equal access for workplace opportunities. This matter was discussed with senior managers as part of our inspection and assurances were provided that policies and processes were in place to allow staff to report any grievances. We were informed that no issues had been reported to senior management. Additionally, senior managers confirmed processes were in place to ensure that all staff have fair and equal opportunities to workplace opportunities.

However, given the issues highlighted in the staff responses, the health board should review the processes in place to allow staff to report any issues of concerns internally in order to ensure it is an inclusive process that encourages staff to voice their concerns without fear of recrimination, as well as to ensure that any concerns raised are appropriately investigated and responded to. The health board must also ensure that staff are reminded of the relevant process in place.

Senior managers confirmed that it had taken time to determine the appropriate staffing levels within the department since the opening of the hospital, but now felt that levels were appropriate and safe. However, it was acknowledged that staffing levels had been very challenging throughout the COVID-19 pandemic. We were informed that staff from other sites were able to provide cover when required.

Feedback from staff indicated that seven out of 14 felt that there were ‘always’ or ‘usually’ enough staff working within the department to allow them to do their job properly, six said ‘sometimes’ there was one member of staff said that there were ‘never’ enough staff. Additionally, 12 out of 13 staff members who responded to the question on our survey confirmed that they were ‘always’ or usually’ able to meet the conflicting demands on their time in work.

Senior managers confirmed that arrangements were in place to ensure that all staff received their annual personal appraisal development reviews (PADRs). Additionally, we were informed that a system was in place to regularly monitor compliance levels. At the time of our inspection the PADR compliance level was 82 percent. We were informed that there were reasons why some staff members had not received their appraisal within the last year, including maternity leave. However, the health board must ensure that, where possible, appraisals are completed for all outstanding staff members. Additionally, 47 percent of staff who responded to our survey said that their training, learning, or development needs were not identified as part of their appraisal. The health board must ensure

appraisals undertaken routinely cover the individual's training, learning and development requirements.

There was a system in place to routinely monitor compliance with mandatory training. Evidence was provided which demonstrated that overall mandatory training compliance within the department was good. However, not all staff were up to date with their mandatory training, which included IPC and safeguarding as previously detailed.

Every member of staff who responded to our survey confirmed that they felt that their immediate line manager takes a positive interest in their health and well-being. Additionally, senior managers confirmed that arrangements were in place to allow staff to access additional occupational health wellbeing support, if required. However, not all staff who responded to our survey were aware of the additional wellbeing support available to them.

Improvement needed

The health board must confirm that processes are in place to allow any member of staff to report any issues of concern internally, as well as to ensure that any concerns raised are appropriately investigated and responded to.

The health board must confirm that processes are in place to ensure that staff are treated fairly and equally in regards to workplace opportunities, and that any instances of discrimination will not be tolerated and appropriate action taken.

The health board must ensure that all staff working within the department receive regular appraisal discussions with their line manager, which cover their training and development requirements.

The health board must ensure that all department staff are up to date with mandatory training requirements.

The health board must ensure that all staff are provided with information on the additional wellbeing support available to them and how to access it.

4. What next?

Where we have identified improvements and immediate concerns during our inspection which require the service to take action, these are detailed in the following ways within the appendices of this report (where these apply):

- Appendix A: Includes a summary of any concerns regarding patient safety which were escalated and resolved during the inspection
- Appendix B: Includes any immediate concerns regarding patient safety where we require the service to complete an immediate improvement plan telling us about the urgent actions they are taking
- Appendix C: Includes any other improvements identified during the inspection where we require the service to complete an improvement plan telling us about the actions they are taking to address these areas.

Where we identify any serious regulatory breaches and concerns about the safety and wellbeing of patients using the service, the registered provider of the service will be notified via a non-compliance notice. The issuing of a non compliance notice is a serious matter and is the first step in a process which may lead to civil or criminal proceedings.

The improvement plans should:

- Clearly state when and how the findings identified will be addressed, including timescales
- Ensure actions taken in response to the issues identified are specific, measurable, achievable, realistic and timed
- Include enough detail to provide HIW and the public with assurance that the findings identified will be sufficiently addressed.

As a result of the findings from this inspection the service should:

- Ensure that findings are not systemic across other areas within the wider organisation
- Provide HIW with updates where actions remain outstanding and/or in progress, to confirm when these have been addressed.

The improvement plan, once agreed, will be published on HIW's website.

5. How we inspect services that use ionising radiation

HIW are responsible for monitoring compliance against the Ionising Radiation (Medical Exposure) Regulations 2017 and its subsequent amendment (2018).

The regulations are designed to ensure that:

- Patients are protected from unintended, excessive or incorrect exposure to medical radiation and that, in each case, the risk from exposure is assessed against the clinical benefit
- Patients receive no more exposure than necessary to achieve the desired benefit within the limits of current technology
- Volunteers in medical research programmes are protected

We look at how services:

- Comply with the Ionising Radiation (Medical Exposure) Regulations
- Meet the Health and Care Standards 2015
- Meet any other relevant professional standards and guidance where applicable

Our inspections of healthcare services using ionising radiation are usually announced. Services receive up to twelve weeks notice of an inspection.

The inspections are conducted by at least one HIW inspector and are supported by a Senior Clinical Officer from Public Health England (PHE), acting in an advisory capacity.

Feedback is made available to service representatives at the end of the inspection, in a way which supports learning, development and improvement at both operational and strategic levels.

These inspections capture a snapshot of the standards of care relating to ionising radiation.

Further detail about how HIW inspects the NHS can be found on our website.

Appendix A – Summary of concerns resolved during the inspection

The table below summaries the concerns identified and escalated during our inspection. Due to the impact/potential impact on patient care and treatment these concerns needed to be addressed straight away, during the inspection.

Immediate concerns identified	Impact/potential impact on patient care and treatment	How HIW escalated the concern	How the concern was resolved
No immediate concerns were identified during this inspection.			

Appendix B – Immediate improvement plan

Hospital: The Grange University Hospital

Ward/department: Diagnostic Imaging Department

Date of inspection: 16 and 17 November 2021

The table below includes any immediate concerns about patient safety identified during the inspection where we require the service to complete an immediate improvement plan telling us about the urgent actions they are taking.

Immediate improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
No immediate assurance issues were identified during this inspection.				

The following section must be completed by a representative of the service who has overall responsibility and accountability for ensuring the improvement plan is actioned.

Service representative:

Name (print):

Job role:

Date:

Appendix C – Improvement plan

Hospital: The Grange University Hospital

Ward/department: Diagnostic Imaging Department

Date of inspection: 16 and 17 November 2021

The table below includes any other improvements identified during the inspection where we require the service to complete an improvement plan telling us about the actions they are taking to address these areas.

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
Quality of the patient experience				
The health board should consider providing additional general health care advice and support information within the department.	1.1 Health promotion, protection and improvement	Posters promoting smoking cessation, mental health support and alcohol abuse information are now displayed in the waiting areas within radiology. This has been adopted at all sites across the radiology directorate.	Andrea Boycott Radiology Acute Services Manager	Completed
The employer should ensure that the employer's procedure in relation to providing information on benefits and risks to patients is updated to detail the occasions where it may not be practical for staff to have these discussions with patients.	Regulation 6 Schedule 2 (i)	Procedure document 2(i) will be updated to include information on the occasions where it may not be practical to have these discussions with patients. The amended procedure document will be	Mark Wilkes Radiology Services Manager	30th April 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		discussed at the next Radiology Operational Group meeting before being ratified by the Radiology Clinical Governance Committee.		
The health board should ensure that arrangements are in place to provide staff and patients with regular updates on the patient experience feedback received by the service, as well as any subsequent actions taken.	6.3 Listening and Learning from feedback	We are currently conducting site specific, quarterly, patient feedback audits via paper questionnaires. A Patient Experience Display Board will be placed in the patient waiting areas to cascade regular updates on patient experience feedback with comments and any associated actions.	Andrea Boycott Radiology Acute Services Manager	Completed April 30th 2022
Delivery of safe and effective care				
The employer must ensure that all staff are routinely completing pregnancy enquires, where required, and that patient records are consistently updated to demonstrate that an enquiry has been completed.	Regulation 6 Schedule 2(c)	Request card audits are performed every quarter and submitted to the Radiation Protection Group. The audits monitor compliance with pregnancy checks and if they have been fully documented, amongst other criteria. These audits are intended to be ongoing, with frequency only reducing to every 6 months when we	Andrea Boycott Radiology Acute Services Manager	31st March 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		consistently achieve maximal compliance for 3 consecutive cycles. Specific education and training will be formulated and cascaded to staff to ensure there is understanding of the importance of pregnancy enquiries and why this should be consistently recorded. This will be delivered via PowerPoint presentation, emails and reiterated at staff meetings.		
The employer must provide HIW with assurance that the Emergency Department referral system will be reviewed to ensure that necessary actions and mitigations have been implemented to prevent further accidental and unintended exposures.	Regulation 8(4)(a)(iv)	Continue to reinforce the current call system whereby ED referrers contact CT to confirm the patient details of the referral they have placed, until below actions are implemented. Plans are in place to initiate a pilot by which ED referrers will place a wristband on a patient after the decision to make a radiology referral has been made – the referrer will write on the wristband what scan or x-ray is being requested. When the patient arrives in radiology, the	Alastair Richards (Emergency Department Consultant, ED Clinical Director) Rob Stafford (Emergency Department Consultant)	Ongoing Start date: March 2022 Review date: 30th April 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		information on the wristband will be correlated with the radiology referral and the scan will not proceed if there are any discrepancies. If the patient is not wearing a wristband they will be returned to ED without a scan. This pilot will be reviewed after 3 months to assess its impact and success. The possibility of adding a pop-up window on Symphony to confirm the scan and patient details (before the radiology request is sent) is being explored with the symphony system administrators.	Cari Randall (Unscheduled Care Service Lead)	30th April 2022
The employer must ensure that all theatre referrals detail the referrer and practitioner for the requested exposure.	Regulation 6(2)	Request card audits are performed every quarter and submitted to the Radiation Protection Group. The audits monitor if the referrer, practitioner and operator are clearly identified on the form, amongst other criteria. These audits are intended to be ongoing, with frequency only reducing to every 6 months when we	Andrea Boycott Radiology Acute Services Manager	31st March 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		consistently achieve maximal compliance for 3 consecutive cycles. Specific education and training will be formulated and cascaded to staff to ensure there is understanding of the importance of clear identification of the duty holders for theatre referrals and why this should be consistently recorded. This will be delivered via PowerPoint presentation, email and reiterated at staff meetings.		
The employer must ensure that the Ionising Radiation Safety Policy is updated to include specific training requirements and professional qualifications for specific duty holder roles.	Regulation 6 Schedule 2(b)	The Ionising Radiation Safety Policy will be updated to include specific training requirements and professional qualifications for specific duty holder roles.	Andrew Carter Radiology Professionals Lead	31st March 2022
The employer should ensure that the relevant employer's procedure is updated to reflect the detail of the agreed arrangements for clinical evaluation completed by those entitled operators who clinically evaluate outside of the radiology department.	Regulation 6 Schedule 2 (j)	The employer procedure 2(j) will be updated to include more detail on duty holders who are entitled to clinically evaluate outside of radiology, such as cardiologists, orthopaedic surgeons, third party providers etc. This will include	Mark Wilkes Radiology Services Manager	30th April 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		the scope of their duty holder roles, tasks, expected level of training/experience, as well how they are informed of their responsibilities and entitlement.		
The employer should ensure that a review date is added to the equipment inventory to ensure that the content is routinely kept up to date.	Regulation15 (1)(b)	Issue date, next review date and authors of the document have been added to the Equipment Inventory to reflect the requirements of Procedure document 2(d)	Andrea Boycott Radiology Acute Service Manager	Completed
The employer should consider updating the health board QA policy to reflect the relevant equipment available within the department.	Regulation 15(1)(a) Regulation 6 Schedule 2 (d)	The QA policy will be updated to reflect the relevant equipment available within the department.	Mark Wilkes Radiology Services Manager	28th February 2022
The employer must ensure that the employer's procedure relating to quality assurance of documentation and equipment is reviewed and updated.	Regulation 6 Schedule 2(d)	The date of review on the employer's procedure relating to quality assurance of documentation and equipment will be updated to reflect its most recent review date.	Andrea Boycott Radiology Acute Services Manager	Completed

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
The employer must ensure clarity is provided to relevant senior staff in regards to the governance and IR(ME)R/IRR requirements for the Orthopaedic Department's mini C-Arm fluoroscopy equipment.	Regulation 17(1) Regulation 15 Regulation 16(4) Regulation 12	An initial meeting has taken place between Radiology and Orthopaedic Senior Management Teams so that Radiology can offer support to manage IR(ME)R/IRR compliance. Work is underway to agree the management and governance structure.	Andrew Carter Radiology Professionals Lead Arvind Kumar AGM Scheduled Care	28th February 2022
The health board must ensure all staff are provided with information outlining the required steps to report any concerns in relation to unsafe clinical practice within the department.	6.3 Listening and Learning from Feedback 7.1 Workforce	We will ensure staff are made aware of the All Wales Procedure for NHS Staff to Raise Concerns via electronic means and visual posters. Appendix 5 within this procedure, which is a flowchart demonstrating the 'Raising Concerns Process' will be circulated to staff and be displayed in departments to remind staff of the process.	Andrea Boycott Radiology Acute Services Manager	28th February 2022
The health board must provide assurance that mechanisms are in place to allow staff to securely raise concerns about unsafe clinical practice and to ensure that concerns raised are routinely investigated and addressed.	6.3 Listening and Learning from Feedback 7.1 Workforce	As a Radiology Senior Management Team we will continue to adhere to the All Wales Procedure for NHS Staff to Raise Concerns.	Andrew Carter Radiology Professionals Lead	February 28th 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		The process for raising concerns about unsafe clinical practice will be reiterated to staff. Reassurance will be offered to staff that managers are available to approach to raise concerns and that concerns will be treated with the strictest confidence and investigated thoroughly. Appendix 5, 'Flowchart of Raising Concerns Process' taken from the All Wales Procedure for NHS Staff to Raise Concerns, will be circulated to staff and be displayed in departments to remind staff of the process.	Arvind Kumar AGM Scheduled Care	
The employer should ensure that relevant documentation is updated to clarify the individuals responsible for completing audits within the departmental audit schedule.	Regulation 6(2) Regulation 7	Procedure document 2(d) (Procedure to ensure Quality Assurance Programs are followed) will be updated include the department audit schedule for IR(ME)R compliance and clinical audit, and the individuals responsible for completing the audits.	Rebecca Wallace Research Lead for Radiology	April 30th 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
The employer should ensure that relevant staff have sufficient capacity to undertake their clinical and IR(ME)R audit responsibilities.	Regulation 6(2) Regulation 7	As the pressures of the pandemic and associated staffing challenges ease, we are confident that it will be possible to dedicate more time to undertake clinical and IR(ME)R audits. A quarterly audit meeting is in place which is led by the Consultant Radiologists and is accountable to the Radiology Clinical Governance Committee. Therefore, any shortfalls in terms of sufficient capacity to undertake audits, will be quickly highlighted and will be addressed in a timely manner.	Andrew Carter Radiology Professionals Lead	June 30th 2022
The employer should ensure that the written procedure in relation to research exposures is updated to detail that these exposures are not undertaken within the department at The Grange.	Regulation 6 Schedule 2(g)	Employer Procedure 2(g) has been updated to detail the sites that research exposures are undertaken and to specify that these exposures are not undertaken within the department at The Grange currently.	Andrea Boycott Radiology Acute Services Manager	Completed
The employer should ensure that the written procedure in relation to research exposures is updated to include details of how the correct	Regulation 6 Schedule 2(g)	Employer Procedure 2(g) will be updated to include details of how the correct examination protocol for each research programme is identified, where it is	Rebecca Wallace Research Lead	31st March 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
examination protocol for each research programme is identified, where it is recorded and how to access this information.		recorded and how to access this information.		
Quality of management and leadership				
The employer should ensure that the employer's procedure in relation to entitlement is updated to detail training and professional qualification requirements, as well as the process for notifying duty holders of their entitlement and scope of practice.	Regulation 6 Schedule 2(b)	The employers procedural document relating to entitlement 2(b) will be updated to include the duty holder training requirements and competence requirements for each of the duty holder roles. In addition, for specific duty holder entitlement the professional qualifications will be updated in the document. Whilst the medical referrers are already informed of their entitlement via a letter, the non-medical referrers will now also receive a communication informing them of their entitlement scope of practice	Andrew Carter Radiology Professional lead	31st March 2022
The employer must ensure that arrangements are in place to provide non-medical referrers with	Regulation 6 Schedule 2(b)	The employer's procedural document relating to entitlement 2(b) will be updated to include the arrangements that	Mark Wilkes	30th April 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
information detailing their entitlement and scope of practice.		are in place. The medical referrers are already informed of their entitlement via a letter, the non-medical referrers will now also receive a communication informing them of their entitlement and scope of practice and to prompt the non-medical referrer group to review and update their protocol.	Radiology Services Manager	
The employer should ensure that the employer's procedure relating to the QA of written procedures and protocols is updated to detail the staff responsible for updating relevant documentation as and when required.	Regulation 6 Schedule 2 (d)	The employer's procedure currently details which group is responsible for updating relevant documentation. The procedure will be updated to detail the chair of each group so that it is clearer who is responsible for updating relevant documentation as and when required.	Mark Wilkes Radiology Services Manager	31st March 2022
The health board must confirm that processes are in place to allow any member of staff to report any issues of concern internally, as well as to ensure that any concerns raised are appropriately investigated and responded to	Standard 7.1 Workforce Standard 6.2 Peoples Rights	The Radiology directorate will review our current processes in place, which allow staff to raise concerns internally in a safe environment where their issues are investigated and responded to in an appropriate and timely manner, to ensure that they are fit for purpose. We will then email all staff with the procedure for the	Andrew Carter Radiology Services Manager	31st March 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		raising of concerns, stressing the inclusive and supportive nature of the process	Arvind Kumar AGM Scheduled Care	
The health board must confirm that processes are in place to ensure that staff are treated fairly and equally in regards to workplace opportunities, and that any instances of discrimination will not be tolerated and appropriate action taken.	Standard 7.1 Workforce Standard 6.2 Peoples Rights	Internal workplace opportunities are always advertised across all sites and expressions of interest are welcomed from all interested parties. Posters about the opportunities are displayed within departments across the directorate and messages alerting the team to the opportunity are shared within team WhatsApp groups to ensure all staff are aware. When interviews are conducted, at least one of the members of the interview panel is selected from another site (wherever possible from a site where none of the applicants are based) to evidence radiology's commitment to the conduction of fair and impartial selection processes. Posters are in place reminding staff that any instances of discrimination will not be	Andrea Boycott Radiology Acute Services Manager Arvind Kumar AGM Scheduled Care	March 31st 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		tolerated and appropriate action taken. Staff are supported to report any instances of discrimination and this will be reiterated at staff meetings and electronically.		
The health board must ensure that all staff working within the department receive regular appraisal discussions with their line manager, which cover their training and development requirements.	7.1 Workforce	PADR compliance is monitored by the Radiology Operational Group on a monthly basis. A group of band 6 radiographers have been trained to manage and deliver effective PADRs to junior staff, therefore cascading the appraisal process, ensuring appraisals are undertaken in a timely manner. Dedicated time is set aside for appraisals to ensure these are completed. A spreadsheet exists which is accessible to all staff at GUH so that they can see who their appraiser is and when their next appraisal is due. The line manager regularly reviews this to ensure PADRs are managed effectively within each team.	Andrea Boycott Radiology Acute Services Manager	March 31st 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
The health board must ensure that all department staff are up to date with mandatory training requirements.	7.1 Workforce	Radiology aims to increase the number of cascade trainers for mandatory training to reduce our reliance on centralised training. 'How to guides' for ESR system mandatory compliance anomalies have been created and will be shared across radiology.	Andrea Boycott Radiology Acute Services Manager	March 31st 2022
The health board must ensure that all staff are provided with information on the additional wellbeing support available to them and how to access it.	1.1 Health Promotion, Protection and Improvement 7.1 Workforce	Posters are on display within the department which highlights the support available to staff in terms of wellbeing. Minuted meetings have taken place which have discussed the resources available for staff wellbeing. Staff are reminded of this support and in particular the ABUHB Wellbeing Website which hosts a wealth of resources during their PADRs and at any 'return to work following sickness' interviews or long-term sickness meetings. Wellbeing Support will be discussed at the next sub department staff meetings, the minutes of which are shared with the	Andrea Boycott Radiology Acute Services Manager	March 31st 2022

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		team via email to ensure all staff are aware.		

The following section must be completed by a representative of the service who has overall responsibility and accountability for ensuring the improvement plan is actioned.

Service representative

Name (print): Andrea Boycott

Job role: Radiology Acute Services Manager

Date: 02.02.2022