Arolygiaeth Gofal Iechyd Cymru
Healthcare Inspectorate Wales

Ionising Radiation (Medical Exposure) Regulations Inspection Report (Announced)

Diagnostic Imaging Department, Nevill Hall 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 healthcare services are provided in a way which maximises the health and wellbeing of people

Our values

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

- Independent – we are impartial, deciding what work we do and where we do it
- Objective - we are reasoned, fair and evidence driven
- Decisive - we make clear judgements and take action to improve poor standards and highlight the good practice we find
- Inclusive - we value and encourage equality and diversity through our work
- Proportionate - we are agile and we carry out our work where it matters most

Our goal

To be a trusted voice which influences and drives improvement in healthcare

Our priorities

- We will focus on the quality of healthcare provided to people and communities as they access, use and move between services.
- We will adapt our approach to ensure we are responsive to emerging risks to patient safety
- We will work collaboratively to drive system and service improvement within healthcare
- We will support and develop our workforce to enable them, and the organisation, to deliver our priorities.

Contents

1. What we did

Full details on how we conduct Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) inspections can be found on our website.

Healthcare Inspectorate Wales (HIW) completed an announced Ionising Radiation (Medical Exposure) Regulations inspection of the Diagnostic Imaging Department at Nevill Hall Hospital, 25 and 26 April 2023.

Our team for the inspection comprised of two HIW Senior Healthcare Inspectors, a HIW Intelligence Manager and a Senior Clinical Diagnostic Officer from the Medical Exposures Group (MEG) of the UK Health Security Agency (UKHSA), who acted in an advisory capacity. The inspection was led by a HIW Senior Healthcare Inspector.

Note the inspection findings relate to the point in time that the inspection was undertaken.

This (full) report is designed for the setting and describes all findings relating to the provision of high quality, safe and reliable care that is centred on individual patients.

A summary version of the report, which is designed for members of the public can be found on our website.

2. Summary of inspection

Quality of Patient Experience

Overall summary:
Patients provided positive feedback about their experiences of attending the Diagnostic Imaging Department at the hospital.

Suitable arrangements were in place to promote the privacy and dignity of patients and we saw staff treating patients with respect and kindness.

Information was available to patients on how to provide feedback and how to raise a concern about their care. The results of a recent survey of patients were displayed on a “you said, we did” board.

This is what the service did well:

- Patients provided positive feedback about the service they had received and the approach of the staff
- The results of a recent patient survey were posted on a “you said, we did” board
- Efforts were made to promote the Welsh language.

Delivery of Safe and Effective Care

Overall summary:
We found arrangements were in place to promote effective infection prevention and control and decontamination within the department.

Staff we spoke to were aware of the health board’s policies and procedures in relation to safeguarding. Staff could describe the actions they would take should they have a safeguarding concern.

There were also positives identified relating to the training and development opportunities available to staff and the work of the oversight groups.

We identified improvement was needed to comply with the Ionising Radiation (Medical Exposure) Regulations 2017 in some areas. This included referral forms for exposures performed during surgical theatre cases were not being completed by the referrer but were completed by the radiographer contrary to regulations. When this was identified by the inspection, the employer issued a letter to instruct all staff to stop this process with immediate effect.

Additionally, some other areas required improvement, relating to pregnancy testing and employer's procedures.

This is what we recommend the service can improve:

- Ensure staff have the appropriate procedure and training to perform pregnancy tests
- Carry out the required changes identified during the inspection process to the employer's procedure.

This is what the service did well:

- Staff we spoke with had a clear understanding of their IR(ME)R roles and responsibilities
- Training and development opportunities for staff to become advanced practitioners
- The Diagnostic Reference Level (DRL) groups work on the establishment of local DRLs.

Quality of Management and Leadership

Overall summary:
The Chief Executive of the health board was the designated employer under IR(ME)R and clear lines of reporting and responsibility were described and demonstrated.

Staff demonstrated they had the correct knowledge and skills to undertake their respective roles within the department.

The department's compliance with the health board's face to face mandatory training and appraisals was generally good.

Whilst feedback from staff was generally positive, there were some negative responses and comments from staff that needed to be addressed. These were mainly in relation to staffing numbers, staff support and senior management.

This is what we recommend the service can improve:

- Whilst staff understood the meaning of duty of candour, they had not received the appropriate training
- The health board needs to take action to address the less favourable comments highlighted within the 'Quality of Management and Leadership' section of this report.

This is what the service did well:

- The management team demonstrated a commitment to learn from the inspection findings and make improvements where identified
- Staff were confident about raising concerns and staff spoke well when interviewed both in a one-to-one setting and in the department
- The majority of staff had completed over 90% of their mandatory training and appraisals were over 98% completed.

Details of the concerns for patient's safety and the immediate improvements and remedial action required are provided in Appendix B.

3. What we found

Quality of Patient Experience

During the inspection HIW issued paper and online questionnaires to obtain views and feedback from patients and carers. As only nine responses were completed, this low number needs to be borne in mind when considering these responses. Responses were positive across all areas, with all patients who answered rating the service as 'very good' or 'good'. Patient comments included the following:

> *"Very helpful and friendly staff at reception and in X-ray department. Well done."*

> *"The service was very good. I was amazed that I had an appointment at 7.30 on a Sunday evening. Well done for going all out for providing such a great service."*

Health promotion, protection and improvement

Posters were clearly displayed, advising patients to inform staff if they were pregnant or breastfeeding. There was also a variety of posters on display advising patients on the benefits and risks of the exposure.

Written information was also available on the benefits of stopping smoking, as well as providing details of support organisations for patients with cancer and their carers.

Dignity and respect

Staff were seen being kind and caring to patients and treating them with respect. Discreet and appropriate conversations were heard at the reception desk when patients booked in, and in the waiting room. We also noted staff assisting patients with mobility difficulties.

Individual changing rooms were available providing privacy when patients were required to change out of their clothes for their procedure. We noted one changing room that had been installed within an X-ray room, where there were no nearby changing facilities. We also saw doors to rooms where X-rays were performed were closed when being used. The X-ray rooms with spacious and clean.

When asked whether staff treated them with dignity and respect and whether measures were taken to protect their privacy, all patients in the questionnaire agreed. All patients also stated they were able to speak to staff about their

procedure without being overheard by other patients and that staff listened to them.

During the inspection we used online questionnaires to obtain views and feedback from staff. A total of 32 were completed.

When asked whether patients' privacy and dignity were maintained, 81% who answered agreed. A total of 78% of staff who answered agreed they were satisfied with the quality of care they gave to patients.

Patient information and consent
Bilingual signage in both Welsh and English was displayed and bilingual posters providing information for patients were clearly displayed within the department. Staff informed us there were a handful of Welsh speaking staff working in the department and we were told that those staff wore lanyards to show they were happy to communicate in Welsh. It was also noted that there was over 90% staff compliance with the mandatory training on Welsh Language awareness, an NHS Wales course.

There was a hearing loop available at reception and staff confirmed they could access a translation service should this be required to assist communication with patients whose first language was not English.

All patients said that they were given enough information to understand the benefits and risks of the examination.

When asked whether staff had explained what they were doing, all patients who answered this question agreed.

Communicating effectively
We saw evidence of an alert on the system to identify patients with specific needs. We were also told that there was flexibility with appointments and that patients could "walk in" with a GP referral without an appointment.

All patients stated that they were able to find the department easily at the hospital.

Care planning and provision
There was evidence that patients received timely care in receiving their examination. We saw that patients were seen in a timely manner whilst in the department. Posters were also displayed informing patients to tell reception staff if they had waited longer in reception than expected.

We were told that if there was a delay, patients would be informed accordingly.

We were also provided with an example where a dementia patient that was unable to confirm their identity. Staff contacted the patient's consultant to seek positive identification before the scan was carried out.

Staff and senior staff we spoke with were able to give examples of where arrangements and systems were in place to promote an efficient service.

All patients who answered this question agreed that they were told at reception how long they would likely have to wait. Most patients agreed that the waiting time between referral and appointment was reasonable.

Only 41% of staff who answered the questionnaire agreed patients were informed and involved in decisions about their care.

Equality, diversity and human rights
The arrangements in place to make the service accessible to patients were described by staff. These included a hearing loop and bilingual information. Corridors were wide and equipment allowed for mobility and access needs.

Staff we spoke with demonstrated a good awareness of their responsibilities in protecting and promoting patients' rights when attending the department. Equality, Diversity and Human Rights awareness formed part of the health board's mandatory staff training programme. Staff we spoke with also provided examples of reasonable adjustments having been made so that patients could access the department to have their examination.

Over 75% of staff who completed the questionnaire felt they had fair and equal access to workplace opportunities.

Citizen engagement and feedback
Information was displayed around the department on how patients and families were able to provide feedback about their care. There was also information displayed on how the organisation had learned and improved based on feedback received, called a 'you said, we did' board. This information was based on the last feedback survey dated January 2023.

Senior staff described suitable arrangements for managing concerns and complaints made by patients about their care. Posters advising patients of how to make a complaint or provide feedback were prominently displayed in the department.

Staff we spoke with confirmed patient feedback had been shared with them together with any learning identified. Additionally, staff confirmed that details and information relating to complaints was shared with staff to ensure there was learning across the department.

All patients said they were involved as much as they wanted to be in decisions about their examination.

A total of 78% of staff said that patients were informed and involved in decisions about their care.

When asked whether they could access the right healthcare at the right time (regardless of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation) 89% of patients said they had.

More than half of the patients said they would not know how to complain about poor service.

Whilst 94% of staff who answered the question in the questionnaire agreed patient experience feedback was collected within their department, only 59% agreed that they received updates on patient experience feedback in their department. Furthermore, whilst 15% of staff agreed that feedback from patients was used to make informed decisions within their department, 66% did not know. Whilst 85% of staff agreed their organisation acted on concerns raised by patients, only 34% agreed the organisation took swift action to improve when necessary.

Delivery of Safe and Effective Care

HIW required senior staff within the department to complete and submit a self-assessment questionnaire prior to our inspection. This provided HIW with detailed information about the department and the employer's key policies and procedures in respect of the Ionising Radiation (Medical Exposure) Regulations 2017. This document and the supporting evidence submitted were used to inform the inspection approach.

The self-assessment questionnaire was returned to HIW within the agreed timescale and was comprehensively completed. Where we required additional information or clarification in respect of the responses within the self-assessment, senior staff provided this promptly.

Compliance with Ionising Radiation (Medical Exposure) Regulations

Duties of employer

Patient identification

The employer had a suitable employer's written procedure in place to correctly identify the individual to be exposed to ionising radiation. This also set out the procedure to follow when patients were unable to confirm their identity verbally or in writing such as patients who are unconscious.

Staff we spoke with also had a clear understanding of the correct patient identification process.

Individuals of childbearing potential (pregnancy enquiries)

There was an employer's written procedure on pregnancy enquiries, that referred to signs being visible in radiology waiting areas relating to female patients. The use of the term female is not considered gender inclusive and needs to be updated in the procedure.

There was no information included in the procedure on ensuring gender inclusivity for these enquiries. The Society of Radiographers had published guidance to assist practitioners in understanding the needs of individuals with gender diversity and those with diversity in their sexual characteristics. However, we were told in discussion with senior staff, that work had started on this. Staff stated that they were waiting on guidance from the All-Wales Image Quality Forum, who had discussed this issue and were currently trialling this in another health board.

Senior staff also informed us that radiographers may from time to time be involved in carrying out a pregnancy test prior to the exposure. A procedure needs to be

established to outline this process for radiographers to follow when carrying out pregnancy tests. In addition, the procedure must define what is classed as a high dose examination and when the 10 day and 28 day rule apply.

The employer needs to establish a procedure to ensure radiographers are fully trained and competent before carrying out pregnancy tests of patients.

Staff we spoke with described the action they would take to make enquires of individuals, which was consistent with the employer's written procedure.

We audited a random sample of ten referral forms. These showed operators had completed pregnancy enquires, in accordance with the employer's written procedure, where appropriate.

Non-medical imaging exposures
Senior staff confirmed that non-medical imaging exposures were performed in the department. There was also an employer's written procedure in place for these types of exposures.

The Delegated Authorisation Guidelines (DAGs) in place did not clearly reference whether it covered both paediatric and adult patients.

The employer is to ensure that the DAGs clearly reference that they cover both paediatric and adult patients.

Referral guidelines
The employer had established referral guidelines for the range of exposures to be performed within the department. The documentation supplied confirmed that individuals used i-Refer, making the best use of clinical radiology 8th edition as the standard for radiology referrals.

We were told during the discussion with senior staff that referral forms for exposures performed during surgical theatre cases were not being completed by the referrer but were completed by the radiographer. We identified this as poor practice and not in keeping with the requirements of the duty holder role and responsibility of the referrer. During the inspection we required senior staff to take more timely action to stop this custom. Before the end of our inspection, we received written assurance from the employer that action had been taken in this regard.

The employer is required to provide an update on the action taken to ensure the employer's written procedure, is corrected and is adhered to by entitled

referrers making a referral prior to exposures performed during surgical theatre cases.

Duties of practitioner, operator and referrer
Departmental staff we spoke with had a good understanding of their roles and responsibilities under IR(ME)R.

The SAF completed stated that medical referrers were sent letters entitling them to refer patients to the radiology department. All medical referrers can refer for all examinations. Non-medical referrers receive individual entitlement letters to act as referrers within their agreed referral protocol detailing their scope of referral from the radiology clinical director.

The sample of ten referral forms examined showed that referrals had been made in accordance with referral guidelines, included sufficient clinical details and had been appropriately completed.

Justification of individual exposures
There was a procedure in place that covered the justification and authorisation of medical exposures involving exposure to ionising radiation. The purpose of this procedure was to ensure that all examinations involving ionising radiation are justified before the exposure was made. Radiologists and Radiographers were entitled as IR(ME)R practitioners for the purposes of justifying imaging examinations involving ionising radiation. Radiographers were entitled as IR(ME)R operators for the purposes of authorising imaging examinations.

The referral forms we examined showed the above procedure had been followed.

Optimisation
An image optimisation team (IOT) had been established in the department, the team ensured standardisation of imaging protocols across the Directorate. However, we were told the group had not met recently. It was recommended that this important group needs to be re-established.

Senior staff confirmed current BIR guidance around the use of patient contact shielding had been implemented in the department.

Staff we spoke with were able to describe how to ensure the doses were as low as reasonably practicable (ALARP). This included making sure the equipment was quality checked, selecting the correct protocols and the proper positioning of the patient.

Diagnostic reference levels (DRLs)

The employer had a written procedure describing the process for the setting, auditing and reviewing of DRLs established for imaging examinations performed in the department.

We evidenced local DRLs had been established and these were below national DRLs. Both local and national DRLs were clearly displayed in work areas within the department for staff reference. Radiation Protection Service Cardiff (RPSC) carry out dose audits and provided recommended local DRLs that are evaluated by the DRL group. The recommendations of this group are presented to the Radiation Protection Committee (RPC) for ratification.

Staff we spoke with confirmed they were aware of the employer's written procedure. They described the action they would take should they identify a DRL has been consistently exceeded and this was in accordance with the employer's procedure.

Paediatrics
Senior staff confirmed that medical exposures were not performed on a regular basis on children at the department. The vast majority of paediatric work is carried out in The Grange Hospital.

We were told that the CT scanning of paediatric patients is limited. The department follow specific protocols, that had been set up with support from the manufacturer's applications specialist and the scanner would dose modulate to ensure exposures were ALARP and optimised.

Clinical evaluation
There was an employer's written procedure in place for carrying out and recording an evaluation for medical exposures performed at the department.

The sample of referral forms we examined included five retrospective referral forms. These all showed evidence of a timely clinical evaluation being completed.

From the information supplied we noted an extensive list of operators outside radiology who performed clinical evaluation. These areas were listed in employer's procedure EP (j), which is the procedure for the evaluation of each medical exposure. These staff were not listed in the EP (b), which related to the identification of entitlements.

The entitlement table at EP (b)(i) needs to be updated to include all lines of entitlement accountability for operators.

It was also positive to note that three reporting radiographers had been trained, signed off as competent and entitled to clinically evaluate general X-ray examinations within specific guidelines. Another reporting radiographer had been trained, appropriately signed off as competent and entitled to clinically evaluate chest and abdominal X-ray examinations within specific guidelines. An advanced practice vascular access service is in place which is jointly led by an advanced practice radiographer. A further reporting radiographer is currently completing this training.

Furthermore, a mammographer had been trained, appropriately signed off as competent and entitled as a Consultant Radiographer (breast imaging). They undertook mammographic image interpretation and reporting along with other duties under local agreement with the Breast Speciality Consultant Radiologists.

Each of the duties held by these individuals were demonstrated on the entitlement matrix.

Equipment: general duties of the employer
There was an employer's written procedure in place to ensure a quality assurance programme in respect of equipment was followed.

We noted that the equipment inventory was overdue for review in March 2023. We were told that nothing had changed in the equipment inventory. Senior staff provided an equipment inventory that was found to be incomplete and did not include all the information required under IR(ME)R. This included the year of manufacture and other areas were missing, with N/A filled in areas for some equipment.

The employer needs to ensure that the review of the equipment inventory is completed in a timely manner and that the equipment inventory is completed in full.

The quality assurance programme in place for all relevant equipment was also described in the self-assessment provided.

Senior staff we spoke with described the equipment replacement programme, which scheduled the replacement of equipment in line with service needs and available funding. Radiology was represented on the divisional capital projects board where replacement priorities could be highlighted. The department aimed to replace at least one room per site per year. This was prioritised on the replacement programme.

There was a recently re-established level A quality assurance (QA) programme for each piece of equipment. There was also a document that detailed the quality control (QC) tests for each piece of equipment and the results were logged locally. It was apparent that a lot of work had been completed to ensure this work was now being completed in a timely manner.

However, the in-house QC testing for the mini C-arm used in theatres was not available on request during the inspection. The level B testing was completed by the medical physics experts (MPEs) in November 2021. We were subsequently informed that the in house QC testing could not be supplied. This testing needs to be completed as a matter of urgency and in a timely manner in the future.

The employer needs to ensure that a robust system is put in place to avoid past issues with level A testing.

The employer is to ensure that in-house QC testing of the mini C-arm used in theatres is completed as a matter of urgency and is completed in a timely manner in the future.

The employer is to provide HIW with assurance that the MPE has provided the support required to theatres to set up the QC testing and training.

Duties of the employer

Entitlement

There was a written employer's procedure in place to identify individuals entitled to act as referrer, practitioner or operator within a specified scope of practice.

All medically qualified staff were made aware of their responsibilities as a referrer at their hospital induction. General Practitioners received a letter of entitlement from the Radiology Clinical Director detailing their responsibilities.

However, it was not recorded that operators were entitled to perform quality control testing on equipment in the entitlement records provided.

The employer needs to ensure that the entitlement records of operators are updated to include quality control testing of equipment.

During the review of the self-assessment, we were told that the advanced practice nurse was not an IR(ME)R operator and always has a radiographer present in the room when exposures were required. However, we noted that the nurse was performing the duties of a non-medical referrer, when they were not entitled to do so.

We recommend that after completing the relevant training and assessment of competency, the advance practice nurse is entitled as a non-medical referrer before they refer for chest X-rays.

Procedures and protocols
The SAF stated that The Radiation Protection Group (RPG), or representatives of this group, reviewed the written procedures and protocols. Authorisation for the updates was given by the Radiation Protection Committee. The authorised documents were stored on the shared area called SharePoint and hard copies were stored in the department which are then available for staff to view.

Senior staff we spoke with also described the process for reviewing and revising the employer's written procedures and protocols. There was an employer's procedure for this area. The purpose of this procedure was to ensure that a regular review of all policies, procedures and protocols were followed.

Whilst we were provided with evidence of written examination protocols, these need to specify whether they are for adults, children or both.

Significant accidental or unintended exposures
Senior staff described suitable arrangements for the analysis, recording and reporting of accidental or unintended exposures. We saw that guidance was readily available in the department for staff should they suspect an accidental or unintended exposure had taken place. This process included involvement of MPEs so that an assessment of the dose could be performed to identify whether the incident was notifiable to HIW.

We saw arrangements were in place for the sharing of learning from incidents with departmental staff and with wider teams within the organisation.

There was an employer's written procedure in place for reporting and investigating accidental and unintended exposures. However, the clinically significant, accidental and unintended exposures part of the employer's procedure required clarity on who makes the decision on what was clinically significant and in defining when the patient was informed or not and where this was recorded.

We recommend that the relevant procedure relating to clinically significant, accidental and unintended exposures part of the employer's procedure is updated. This is to include who makes the decision on what is clinically significant and in defining when the patient is informed or not and where this is recorded.

The process of sharing information was also described, this included issuing learning outcome notices throughout the health board to ensuring the wider dissemination of information. This was in addition to the passage of information from lessons learned.

Staff responses in the questionnaire were as follows:

- Their organisation encouraged them to report errors, near misses or incidents – 97%

- Their organisation treated staff who were involved in errors, near misses or incidents fairly – 63%

- When errors, near misses or incidents were reported, their organisation took action to ensure that they do not happen again – 81%

- The last time they saw an unintended exposure, error, near miss or incident, they or a colleague reported it – 91%

- They were given feedback about changes made in response to reported errors, near misses and incidents – 91%

- If they were concerned about unsafe practice, they would know how to report it – 94%

- Many said they would feel secure raising concerns about unsafe clinical practice (66%) although less than half of the respondents said they are confident their concerns would be addressed (34%).

Staff comments included:

> *"Following incidents, learning outcomes are provided and displayed. However, seem to be target blame on to the radiographer, even if multiple errors took place prior to the resulting incident. These errors fail to be followed up with no visible action been taken to prevent them from happening again."*

> *"Although we have had a number of radiation incidents, this appears to have had no effect on higher management, who are only concerned with numbers. Patients are not considered as people, only figures, which is against my belief as a radiographer. There is also no concern for staff - staff are burnt out due to minimal numbers working in the department*

covering gaps on rotas, sickness and annual leave - this has a detrimental effect on concentration and mental well-being."

"Staff are hardworking and dedicated. Only frustration is in senior management beyond our immediate line manager not being accessible and the feeling of not being listened to. "

"I feel that very senior management within Radiology do not speak to staff before they implement changes. They make it seem that staff are replaceable & that they don't care that staff are leaving."

Safe Care

Managing risk and health and safety
The department was easy to find and accessible with good disabled access including wide corridors. The treatment rooms were spacious with mobility aids seen in the rooms.

The department was on both the ground and first floor within the hospital. The ground floor would benefit from a refresh and some remedial maintenance work, this included missing and broken ceiling tiles. We also noted fold down chairs marked as condemned and some seating pads in the waiting areas were split and worn and need to be replaced as they posed an infection prevention and decontamination risk.

The health board need to ensure that the remedial work in the department including the split chairs and missing ceiling tiles is completed.

Whilst the environment was generally safe and secure with limited clutter and tripping hazards, we noted a large yellow unlocked and unsecured clinical waste bin near the lifts on the ground floor that was for clinical waste.

The health board need to ensure that that the large yellow bin is secured and put in a more appropriate place.

There were a range of risk assessments in place that staff were able to describe and knew where to find the assessments.

Infection prevention and control (IPC) and Decontamination
There were suitable arrangements in place to promote effective IPC. All treatment areas of the department we saw were visibly clean and tidy and the equipment we saw was also clean. We saw staff cleaning equipment between patients to help reduce cross infection.

Personal protective equipment was readily available for staff to use. Suitable handwashing and drying facilities and hand sanitiser were also readily available within the department.

Staff we spoke with were aware of their responsibilities in relation to IPC and decontamination. Additionally, senior staff were able to describe how medical devices, equipment and relevant areas of the unit were decontaminated.

The specific arrangements in place to treat symptomatic patients or patients with confirmed infections when attending the unit were also described. This included the room identified for patients with an infection, such as COVID-19, which would be cleaned thoroughly after use. There would be a minimum number of staff attending infected patients and the department made efforts to ensure no cross over with other patients.

All the patients who completed the questionnaire said that the setting was clean. However, when asked whether in their opinion that IPC measures were being followed only 56% said yes. Almost all staff agreed that their organisation implemented an effective infection control policy. Their questionnaire replies included:

- There is an effective cleaning schedule in place (94%)
- Appropriate PPE is supplied and used (100%)
- The environment allows for effective infection control (88%).

Some comments we received about infection prevention and control procedures are below:

> *"Plentiful and organised PPE and cleaning products available for all staff members, which are kept in a safe and practical space. Stock is monitored and replenished efficiently. Maintaining both staff and patient safety in regards to infection control has been second to none."*
>
> *"Cleaning schedules are completed for each room daily and the surfaces used are cleaned between each patient."*

Safeguarding children and safeguarding vulnerable adults
All staff we spoke with were aware of the health board's safeguarding policies and procedures and where to access these. They were also able to describe the actions they would take should they have a safeguarding concern.

There was evidence from the sample of five training records we examined that showed that all staff were up to date with training, which had been completed at an appropriate level according to their role within the department.

Effective care

Participating in quality improvement activities

Clinical audit

Senior staff provided examples of clinical audits that had been completed. We were told that clinical audits completed by medical staff were completed on a department audit template and audits were registered centrally. There was also a standard report template, with medical colleagues presenting their findings in various formats and were presented at the clinical audit meeting.

Other clinical audit and departmental audits would be discussed at the radiology operational group and may also feed into the clinical audit meeting and clinical governance meeting where appropriate.

We noted that some audit findings found non-compliance with IR(ME)R, for example documenting pregnancy checks, dose recording and justification. In such cases, there was no evidence of robust action to implement change. The re-auditing of identified issues needed to be completed sooner rather than wait 6 months before the next audit. Staff need to comply with the procedures that they were working too.

Any issues identified during an audit need robust action and must to be rechecked in a timely manner and not wait until the next audit is due.

Expert advice

Senior staff described and demonstrated suitable arrangements for the MPEs to be involved in and provide advice on medical exposures performed at the department. The employer had appointed and entitled MPEs to provide advice on radiation protection matters and compliance with IR(ME)R.

Medical physics support was considered to be good, this was evidence by their involvement in various groups and committees as well as advising staff when required. Senior staff described and demonstrated suitable arrangements for the MPEs to be involved in, and provide advice on, medical exposures performed at the department.

We were told that MPEs actively participate in image optimisation via both the image optimisation group and the DRL group. Advice was also given on

establishment of local DRLs and compliance with these was audited on a routine and ad hoc basis. Advice would also be given on specific optimisation projects.

During discussion with the MPEs we were told that level B testing of equipment was up to date.

Medical Research
Medical research was not currently performed at the hospital, although it was performed at other sites within the health board. However, an employer's procedure was available and clearly written.

Records management
Generally, we found suitable arrangements were in place for the management of records used within the department.

A sample of five current patient referral documentation and five retrospective patient referral documentation were examined. The sample showed that the referral records had been completed fully to demonstrate appropriate patient checks had been performed. This included patient identification, sufficient clinical details, enquiries made of pregnancy status where applicable, justification had been carried out and the referral appropriately signed by an entitled referrer.

Quality of Management and Leadership

Staff Feedback

HIW issued a questionnaire to obtain staff views on services carried out by Nevill Hall Hospital and their experience of working there. In total, we received 32 responses from staff. Not all respondents answered every question.

Responses from staff were mixed, with most being satisfied with the quality of care and support they gave to patients (78%) and many agreeing that they would be happy with the standard of care provided by their hospital for themselves or for friends and family (59%). However, over half of respondents felt that they would not recommend their organisation as a good place to work (59%).

Staff comments included the following:

> *"Staffing levels have declined over the last few years, adding increased pressures on staff with little support. Progression is minimal, leading to high staff turnover. Resulting in increased training pressures, and no allocated time for this due to reduced numbers of staff. The outcome of this is inadequate training and increased chances of incidents through lack of knowledge."*

> *"Under pressure to scan too many patients during a 12 hour shift. Not enough breaks. Patients are not cared for and treated like patients. Patients are now seen as no's/targets. Feels like a production line. Don't feel valued in work"*

> *"Staff are hardworking and dedicated. Only frustration is in senior management beyond our immediate line manager not being accessible and the feeling of not being listened to."*

We asked staff how the setting could improve the service it provided. Staff suggested:

> *"More interaction with senior management and staff to address issues. Looking at the ooh rota and lone working and get staff opinion."*

> *"Building repairs needed, particularly leaking roof. Little career progression opportunities in some modalities."*

Governance and accountability framework
The Chief Executive of the health board was the designated employer under IR(ME)R and had overall responsibility for ensuring the regulations were complied with. Where appropriate the employer had delegated tasks to other professionals working in the health board to implement IR(ME)R.

We were provided with details of the organisational structure. Clear lines of reporting and responsibilities under IR(ME)R were described and demonstrated.

The management team demonstrated a commitment to learn from HIW's inspection findings and make improvements where needed.

Management described the process to engage with staff on a regular basis, this included an open-door policy at the department, as well as visiting the department on a regular basis.

Staff in the questionnaire commented on the new portering system. This system required requests to be made for both the job to deliver the patient and to collect the patient, from radiology. The second job could not be entered onto the system until the patient was ready to be collected, which staff believed lead to increased pressure on staff to care for the patient in the meantime. Management stated that there had been regular meetings with the portering supervisor in relation to this.

A member of staff commented that:

> *"The current portering system is not fit for purpose and is unsafe for patients. This needs urgent improvement as detrimental to patients and lone working staff. Lone working staff (all out of hours, 5pm-9am and all weekend) results in inability to look after multiple patients, safely issues for example cardiac arrest and fitting. Other issues are violence and aggression, manual handling, lack of support in decision making for junior staff no emotional support on top of single handedly managing a busy workload. Chronic short staffing erodes staff morale and is unsafe for patients. Blame culture towards patient facing staff no responsibility being taken by management even if indirectly as a result of poor decision making from senior management."*

Staff agreement, in the questionnaire, was as follows

- They were content with the efforts of their organisation to keep them and patients safe – 41%

- Care of patients was their organisation's top priority – 50%

- Senior managers were visible – 34%

- Communication between senior management and staff is effective (38%)

- Senior managers were committed to patient care – 45%

- Their immediate manager can be counted on to help them with a difficult task at work (66%) and that their immediate manager gives them clear feedback on their work (66%)

- Their immediate manager asked for their opinion before making decisions that affected their work – 56%

- Their organisation was supportive – 53%.

One comment we received about management was:

> *"Staff are hardworking and dedicated. Only frustration is in senior management beyond our immediate line manager not being accessible and the feeling of not being listened to."*

Workforce planning, training and organisational development
We viewed a sample of competency records for five staff and the training and entitlement matrix maintained by the department. The training records, entitlement, scope of practice and competency were well documented and linked to the appropriate equipment training records provided. However, a process of refresher training needs to be established, some of the training records dated back to 2012. Additionally, the non-medical referral training needed the dates of entitlement included.

The training records of staff need to be updated, following refresher training.

The training records of non-medical referrers needs to be completed in full.

Most respondents (81%) felt they had received appropriate training to undertake their role. Staff commented:

> *"More training on the Modalities we are required to use as fail safe (Nuclear Medicine CT)."*

> *"We are expected to use a machine where we are unable to get regular practice on if the CT scanner goes down."*

Senior staff provided details of the number and skill mix of staff working in the department and confirmed this was sufficient to deliver the services that were provided.

However, only 36% of staff agreed that there were enough staff to enable them to do their job properly. Staff told us:

> *"Management have failed to address the portering issues that have been raised multiple times. This has resulted reduction in the standards of patient care while in our department, for example patient's having lengthily waits in cold corridors waiting for porters.*
>
> *Following incidents, learning outcomes are provided and displayed. However, seem to be target blame on to the radiographer, even if multiple errors took place prior to the resulting incident. These errors fail to be followed up with no visible action been taken to prevent them from happening again."*

We reviewed staff training records in relation to the health board's mandatory training programme. These showed staff were expected to complete training on a range of topics relevant to their role. The mandatory training records of five staff were checked and there was good training compliance noted, with over 90% of staff having completed all the mandatory training. Management were aware of those staff who had not completed all of their training and were able to described the reasons why. The process to ensure compliance was also explained, which included supporting those members of staff who struggled with online training.

There were clear arrangements in place for staff supervision and appraisals. Senior staff described the process in place for newly qualified staff with an induction process and a mentor assigned to the member of staff. Compliance with the appraisal process was also noted as being 98%, which was considered to be good practice. In the staff questionnaire, 94% of staff said they had an appraisal, annual review or development review in the last 12 months.

Staff we spoke with were confident when raising concerns and spoke well when interviewed. Whilst staff understood the meaning of the duty of candour, they had not received any training on this new duty.

The health board are to ensure that staff receive appropriate training on the duty of candour.

When asked about whether they agreed staff had fair and equal access to workplace opportunities (regardless of age, disability, gender reassignment,

marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation), 75% agreed. Staff told us:

> *"At Nevill Hall we were made to work 12.5 hour shifts , 7 days a week Another hospital within ABUHB do not work 7 days. They do not work weekends. Would have liked the opportunity to work at this hospital. In order to maintain my family/work life balance "*
>
> *"New opportunities, experiences, progression and learning sessions are vastly advertised to us as staff."*

A total of 81% of staff agreed that their job was not detrimental to their health and 75% of staff agreed that their current working pattern/off duty allows for a good work-life balance. However, only 41% of staff agreed they would recommend their organisation as a place to work.

That being said, 84% agreed that their workplace was supportive of equality and diversity.

It was positive to note that the majority of staff (78%) said they were aware of the occupational health support available to them. However, only 59% agreed the organisation took positive action on health and wellbeing.

It was disappointing to note that 10% of staff who answered the question indicated they had faced discrimination at work within the last 12 months.

The health board is required to inform HIW of the action taken to address the issues relating to staff discrimination and other less positive staff comments and percentage agreements in the report.

Other replies to the questionnaire included:

- That staff could meet the conflicting demands on their time at work – 72%
- That they were involved in deciding on changes introduced that affected their work area - 41%
- Almost all of respondents felt they are able to access the ICT systems needed to provide good care and support for patients - 97%.

4. Next steps

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.

The improvement plans should:

- Clearly state how the findings identified will be addressed
- 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
- Ensure required evidence against stated actions is provided to HIW within three months of the inspection.

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.

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 on this inspection.			

Appendix B - Immediate improvement plan

Service: Nevill Hall Hospital

Date of inspection: 25/26 April 2023

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.

Improvement needed	Standard/ Regulation	Service action	Responsible officer	Timescale
No immediate assurance issues.				

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

Service: **Nevill Hall Hospital**

Date of inspection: **25/26 April 2023**

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
The employer needs to establish a procedure to ensure radiographers are fully trained and competent to carry out pregnancy tests on patients.	IR(ME)R 2017 Regulation 11 (3)(d)(i) and 12 (8) (d)	Radiology will review their involvement and role in pregnancy testing. ABUHB have engaged with Professional Leads across Wales to discuss current practice. If it is agreed that we require direct involvement in the pregnancy testing process, a draft SOP has been developed to address training needs for radiography staff.	Radiology Services Manager	30th September 2023
The employer is to ensure that the DAGs clearly reference that they cover both paediatric and adult patients.	IR(ME)R 2017 Regulation 11 (5)	The current DAG's in place will be updated to reflect they relate to patients 16 years of age or older and that paediatric requests will be justified by Radiologists.	Cross Sectional Modality Lead, NHH	31st July 2023

The employer is required to provide an update on the action taken to ensure the employer's written procedure is corrected and is adhered to by entitled referrers making a referral prior to exposures performed during surgical theatre cases.	IR(ME)R 2017 Regulation 6 (2), 6 (5) and 10 (5)	An immediate change in process was implemented to ensure referral forms are received prior to any exposure to ionising radiation in theatre. Communication was made with all Directorates to ensure the change was implemented. The procedure document has been updated to reflect the change in practice and audit is ongoing to ensure compliance.	Radiology Site Lead, NHH	Change implemented immediately Compliance audit ongoing
The employer is to ensure the entitlement table in EP (b)(i) is updated to include all lines of operator entitlement accountability.	IR(ME)R 2017 Regulation 10 (3) and Schedule 2 (b)	Employer procedure document 2(b)(i) will be updated to include the entitlement of operators for clinical evaluation under the non-reporting agreements. Following the update the document will be ratified by RPC.	Radiology Services Manager	31st August 2023
The employer is to ensure that the review of the equipment inventory is completed in a timely manner and that the equipment inventory is completed in full.	IR(ME)R 2017 Regulation 15 (1) (b) and 15 (2)	The equipment inventory has been reviewed and updated with all relevant information.	Radiology Site Lead, NHH	Completed
The employer is to ensure that a robust system is put in place to avoid past issues relating to keeping level A testing up to date.	IR(ME)R 2017 Regulation 15 (3)	A team of trained staff has been established in NHH Radiology to ensure Level A testing is completed regularly and in a timely manner. The role of this team is to coordinate the	Radiology Site Lead, NHH	Completed

		Level A testing. Further communication has been issued to all Radiography staff to reinforce their responsibilities for QA of equipment.		
The employer is to ensure that: • Evidence of the in-house quality control testing for the mini C-arm used in theatres is completed as a matter of urgency • The quality control testing of the mini C-arm is completed in a timely manner in the future • They provide HIW with assurance that the MPE has provided the support required to theatres to set up the QC testing and training.	IR(ME)R 2017 Regulation 15 (3)	Staff have been identified to be trained on the Level A QA testing and this will begin on 17th July 2023 with the help of the MPE. A baseline of results will be established to allow the monthly testing to be implemented. A QA programme has been established within the theatre department for regular QA testing of the mini c-arm and there is a training plan to ensure this programme can be maintained. Assurance of compliance will be given to RPC. The MPE has attended the T&O Directorate meeting on 16.6.23 and detailed the legal requirements to carry out QA and discussed that T&O have signed up to the Health Board's Employer's Procedures which state that they will carry out QA. A spreadsheet and set of instructions for the QA has been provided and training for the operators is being arranged.	Directorate Manager, Orthopaedics Medical Physics Expert	31st July 2023 31st July 2023 Completed (ongoing)

The employer is to ensure that the entitlement records of operators are updated to include quality control testing of equipment.	IR(ME)R 2017 Regulation 10 (3) and Schedule 2 (b)	The individual entitlement document template will be updated to ensure the operator role includes Level A QA tests.	Radiology Site Lead, NHH	Completed
The employer is to ensure that following the completion of the relevant training and competency assessment, the advance practice nurse is entitled as a non-medical referrer before they refer for future chest X-rays.	IR(ME)R 2017 Regulation 6 (2) and 6(5) and Schedule 2 (b)	A non-medical referrer protocol will be written to identify the scope of practice for the advanced practice nurse to refer for chest x-rays. Following acceptance of the protocol and relevant training the individual will be entitled as a referrer with a defined scope of referral.	Radiology Services Manager	31st July 2023
The employer is to ensure that the relevant procedure relating to the clinically significant, accidental and unintended exposures is updated. This is to include who makes the decision on what is clinically significant and in defining when the patient is informed or not and where this is recorded.	IR(ME)R 2017 Regulation 8 (1) and Schedule 2 (l)	Procedure document 2(l) will be updated to reflect that the Clinical Director of Radiology, or a named Deputy, will make the decision on whether an incident is clinically significant based on the information presented to them. This decision will be included in the investigation report associated with any SAUE or CSAUE investigation. In ABUHB, all patients involved in SAUE or CSAUE incidents are informed.	Radiology Site Lead, NHH	31st August 2023

The health board needs to ensure that the remedial work in the department including the split chairs and missing ceiling tiles is completed.	Standard 2.4 Infection Prevention and Control (IPC) and Decontamination	The split chairs will be removed from use and replacement, non-upholstered chairs procured. The Estates lead in NHH has been contacted to ensure the ceiling tiles are replaced.	Radiology Site Lead, NHH Facilities Manager, NHH	30th September 2023 30th September 2023
The health board need to ensure that that the large yellow bin is secured and put in a more appropriate place.	Standard 2.4 Infection Prevention and Control (IPC) and Decontamination	The Estates lead has been contacted and the existing bin will be replaced with a secured clinical waste bin. This will be located in an appropriate location.	Facilities Manager, NHH	31st July 2023
Any issues identified during an audit need robust action and must be rechecked in a timely manner and not wait until the next audit is due.	IR(ME)R 2017 Regulation 7	We will ensure any issues identified from an audit will have an associated robust action plan and re-audit within 1 month to ensure compliance.	Radiology Quality & Governance Manager	Completed
The training records of staff need to be updated, following refresher training.	IR(ME)R 2017 Regulation 6 (3) (b), 17 and Schedule 3	The equipment training records for staff will be amended to include a section to identify any update training.	Radiology Site Lead, NHH	Completed

The training records of non-medical referrers needs to be completed in full.	IR(ME)R 2017 Regulation 6 (3) (b), 17 and Schedule 3	The date of entitlement for non-medical referrers will be included on the non-medical referrer matrix.	Radiology Site Lead, NHH	31st December 2023
The health board are to ensure that staff receive appropriate training on the duty of candour.	Standard 7.1 Workforce	The Health Board have provided online training via the ESR system for all staff and we will ensure all staff have completed the training within 3 months.	Radiology Site Lead, NHH	30th September 2023
The health board is required to inform HIW of the action taken to address the issues relating to staff discrimination and other less positive staff comments and percentage agreements in the report.	Standard 6.2 Peoples Rights	Staff meetings have already taken place to discuss issues raised in the HIW report. Minutes of the meeting have been distributed to every member of staff. Pathways for escalation of issues have been clarified within the department which includes a range of Band 7 staff and Society of Radiographer representative. Staff have been reminded that feedback can be made in person or anonymously. Arrangements for senior management to have a more visible presence on site have been actioned alongside the site lead. The on-site Senior Management rota will be published and be available for all staff groups to view.	Radiology Site Lead, NHH Radiology Management Team	Ongoing

		Senior Management maintain their 'open door' policy towards staff and will continue with the ongoing staff engagement sessions and are actively engaged with 'People First Initiative for Wellbeing'. This engagement is encouraged and supported from a Divisional perspective. To address the requirements of the ABUHB Clinical Futures model the Radiology Management team undertook a full staff consultation in 2020 and implemented a 12.5 hour day, 7 days a week roster in November 2020 across all the major sites. One CT scanner was restricted to a five day working week while the required staffing compliment was established. The recruitment is progressing and we aim to have all sites on the same service provision by the end of 2023. The staffing establishment within each department continues to be reviewed and are reflective of the current service demand. The Radiology Directorate have Divisional support in ensuring vacancies are recruited		

		without delay to minimise any vacancy shortfall. Radiology Directorate have a clear plan for staff training and progression and this is included in the IMTP. The Radiology Directorate continue to successfully train advanced practice within its workforce and provide opportunities to all staff across the Directorate for progression. This has been acknowledged and appreciated during the inspection / report. The management team have worked closely with the modality and site leads to develop robust induction and training programmes to ensure staff are competent to work independently. The Radiology Directorate have weekly performance meetings and monthly operational group meetings where demand and capacity issues are addressed. In these forums we are able to review the current workload with the site and modality leads to ensure service utilisation is optimised. Radiology have invested in new equipment e.g. new equipment, alarm call systems,		

		controlled access doors etc to ensure a safe environment for our staff and patients at all times. The Radiology Directorate management team will continue to ensure that all staff across all sites get equal access to the progression and training opportunities.		

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): Mark Wilkes

Job role: Radiology Services Manager

Date: 23.06.2023