Arolygiaeth Gofal Iechyd Cymru
Healthcare Inspectorate Wales

Ionising Radiation (Medical Exposure) Regulations Inspection (Announced)

Radiology Department / Neath Port Talbot Hospital / Swansea Bay 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 Neath Port Talbot Hospital within the Swansea Bay University Health Board on 21 and 22 January 2020. The following areas were visited during the inspection:

- Radiology Department

Our team, for the inspection comprised of two HIW Inspectors and a Senior Clinical Diagnostic Officer from the Medical Exposures Group of Public Health England, who was acting in an advisory capacity.

HIW explored how the service:

- Complied with the Ionising Radiation (Medical Exposure) Regulations 2017 (IR(ME)R 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

Overall, from the evidence we examined, we found that compliance with IR(ME)R 2017 was good. Discussions with staff demonstrated that awareness of their responsibilities in line with IR(ME)R was also generally good.

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

Policies and written procedures required under IR(ME)R 2017 were available and up to date. These helped the department to comply with the requirements of the regulations as they apply to radiology.

The department was being well managed and comments from staff indicated that they felt supported by senior staff.

We identified that further efforts could be made to fully meet some of the Health and Care Standards (2015) and Ionising Radiation (Medical Exposures) Regulations 2017.

This is what we found the service did well:

- Feedback received from patients indicated that they were highly satisfied with the services provided within the department
- Arrangements were in place to promote the privacy and dignity of patients
- Senior staff were very receptive to our inspection and demonstrated a willingness to make improvements as a result.

This is what we recommend the service could improve:

- Increase the amount of information available to patients providing advice on their health and wellbeing
- Promote the availability of Welsh speaking staff working within the department to help deliver an 'Active Offer'

- Ensure patients are routinely being provided with information on who to contact should they experience any issues following an exposure.

What we found

Background of the service

Swansea Bay University Health Board, formerly Abertawe Bro Morgannwg University Health Board (ABMU), was created on April 1 2019 after responsibility for providing healthcare services in the Bridgend County Borough Council area passed from AMBU to the new Cwm Taf Morgannwg UHB.

The health board now covers a population of around 390,000 in the Neath Port Talbot and Swansea areas. There are three major hospitals within the area providing a range of services, these are Morriston, Singleton and Neath Port Talbot Hospitals.

The radiology department at Neath Port Talbot Hospital consists of four general x-ray rooms, three mobile general radiography units and two c-arm fluoroscopy mobile units.

Examinations are also provided using a range of other equipment, including:

- Computed Tomography (CT) scanners
- General Fluoroscopy unit
- Ultrasound and dental units
- Magnetic Resonance (MR) scanners

The department employs a number of staff including Radiographers, Consultant Radiologists and Advanced Practice Radiographers.

The department also has support and advice from Medical Physics Experts (MPE), who are all employed by the Health Board.

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.

Responses from patients indicated that they were highly satisfied with the service provided by staff within the radiology department.

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

Whilst the communication needs of patients were being met, we identified that improvements could be made to provide additional information to patients on the availability of Welsh speaking staff, waiting times and the complaints procedure.

Before our inspection we invited the service to hand out HIW questionnaires to patients to obtain their views on the service provided within the department. Questionnaires were also made available to patients visiting the department during our inspection. In total, we received 28 completed questionnaires.

Patients were asked in the questionnaire to rate their overall experience provided by the service. Responses were positive; every patient rated the service as either 'excellent' or 'very good'. Patients told us:

> *"Excellent service, wonderful staff. Staff are kind, caring and respectful for all patients"*
>
> *"Everyone was helpful and reassuring"*
>
> *"All the staff have been very helpful and are very friendly and approachable"*

Staying healthy

Information was clearly displayed within the waiting room areas visited as part of our inspection outlining the risks and benefits of having an x-ray. However, there was limited information displayed within the department on how patients could look after and care for their own general health and wellbeing. The health board

should consider providing additional information within the department on patient health and wellbeing, for example on topics such as smoking cessation.

Improvement needed

The health board should ensure that more information is available to patients within the department providing advice on general health and wellbeing.

Dignified care

We observed staff speaking to patients in a polite, sensitive and professional manner.

All of the patients who completed a questionnaire agreed that they had been treated with dignity and respect by the staff and all but one patient felt that they were always able to maintain their own privacy, dignity and modesty during their appointments.

We did not overhear any sensitive conversations taking place within the department during our visit. We were told that on the occasions where patients request private conversations, either the treatment rooms or other meeting rooms within the department are used. All but two of the patients told us that they were able to speak to staff about their procedure or treatment without being overheard by other people.

On the occasions that patients with mobility issues attend the department, we were informed that discussions are held with staff to ensure that their experience is dignified. During our inspection, one patient told us that she had informed staff that she was claustrophobic and that staff had subsequently made arrangements to help that did not impact on privacy and dignity.

The main patient waiting area, as well as the sub waiting areas, within the department appeared clean and in a good state of repair. The number of seats available appeared appropriate for the number of patients attending.

Changing rooms were available for patients that were required to remove their clothing prior to their procedure. The changing rooms had two entrances, which meant that once dressed in the gown, the patient was able to enter the treatment room, instead of having to go back into the waiting area.

Whilst we did not observe patients having their procedures, we saw staff greeting patients in a friendly manner. Doors to treatment rooms were being closed when treatment or consultations were taking place.

Patient information

We saw that some information was available in leaflet format and displayed within the department. However, as previously stated this information was limited and only a few topics were covered.

There was a poster displayed in the waiting room areas detailing the benefits and risk to x-ray examination for patients. This poster had been developed by one of the MPEs. All but one patient told us that they felt that they had received clear information to help them understand the benefits and risks of their examination.

All patients who completed our questionnaire said that they felt that they had been as involved as much as they wanted to be in relation to decisions about their treatment.

The majority of patients who completed a questionnaire told us that they had been given information on how to care for themselves following their examination. However, a third of the patients said that they had not been provided with information on who to contact for advice about any after effects of any examination or treatment they had received.

Improvement needed

The health board must ensure that patients are routinely provided with information advising them who to contact should they have any issues following their examination / treatment.

Communicating effectively

Every patient that completed our questionnaire felt that it was ‘very easy or ‘fairly easy’ to find their way to the department once in the hospital.

We were told by staff working within the department that there was no hearing loop installed in the department to assist people wearing hearing aids to communicate with staff. Staff informed us that if they are aware in advance, arrangements can be made. There was also no Braille information available in the department for patients with sight impairments. Again, we were informed that this information was not standard within the department, but arrangements would be made on request.

All patients who completed a questionnaire told us that they were ‘always’ able to speak to staff in their preferred language. Also, every patient told us that they felt that they were listened to by staff during their appointment.

The majority of the information displayed was available in English and Welsh, however, as previously highlighted information in the department was limited. We were informed that there were a few staff working within the department that spoke Welsh. However, it was not immediately obvious within the public areas of the department that patients could speak to staff in Welsh if they wished to do so.

The availability of Welsh speakers working within the department could be better promoted to help deliver an 'Active Offer'[1]

Improvement needed

The health board is required to provide HIW with details of the action taken to promote the availability of Welsh speaking staff working in the department to help deliver the 'Active Offer'.

Timely care

All patients who completed a questionnaire told us that it was "very easy" or "fairly easy" to get an appointment within the department.

Just over half of the patients informed us that they had waited less than 15 minutes to undergo their examination when they'd arrived at the department.

There was no method in place to inform patients of the current waiting time to be seen and the majority of patients' questionnaire responses stated that they were not told on arrival how long they would likely have to wait before having their examination or treatment.

We were told that on the occasions where patients could be faced with a substantial wait to be seen during busier periods, patients would be informed on arrival. There was no evidence identified as part of our inspection to suggest that patients were waiting significant periods to be seen. However, given the feedback

[1] 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

received from patients, the health board should consider further ways to communicate any delays to patients.

Improvement needed

The health board is required to provide HIW with details of the action taken to better inform patients visiting the department of current waiting times.

Individual Care

Listening and learning from feedback

The health board had a procedure in place for responding to any concerns that are received from patients in regards to the services they receive. The procedure was in line with the all Wales NHS Complaints Procedure, known as Putting Things Right[2] (PTR).

Staff we spoke with were aware of the concerns process and we were informed that the health board's PTR team would flag up any formal complaints received to the department.

Staff told us that on the occasions where verbal concerns were raised by patients attempts were made, where possible, to speak with the patient immediately to try to help resolve any issues or concerns quickly and efficiently. Where this was not possible, we were told that patients were signposted to the concerns process.

There was no information displayed within the department relating to the PTR complaints process. Also, half of the patients that completed a questionnaire told us that they would not know how to raise a complaint about the service they had received. Given this feedback, efforts should be made to better inform patients of the health board complaints procedure.

There was a 'Let's Talk' poster displayed in the main waiting room area, which outlined how visitors to the department could provide feedback to staff. There

[2] '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.

was a QR code on the poster which allowed individuals to access the relevant feedback form by scanning the code with a mobile phone. The poster also included details of the Community Health Council[3] (CHC). The CHC is able to offer support and advice to any individuals who wish to raise concerns about their NHS treatment.

On the main entrance corridor to the department, there was a large poster entitled 'When you needed us, how did we do'. The poster detailed the ways patients and other visitors are able to provide feedback on their experiences. The methods of feedback listed were to contact the department manager, complete a feedback card or to complete an online survey. Senior staff were receptive to our suggestion that this poster and the feedback cards could be better placed in the waiting room area that would make it more noticeable to patients and to encourage more responses from visitors to the department.

During our inspection a feedback folder was provided to the team to review. This folder included the analysis that had been undertaken by staff on the comments that had been received from visitors to the department on their views and experiences. It was suggested during discussions with senior managers that it would be beneficial for this information to be displayed within the waiting room areas of the department. This again, could encourage additional feedback to be provided from patients and other visitors on the service.

Improvement needed

The health board is required to provide HIW with details of the action to be taken, to ensure that patients are fully aware of their right to raise concerns about their NHS care or treatment.

[3] http://www.wales.nhs.uk/sitesplus/899/page/71619

Delivery of safe and effective care

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

Overall, from the evidence available and discussions with staff, we found that compliance with IR(ME)R 2017 was good.

Staff awareness of their IR(ME)R responsibilities was generally very good.

Policies and written procedures required under IR(ME)R 2017 were available and up to date. These helped the department to comply with the requirements of the regulations as they apply to radiology.

The department was clean and arrangements were in place to promote the safety of patients, staff and visitors to the department.

A few areas for improvement were highlighted which included the consistent recording of patient doses and justification of patient exposures.

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 aimed to ensure that the correct patient had the correct exposure in accordance with the requirements of IR(ME)R 2017.

The procedure clearly identified those staff responsible for correctly identifying patients. Staff were expected to ask patients to confirm their name, date of birth and address. This approach is in keeping with current UK guidance[4].

The procedure described alternative approaches that staff must use should patients be unable to verbally confirm their identity themselves, further prompting patient safety. The procedure also set out the process staff should follow when undertaking identification checks for paediatric patients.

Staff we spoke with were able to describe the correct procedure to identify patients. Also, all patients who completed our questionnaire told us that they were asked to confirm their personal details by staff before starting their examination.

Individuals of childbearing potential (pregnancy enquiries)

The employer had a procedure in place in relation to the process for carrying out pregnancy enquiries for individuals of childbearing age prior to any exposures. This aimed to ensure that such enquiries were made in a standard and consistent manner.

The procedure clearly identified those staff responsible for making relevant enquires and set out the actions they must follow depending on the individual's responses. The written procedure included the age range of patients who should be asked about pregnancy in accordance with UK guidance[5].

Information was displayed within the department waiting area and patient changing rooms advising individuals to inform staff if they either were or think that they may be pregnant. This is important to minimise potential harm to an unborn child from the exposure to ionising radiation.

Staff we spoke with were able to describe their responsibilities in regard to the pregnancy enquiries, which were in line with the employer's procedure described above. As part of our inspection, we reviewed a random sample of patient

[4] Department of Health and Social Care (2018); Guidance to the Ionising Radiation (Medical Exposure) Regulations 2017

[5] Guidance to the Ionising Radiation (Medical Exposure) Regulations 2017.

records. Evidence was available to indicate the relevant checks had been carried out and recorded by staff.

On the occasions where carers and comforters were present, they were not permitted to join the patient in the X-ray room if they were pregnant. During discussions with senior managers it was suggested that a pregnancy checking questions should be added to the carers and comforters consent form.

Non-medical imaging exposures

The employer had a written procedure in place which set out the criteria for carrying out non-medical imaging exposures[6].

Referral guidelines

The employer had established referral guidelines in place. Arrangements were described for making these available to those entitled to act as referrer under IR(ME)R 2017. We were informed that the clinical referral guidelines (iRefer) are freely available to all healthcare professionals via the Intranet. We were also informed that there was a referral responsibilities leaflet available.

An issue was identified in regards to the process of requesting referrals for theatre cases requiring mobile fluoroscopy imaging. We were informed that currently the surgeon provides verbal information for the request for imaging during surgical cases. There was no formal referral form being submitted prior to the exposure taking place. Therefore, the process of justification and authorisation of these exposures by the practitioner could not be evidenced. This process was discussed with senior staff as part of our inspection and it was agreed that improvements are required to ensure that the process is compliant with the IR(ME)R 2017 Regulations.

Currently the majority of referrals submitted to the department for diagnostic imaging are paper based. Once received, referrals are registered onto the

[6] 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.

electronic system RadIS[7]. During discussions with senior managers it was suggested that additional information could be included within the referral procedures to outline action to be taken when either the referral received does not meet the relevant criteria and/or the referrer tries to make a referral outside their agreed scope of practice.

As part of our inspection, we reviewed a random sample of patient referral documentation. Overall, the referral forms were completed to a good standard. The layout of the referral forms reviewed was clear and clinical information provided was in line with referral guidelines.

The majority of referrals included sufficient clinical details and were signed by an appropriately entitled practitioner confirming justification[8]. However, we did identify that two CT referral forms had not been appropriately signed by the practitioner to confirm justification. This issue has also been noted under the sub heading of justification later on in this section.

Improvement needed

The employer must provide HIW with details of the action taken to ensure that referrals for theatre cases requiring mobile fluoroscopy imaging are completed prior to the exposure in accordance with IR(ME)R 2017.

Duties of referrer, practitioner and operator

The employer had a system in place to identify the different types and roles of the professionals involved in referring and performing radiology examinations for patients. The employer's procedure on how IR(ME)R 2017 is implemented within

[7] An All Wales Radiology Information System (WRIS), RadIS, which allows the sharing of information in order to support seamless patient care across the NHS Wales organisations is available to all health boards in Wales.

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

the department identified, by staff group, who were entitled to be referrers[9]practitioners[10] and operators[11] (known as duty holders).

Information was included within the employers Ionising Radiation Protection Policy in relation to the minimum competency / training requirements for each duty holder role. Entitlement is linked to successful completion of the relevant training and competency checks for specific equipment and examinations.

The policy outlines that the Clinical Director is responsible for authorising the entitlement of new medically qualified practitioners and operators. Staff we spoke with informed us that they had copies of their individual scope of entitlement documents.

Staff we spoke with had a clear understanding of their relevant duty holder roles and scope of entitlement under IR(ME)R.

Staff confirmed that they were able to access up to date electronic versions of the policies and procedures via the departments online shared drive. We were also informed that hard copies of documents were available to review within the department.

Senior staff described the arrangements for notifying staff of any changes to policies and procedures within the department. This involved updates being provided via relevant staff meetings and the weekly staff huddles which take place within the department. Following any updates, staff have to review the amended document and confirm in writing that they have done so.

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[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.

There is a contract in place between all health boards in Wales for Everlight Radiology[12] to provide a radiology reporting service which includes, in some instances, out of hours justification of specified examinations and associated clinical evaluation. However, we were informed by senior managers that in Swansea Bay UHB, registrar radiologists working at Singleton Hospital act as practitioner to justify any exposures out of hours. Everlight have group entitlement as operators and only undertake clinical evaluations. Information was available detailing the Everlight radiologists and their associated GMC numbers.

Justification of Individual Medical Exposures

The employer had a written procedure for the justification and authorisation of medical exposures. Staff we spoke with had a clear understanding of the justification process.

Justification of individual medical exposures was being recorded on the radiology request forms, with the date and signature of the practitioner. As outlined previously, as part of our inspection we reviewed a sample of radiology referral documents. We highlighted that two of these referral documents had not been appropriately signed by the entitled practitioner. This meant that it was unclear who had justified the exposure. The employer must ensure that relevant staff are reminded of the importance of signing documentation to ensure that there is an identifiable name recorded.

Given the IR(ME)R 2017 definition of carers and comforters, discussions were held with senior managers about this aspect of the service delivery. There was an employer's procedure in place relating to the exposures of carers and comforters. We were told that the practitioner for the patient exposure would also act as the practitioner for the carer and comforter exposure. In justifying the exposure of the carer and comforter the practitioner must also satisfy themselves that the patient truly requires the close support of another individual for the examination to take place successfully.

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

Improvement needed

The employer must provide HIW with details of the action taken to ensure that all medical and non-medical exposures are justified and that the individual practitioner justifying each exposure can be identified.

Optimisation

Arrangements were in place for the optimisation[13] of exposures. For example, the health board has established a multidisciplinary Image Optimisation Team (IOT) for CT. This IOT, which is led by an MPE, focuses on aiming to reduce the magnitude and variation in patient dose, develop consensus imaging protocols and to share best practice throughout the health board. This team was currently only focussing on CT, but we were informed by senior managers that discussions were underway to try to extend the remit of the IOT to other modalities.

For paediatric patients, there was evidence of the arrangements and specific exposure settings that were being used to ensure that exposures to children were being optimised.

Diagnostic reference levels

There were processes in place for determining, implementing and reviewing Diagnostic Reference Levels (DRLs). During our tour of the department, we noted that local and national DRLs were clearly displayed in each area visited.

Local DRLs had been established for all standard examinations that are undertaken. The majority of local DRLs were below or the same as the national level. However, there were some barium examinations where the dose levels were over the national level. We were informed that audits were ongoing in order to establish local DRLs for these fluoroscopy examinations to better reflect local patient demographics.

Arrangements were in place to allow staff to record any doses which exceeded local/national levels for standard patients. This information was monitored

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

monthly by the modality leads to determine whether any further action / escalation was required.

Audit arrangements were in place to monitor the input of patient dose data onto RadIS by staff. We were informed that there had been a significant improvement in the completion of dose recording by staff. However, as part of our review of information, we identified a number of examples where staff had only recorded the dosage on the referral form and had not manually recorded the information onto RadIS where required, in line with the relevant procedure. If doses are not routinely being recorded onto RadIS, it will impact on the accuracy of any subsequent dose audits which are undertaken.

Improvement needed

The employer must provide HIW with details of the action take to ensure that staff are routinely recording patient dose values onto RadIS in line with the employer procedure that is in place.

Clinical evaluation

There was an employer's procedure in place which detailed the process regarding clinical evaluation. We were told that all examinations and exposures involving ionising radiation have a clinical evaluation performed by an appropriately entitled member of staff.

As part of our review of the random sample of patient records, we found that all records evidenced that a clinical evaluation had been completed within 10 days of the procedure being undertaken.

Equipment: general duties of the employer

The employer had an up-to-date inventory (list) of the equipment used within the radiology department. The inventory contained the information required under (IR(ME) 2017.

There was a QA programme in place to ensure that all equipment is regularly checked. A database was maintained which detailed all equipment within the department and the required QA dates.

We were informed that there were some staff within the department that have received training from the MPE in order to allow them to undertake the QA of the equipment. There was also a quality assurance (QA) handbook available which was provided by an MPE.

Safe care

Managing risk and promoting health and safety

The environment was well maintained and arrangements were in place to promote the safety of staff, patients and visitors to the department.

The department was located on the ground floor. There was level access throughout with double doors and large corridors which allowed patients with mobility difficulties to enter and leave the department safely.

The department was clean and generally free from clutter and obvious trip hazards. Appropriate signage and restricted access arrangements were in place to deter and prevent unauthorised persons entering areas where radiology equipment was being used. This helped promote the safety of patients and visitors to the department.

Infection prevention and control

Arrangements were in place for effective infection prevention control and decontamination.

Overall the environment was clean, well maintained and arrangements were in place to promote the safety of staff, patients and visitors to the department. At the time of our inspection, all areas of the department were visibly clean and generally tidy.

We were told by senior managers that there are daily cleaning schedules for all areas of the department including each of the examination rooms. Cleaning and decontamination processes were in place for each of the different pieces of equipment within the department.

On the occasions where the department is notified that a patient with a known infection will be attending, we were told that arrangements are made to see the patient at the end of the day where possible, to ensure that there is sufficient time to appropriately clean the room. We were also informed that process flow charts were available in each room outlining the process to staff should adhere to following treatment of infectious patients.

Senior staff confirmed that there is an infection control lead based at the hospital and also modality leads undertake random cleanliness checks within the department.

All staff are required to undertake mandatory infection control training. Senior managers informed us that a record is maintained which outlines training

compliance. The department staff that we spoke with as part of our inspection informed us that they had all completed the training.

All of the staff we spoke with had good knowledge of their responsibilities in regard to infection and control within the department.

We saw that personal protective equipment (PPE) was readily available. Staff we spoke with confirmed that they always had access to PPE such as disposable gloves. The use of PPE together with effective handwashing is important to reduce the spread of infection.

There were no concerns highlighted by patients over the cleanliness of the department. All of the patients who completed a questionnaire felt that the department was ‘very clean’ or ‘fairly clean’

Safeguarding children and adults at risk

Discussions with staff within the department demonstrated that there was an awareness of current safeguarding procedures in place. Staff we spoke with also informed us that they had completed online training to help them keep up to date with relevant safeguarding issues.

Senior managers confirmed that there was a safeguarding lead within the hospital and posters were displayed within the department to ensure that staff were aware of who to contact should they have any concerns.

Effective care

Quality improvement, research and innovation

Clinical audit

Information was provided to demonstrate compliance with IR(ME)R 2017 in regard to clinical audit. Evidence was provided of the audits already completed this year, as well as the audits schedule for the remainder of the year.

Evidence was available to indicate that learning was being identified by the audit programme and re-audits were being schedule where required.

There was an employer’s procedure in place in relation to clinical audit. During discussion with senior managers it was suggested that additional information could be included within this procedure providing further detail including timeframes for audits, who will be undertaking the specific work and how learning outcomes are communicated.

Expert advice

There were four MPE's that were employed by the UHB. Each MPE was listed on the approved list for RPA 2000, the certification body for MPEs. Evidence of the appointment letters from the CEO was also available.

During discussions with senior managers, we were informed that there were plans to develop a service specification for MPEs, to ensure that there was sufficient capacity in place to meet the required workload.

We were able to confirm that MPEs provided support and advice to departmental staff about new and existing procedures. The MPE role also included undertaking relevant audits, establishing and monitoring local DRL levels and advising staff on radiation incident reporting.

Senior staff also told us that they were able to contact an MPE for advice when necessary on an ad hoc basis.

Medical research

The employer had an established procedure in place with regard to Medical Research exposures. However, we were informed by senior managers that research involving medical exposures was not being performed at the hospital at the time of our inspection.

Information governance and communications technology

Information management systems within the department were described and demonstrated by staff. The systems in place allowed for relevant patient details and information about diagnostic and interventional procedures performed, to be recorded and easily accessed by staff.

Record keeping

We reviewed a random sample of patient records. The majority of records we saw had been completed with appropriate details by those staff involved in the exposure. However, as previously detailed in this report we did identify issues in regards the evidence recorded to confirm justification of exposures for two of the records we reviewed.

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

A management structure with clear lines of reporting and accountability was described and demonstrated.

Written procedures and management arrangements were in place to support the radiology department's compliance with IR(ME)R 2017.

The department was being well managed and comments from staff indicated that they felt supported by senior staff within the department. It was clear from our inspection that there was a good rapport between department staff and senior managers.

Senior staff confirmed that there were a number a vacancies within the service currently. However, work was ongoing to ensure that there is sufficient service capacity to meet the demand.

Governance, leadership and accountability

There was a management structure in place, with clear lines of reporting, which was described and demonstrated. We found that governance arrangements were in place to support the effective operation of the department.

Staff we spoke with during our inspection felt supported by their line managers. We were also told that senior managers within the department were very visible and approachable. Staff told us that they pleased with the level of engagement and leadership provided by senior management.

Weekly huddles were held within the department and led by a senior manager. These discussions aim to provide department staff with any updates or issues that they need to be aware of. Key notes from the huddle discussions were also made available to any staff members unable to attend.

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 inspection.

Prior to the 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. This document was used to inform the inspection approach.

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

Duties of the employer

Entitlement

As detailed previously, the employer had a suitable system in place to identify the different types and roles of the professionals involved in referring and providing radiology examinations for patients, as required under IR(ME)R 2017. The employer's policy on how IR(ME)R 2017 is implemented within the department identified personnel, by staff group (duty holders).

Procedures and protocols

The Chief Executive Officer (CEO) of the health board was designated as the employer. We were informed during discussions with senior management staff that whilst the CEO retains the responsibility associated with being the employer the CEO had delegated the associated tasks related to IR(ME)R 2017 to the health board's Deputy Executive Director of Therapies and Health Science. This arrangement is acceptable, however, as part of our review of relevant IR(ME)R documentation, we highlighted that there were some inconsistencies in regards to the employer arrangements detailed. The employer must ensure that all relevant documentation consistently reflects the arrangements in place.

Overall, we saw that clear written procedures and protocols had been developed and implemented in accordance with IR(ME)R 2017.

As previously detailed, staff we spoke with as part of our inspection confirmed that they had access to up to date versions of the policies and procedures. Also, senior staff confirmed that when any changes to documents occur, notifications

are circulated to department staff, who are subsequently ask to confirm that they have read and understand the relevant changes.

Improvement needed

The employer must provide HIW with details of the action taken to ensure all IR(ME)R 2017 documentation accurately reflects the employer arrangements in place within the health board.

Significant accidental or unintended exposures

The employer had a written procedure for reporting and investigating accidental or unintended exposures within the department.

The employer's procedure set out the process staff should follow if they suspect that an accidental or unintended exposure or near miss has occurred. The procedure guided staff of the process to follow and, where necessary, subsequently resulted in HIW being informed of such incidents in a timely manner. A few areas were highlighted within the procedure which the employer should consider including additional clarity on. These included the requirements under the SAUE guidance for a root cause analysis to be undertaken where necessary and also for any subsequent reports to clarify whether local procedures had been applied.

During discussions with senior staff it was also suggested that additional detail was required within the procedure in relation to the recording of the decision as to whether to notify the patient of an exposure or not. Currently if it is determined that if the exposure is below the clinical threshold, the patient would not be notified. The employer should consider updating relevant documentation to ensure staff are aware of the information that needs to be routinely recorded.

Staff and resources

Workforce

During discussions with senior staff we were informed that more staff capacity was required, as there were currently a number of vacancies and demand was increasing. This meant that there was a reliance on overtime from staff to ensure that there is sufficient capacity.

We were told that workforce planning analysis was ongoing to determine the capacity required to meet the demands of the service. Consideration was also being given to increasing the amount of patient sessions available, which may result in an increased working day.

Additional concerns were raised by senior managers around the limited nursing support for the department. We were informed that these issues were as a result of the health board boundary changes, which resulted in some staff being lost to Cwm Taf Morgannwg UHB.

The staff vacancies included four radiologists. However, we were informed that applicants had been received for these posts and interviews were scheduled.

Department staff we spoke with felt that the staffing levels were safe and informed us that they had enough time to perform their duties. Also, as previously mentioned staff felt that they were supported by their managers and told us that senior managers were very approachable.

We looked at a sample of training records for 'practitioners' and 'operators' working within the department. These demonstrated that staff had received relevant training and had their competency assessed in relation to carrying out exposures and examinations. These records also clearly identified each individual's scope of practice.

Department staff confirmed they had access to training and were supported by senior staff to meet their continuing professional development needs. Staff we spoke with were also aware how to access any additional support via Occupational Health.

3. 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.

4. 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 as part of this inspection.			

Appendix B – Immediate improvement plan

Hospital: Neath Port Talbot Hospital

Ward/department: Radiology Department

Date of inspection: 21 and 22 January 2020

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 assurances issued as part of 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: Neath Port Talbot Hospital

Ward/department: Radiology Department

Date of inspection: 21 and 22 January 2020

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 ensure that more information is available to patients within the department providing advice on general health and wellbeing.	1.1 Health promotion, protection and improvement	• Leaflets and Posters have been displayed throughout the department since the Inspection. (Smoking cessation, Mental well-being etc.)	Neath Port Talbot Site Superintendent	Complete
		• To engage Public Health colleagues to obtain further Health promotion literature for display in department	Neath Port Talbot Site Superintendent	September 2020
		• Develop electronic solutions with IT and wider Health board colleagues. E.g. Television with	Neath Port Talbot Site Superintendent	October 2020

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		rolling Public Health information. Progress to be reviewed monthly at Directorate Board.		
The health board must ensure that patients are routinely provided with information advising them who to contact should they have any issues following their examination / treatment.	4.2 Patient Information	• Project starting June 2020 to review and revise patient information leaflets and correspondence sent out from Radiology Services Booking Systems. This will include guidance on how to contact the department to discuss any concerns or queries regarding their care. • The Radiology Service is developing a webpage for addition to the Health Board Website. This will equally include all contact details for raising concerns & queries, as well as signposting to the HB complaints pathway • Develop electronic solution for posting service communication,	Radiology Services Manager / Neath Port Talbot Site Superintendent / Radiology Admin and RIS Managers. Radiology Services Manager / Neath Port Talbot Site Superintendent / Neath Port Talbot Site Superintendent	August 2020 January 2021 October 2021

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		to include complaints and concerns information. Progress to be reviewed monthly at Directorate Board • Welsh Government Posters on 'Putting things Rights' will be made available in larger numbers across the department to increase visibility	Neath Port Talbot Site Superintendent	July 2021
The health board is required to provide HIW with details of the action taken to promote the availability of Welsh speaking staff working in the department to help deliver the 'Active Offer'.	3.2 Communicating effectively	• The ability to speak Welsh is already noted as desirable for Radiology posts during advertisement and this will continue. • Applicants at advert are advised that English and/or Welsh speakers are equally welcome to apply for Radiology posts and this will continue. • Posters indicating the availability of welsh speakers within the department will be displayed.	Health board / Radiology Services Health board / Radiology Services Neath Port Talbot Site Superintendent	Complete & Ongoing Complete & Ongoing August 2020

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		• Availability of welsh speakers within the department will be added to the upcoming webpage.	Radiology Services Manager / Neath Port Talbot Site Superintendent	January 2021
		• The Project to review and revise patient information & correspondence starting June 2020 includes an action to ensure all updates are translated and made available to patients in Welsh.	Radiology Services Manager / Neath Port Talbot Site Superintendent / Radiology Admin and RIS Managers	January 2021
		• The Health board currently provides services for interpretation for any patient requiring this support where Welsh speakers are not available e.g. Language line.	Health board / Radiology Services	Complete & Ongoing
		• A matrix of Welsh Speakers across the service to include all staff groups will be developed to support the Active offer on a daily basis	Neath Port Talbot Site Superintendent	August 2020

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
The health board is required to provide HIW with details of the action taken to better inform patients visiting the department of current waiting times.	5.1 Timely access	• The action allocated above for Public Health promotion via a TV/Electronic solution will allow the display of current waiting times. In the Interim white boards will be used to display service information	Neath Port Talbot Site Superintendent	October 2020
		• The Project to review and revise patient information & correspondence starting June 2020 includes an action to review opportunities to advise of waiting times for individual services	Radiology Services Manager / Neath Port Talbot Site Superintendent / Radiology Admin and RIS Managers	January 2021
		• Once a Radiology bespoke Internet page is available the waiting times can be displayed for patient reference on an ongoing basis	Radiology Services Manager / Neath Port Talbot Site Superintendent	January 2021

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
The health board is required to provide HIW with details of the action to be taken, to ensure that patients are fully aware of their right to raise concerns about their NHS care or treatment.	6.3 Listening and Learning from feedback	• As noted above in point 2 actions – 4.2 Patient information. • The service is planning to display its quality and governance information within the department, including how the service has responded to themes received via patient feedback and/or complaints. E.g. 'You said, we did..'	As per point 2 actions Radiology Services Manager / Neath Port Talbot Site Superintendent	As per point 2 actions August 2020
Delivery of safe and effective care				
The employer must provide HIW with details of the action taken to ensure that referrals for theatre cases requiring mobile fluoroscopy imaging are completed prior to the exposure in accordance with IR(ME)R 2017.	Regulation 6 (2) Regulation 10 (5)	• Taken to Medical Exposure Committee for discussion. Action agreed to schedule a meeting with Service director for Theatres • Benchmark other Health board procedures for management of this area. • Develop plan to implement correct process and agree	Radiology Services Manager Radiology Services Manager Theatre Services Manager / Neath Port Talbot Site Superintendent	July 2020 August 2020 September 2020

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		accountability for monitoring and compliance • Audit the Compliance 1/4ly as part of current audit calendar. • Raise the issue of non-compliance to Medical Directors to ensure compliance required is communicated to Medical Teams working in Theatres & Anaesthetics. • Update Employers Procedure - section EP 5 – to reflection the compliance level required.	Neath Port Talbot Site Superintendent Radiology Services Manager / Radiology Clinical Director SBUHB - Medical Physics Advisor	January 2021 July 2020 July 2020
The employer must provide HIW with details of the action taken to ensure that all medical and non-medical exposures are justified and that the individual practitioner justifying each exposure can be identified.	Regulation 11 (1) (b) Regulation 11 (2) (a-d)	• Audit of Radiographer & Radiologist compliance for completion of the correct IRMER Justification section of the request form via signature. • Audit results to be discussed at Clinical Governance meeting	Neath Port Talbot Site Superintendent Neath Port Talbot Site Superintendent	July 2020 August 2020

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		• Audit Results to be reviewed at Radiology Multi-disciplinary Education & Audit Meeting • Radiology Clinical Director to share IRMER Report and need for compliance at Directorate meeting.	Neath Port Talbot Site Superintendent Radiology Clinical Director	August 2020 July 2020
The employer must provide HIW with details of the action taken to ensure that staff are routinely recording patient dose values onto RadIS in line with the employer procedure that is in place.	Regulation 10 (4) Schedule 2 (j)	• Audit completed in February 2020, for Theatres. • Audit schedule will continue on a rolling basis to cover each area of the service that does not have an in-built dose log. • Audit results to be discussed at Radiation Protection and Medical exposure meetings on an ongoing basis. • IRMER Report to be shared across Site superintendents and need for RADIS Dose compliance against Employers procedure to	Neath Port Talbot Site Superintendent Neath Port Talbot Site Superintendent Neath Port Talbot Site Superintendent Radiology Services Manager / Neath Port Talbot Site Superintendent	Completed 2020 Ongoing – Mobile X-ray kit due July 2020 Completed and Ongoing July 2020

Improvement needed	Standard / Regulation	Service action	Responsible officer	Timescale
		be discussed at Clinical Governance Meeting		
Quality of management and leadership				
The employer must provide HIW with details of the action taken to ensure all IR(ME)R 2017 documentation accurately reflects the employer arrangements in place within the health board.	Regulation 6 (1) Regulation 6 (5) (b) Schedule 2 (d) Governance, Leadership and Accountability	The Health Board has sought further clarity on requirements for compliance with this point from HIW, and has since identified actions required. • Actions required to update the SBUHB Policy on 'The Implementation of IRMER' have been completed. • The Policy will be reviewed and discussed alongside the IRMER Report and Improvement Plan at the next Radiology Clinical Governance meeting; Radiation Protection Committee & Medical Exposure Committee.	Deputy Director of Therapies SBUHB SBUHB Medical Physics Advisor Deputy Director of Therapies / Radiology Services Manager / Neath Port Talbot Site Superintendent	June 2020 July 2020 August 2020 – Radiology Governance & Dec 2020 – Radiation Protection & Medical Exposure

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): Alexandra Simmonds / Janine Sparkes

Job role: Radiology Services Manager - Swansea Bay UHB / Site Superintendent Neath Port Talbot

Date: 26/06/2020