Arolygiaeth Gofal Iechyd Cymru
Healthcare Inspectorate Wales

DRIVING IMPROVEMENT THROUGH INDEPENDENT AND OBJECTIVE REVIEW

Ionising Radiation (Medical Exposure) Regulations Inspection (announced)

Powys Teaching Health Board:

Diagnostic Imaging Departments

Victoria Memorial Hospital,

Brecon War Memorial Hospital,

Ystradgynlais Community Hospital

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Copies of all reports, when published, will be available on our website or by contacting us:

In writing:

Communications Manager
Healthcare Inspectorate Wales
Welsh Government
Rhydycar Business Park
Merthyr Tydfil
CF48 1UZ

Or via

Phone: 0300 062 8163
Email: hiw@wales.gsi.gov.uk
Fax: 0300 062 8387
Website: www.hiw.org.uk

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Contents

1. Introduction

The inspection considered the diagnostic imaging (radiography) departments of the Victoria Memorial Hospital (Welshpool), Brecon War Memorial Hospital and Ystradgynlais Community Hospital within Powys teaching Health Board.

HIW is responsible for monitoring compliance against the Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) 2000 (and its subsequent amendments 2006 and 2011). We achieve this through a programme of assessment and inspection of services in the NHS and independent sectors that use ionising radiation.

The regulations place responsibilities on practitioners, operators, those who refer patients for medical exposures and the employers of these three groups. The employer is required under the regulations to create a framework for the safe, efficient and effective delivery of ionising radiation by the provision of written procedures and protocols. A breach of regulations can result in the issue of prohibition notices, improvement notices or criminal proceedings.

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 (justification)
- Patients receive no more exposure than necessary to achieve the desired benefit within the limits of current technology (optimisation)
- Practitioners and operators do not undertake any medical exposure without being adequately trained. Employers ensure adequate training is provided and records of this training are maintained.

We publish our findings within our inspection reports under four themes:

- Quality of the Patient Experience
- Compliance with IR(ME)R
- Quality of Management and Leadership

2. Methodology

During the inspection we gather information from a number of sources including:

- Information held by HIW
- Information provided by the department in the HIW Self Assessment Form
- Discussions with staff (where appropriate) and senior management
- Conversations with patients, relatives (where appropriate)
- Examination of a sample of patient records
- Examination of policies and procedures
- Examination of treatment rooms and the environment
- HIW patient questionnaires

At the end of each inspection, we provide an overview of our main findings to representatives of the service.

These inspections capture a snapshot of the standards of care patients receive; the extent to which services are meeting essential safety and quality standards and regulations and may point to wider issues about the quality and safety of services provided.

3. Context

Activity

Each year, the diagnostic imaging departments carry out approximately the following number of general 'plain film' radiography procedures:

- Victoria Memorial Hospital (Welshpool) - 4875
- Brecon War Memorial Hospital - 7275
- Ystradgynlais Community Hospital - 4597

The departments also carry out medical and antenatal ultra sound scanning procedures. In addition the department at Brecon War Memorial Hospital carries out dental radiography procedures.

Equipment

Each diagnostic imaging department had general X-ray equipment and ultrasound scanning equipment. All departments had mobile X-ray equipment and at Brecon War Memorial Hospital dental X-ray equipment was also used.

Environment

All departments consisted of between one and two general X-ray treatment rooms and designated waiting areas.

Staffing

In terms of staffing the following staff worked within the departments:

<u>Victoria Memorial Hospital</u>

- 1 visiting Radiologist (3 sessions per month via a service level agreement with Betsi Cadwaladr University Health Board)
- 2.82 whole time equivalent (WTE) Radiographers
- Medical Physics Expert (via a service level agreement with Betsi Cadwaladr University Health Board)
- 2.5 WTE Support Workers

<u>Brecon War Memorial Hospital</u>

- 1.3 WTE Radiographers plus 0.3 WTE Team Leader

- Visiting sonographers (2 days per week via a service level agreement with Abertawe Bro Morgannwg University Health Board)
- Medical Physics Expert (via a service level agreement with Velindre NHS Trust)

Ysradgynlais Community Hospital

- 1 visiting Radiologist (1 session per week via a service level agreement with Abertawe Bro Morgannwg University Health Board)
- 0.4 WTE Advanced Practice Radiographer (reporting radiographer)
- 1 WTE Radiographer plus 0.3 WTE Team Leader
- Visiting sonographers (2 sessions per week via a service level agreement with Abertawe Bro Morgannwg University Health Board)
- Medical Physics Expert (via a service level agreement with Abertawe Bro Morgannwg University Health Board)

4. Summary

Across all the departments we visited, we saw staff treating patients with respect and courtesy. Positive comments were also made by patients regarding the approach and attitude of the staff teams. We saw that all the departments were clean and tidy and efforts had been made to make waiting areas comfortable and welcoming.

Patients confirmed that they had not experienced delays when attending the departments for their diagnostic imaging procedures.

We found that the health board had identified an employer under IR(ME)R. In all sites the Chief Executive within the health board had ultimate responsibility for ensuring IR(ME)R was implemented within the service. At the time of our inspection there were two long term vacancies within the health board's IR(ME)R governance structure. Senior health board and hospital staff explained that considerable efforts had been made to recruit to these positions. As a result we were told that one of the positions had been filled and the person was due to take up post imminently.

The employer had written procedures in place as required by IR(ME)R and with the aim of delivering a safe and effective service to patients. We identified that a number of these needed to be reviewed and revised to promote further clarity for departmental staff teams. There was a written procedure for the entitlement and identification of referrers, practitioners and operators as defined under IR(ME)R. It became apparent, however, that there were individuals performing practitioner and operator functions and who, according to the written procedure, were not entitled by the employer to do so.

Arrangements were in place to ensure medical exposure doses are kept as low as reasonably practicable. Arrangements were also in place to pay special attention to optimising medical exposures for children, which we identified as noteworthy practice. We also identified noteworthy practice around establishing local diagnostic reference levels (DRLs), monitoring referral forms and informing referrers of their responsibilities.

We found strong and effective leadership being provided by lead radiographer staff. It was clear from our conversations with all levels of staff involved during the inspection that there was a strong commitment to learn from the inspection and to make improvements as appropriate.

As described previously, there were two vacancies within the health board's IR(ME)R governance structure and it is understood considerable efforts had been made and were continuing to address the remaining vacancy. In addition

plans were described to strengthen existing support from neighbouring health boards with whom the health board had existing service level agreements with. Whilst interim arrangements were described, it was evident that the clinical team leaders were having to take on additional work and responsibility, which may not be sustainable in the longer term.

This inspection has resulted in the need for the service to complete an improvement plan to address the improvement needed identified during this inspection. The details of this can be seen within Appendix A of this report.

5. Findings

Quality of the Patient Experience

Across all the departments we visited, we saw staff treating patients with respect and courtesy. Positive comments were also made by patients regarding the approach and attitude of the staff teams. We saw that all the departments were clean and tidy and efforts had been made to make waiting areas comfortable and welcoming.

Patients confirmed that they had not experienced delays when attending the departments for their diagnostic imaging procedures.

Prior to the inspection, we asked that the three radiography departments to distribute HIW questionnaires to patients to obtain their views on the services provided. We also sought patients' views by speaking to a number of those attending the departments during our inspection. In total, 42 questionnaires were completed and returned.

All patients/carers who provided comments told us they were very happy with the service they had received and praised the approach and attitude of the staff teams, the cleanliness of the departments and timeliness of being seen. Comments included,

> *'Great service right on my doorstep. Couldn't fault it. All staff friendly and helpful.'*
>
> *'…I find everyone very helpful.''*
>
> *'Minimal waiting time, lovely staff.'*
>
> *'…I have always received a fast efficient service.'*
>
> *'…the staff I encountered were polite, very helpful and was put at ease…'*
>
> *'The whole hospital is very clean it is a pleasure to visit.'*
>
> *'Doing a great job!'*
>
> *'Staff very helpful, we are so lucky to have this service in our community.'*
>
> *'Excellent service – Thank you.'*

We saw patients being treated with respect and kindness by departmental staff teams and this was reflected in the comments we received from patients. Changing cubicles were available within each of the departments we visited. These offered patients privacy should they need to change into/out of dignity (hospital) gowns.

We were provided with a tour of each department. We saw that all areas were clean and tidy. Patients who provided comments also told us that they were satisfied with the cleanliness of the departments they had visited.

Efforts had been made to make waiting rooms pleasant areas where patients could wait, for example we saw pictures were being displayed, low level music was played and reading material was available. The departments were clearly signposted and hospital staff were on hand to provide directions as needed. Patients who completed and returned questionnaires and those we spoke to told us they had been able to find their way to the departments easily.

Information leaflets were readily available within waiting areas. Patients who provided comments told us they felt they had been provided with enough information about their treatments.

Patients told us that they had not experienced any delays when attending for their treatments. Some patients added their own positive comments about the timeliness in which they had been seen.

Compliance with IR(ME)R

We found that the health board had identified an employer under IR(ME)R. In all sites the Chief Executive within the health board had ultimate responsibility for ensuring IR(ME)R was implemented within the service. At the time of our inspection there were two long term vacancies within the health board's IR(ME)R governance structure. Senior health board and hospital staff explained that considerable efforts had been made to recruit to these positions. As a result we were told that one of the positions had been filled and the person was due to take up post imminently.

The employer had written procedures in place as required by IR(ME)R and with the aim of delivering a safe and effective service to patients. We identified that a number of these needed to be reviewed and revised to promote further clarity for departmental staff teams. There was a written procedure for the entitlement and identification of referrers, practitioners and operators as defined under IR(ME)R. It became apparent, however, that there were individuals performing practitioner and operator functions and who, according to the written procedure, were not entitled by the employer to do so.

Arrangements were in place to ensure medical exposure doses are kept as low as reasonably practicable. Arrangements were also in place to pay special attention to optimising medical exposures for children, which we identified as noteworthy practice. We also identified noteworthy practice around establishing local diagnostic reference levels (DRLs), monitoring referral forms and informing referrers of their responsibilities.

Duties of Employer

The employer is defined in Regulation 2(1) as any natural or legal person, who, in the course of a trade, business or other undertaking, carries out (other than as an employee), or engages others to carry out, medical exposures or practical aspects, at a given radiological installation.

The Chief Executive of the health board was designated as the employer. This is commonly seen and is in keeping with the national guidance on implementing IR(ME)R legislation as it applies to diagnostic and interventional radiology.

The health board's *Ionising Radiation Safety Policy* document described that the Chief Executive was legally accountable for the safe delivery of ionising radiation used within the health board's premises. The document set out the employer's duties. These, however, could have been made clearer to describe in practical terms what happens operationally. It also needed to be updated to

reflect that fluoroscopy was no longer provided by the X-ray departments at the Victoria Memorial Hospital (Welshpool) or the Brecon War Memorial Hospital.

The above policy document included the organisational structure showing the lines of reporting, accountability and delegation in respect of IR(ME)R. At the time of our inspection, two positions were vacant, the Director of Therapy and Health Science and the Professional Head of Radiography. It was not clear from the document who had taken over responsibility for performing these roles in the interim.

From conversations with senior staff, it was evident that interim arrangements had been put in place but it seemed that additional work pressures were being placed on the clinical departmental teams despite these arrangements. Our further findings in this regard are reported under section *Management and Leadership* later in this report.

Given our findings the document should be reviewed and revised to reflect the current arrangements in respect of IR(ME)R. The employer must also ensure that any responsibilities delegated to staff are being carried out appropriately.

Improvement needed

The employer should make suitable arrangements to review and revise the Ionising Radiation Safety Policy to add clarity and to reflect current arrangements.

We saw that written procedures and protocols had been developed in accordance with IR(ME)R legislation. A number of the procedures, however, needed to be reviewed and revised to reflect current practice across the departments we visited.

We also saw that the arrangements were in place for quality assurance activity (including documentation), for the adequate training of practitioners and operators and for investigating and reporting incidents. These are all duties of the employer as required by IR(ME)R. Our findings, which are described throughout this report, indicated that the governance associated with these duties needed to be improved.

Procedures and Protocols

Regulation 4(1) and 4(2) requires the employer to have written procedures and protocols in place.

Prior to our inspection visit we were provided with a copy of the employer's *Standard Operating Procedures in Radiography*. At the time of our inspection,

this had been updated and we were provided with a revised version. We confirmed that this revised document applied across each of the radiography departments we inspected.

Overall, the standard operating procedures were detailed and included those employer's procedures required under IR(ME)R. Senior clinical departmental staff described the process for reviewing written procedures and protocols and the system for informing staff of any changes made. Departmental staff we spoke to also confirmed they were made aware of changes by the system described.

Through conversations with senior clinical departmental staff during the course of our inspection, it became apparent that a number of the standard operating procedures needed to be reviewed and revised to ensure that they fully reflect current practice and promote further clarity for the staff that use them. Our specific findings on these can be found further on in this section of the report.

Our inspection focussed on the radiography departments at the three hospitals we visited. We took the opportunity, however, to visit theatres within Brecon Memorial Hospital as it was apparent that X-ray equipment was being used in theatre which was not under the jurisdiction of the radiography department.

We found that the theatre staff were unaware that the employer's standard operating procedures had been updated. Rather they had previous versions, which were out of date. We informed senior hospital staff of our findings so that up to date versions could be provided. They agreed to do this. Given our findings, the employer needs to ensure that appropriate arrangements are in place to ensure all relevant staff are made aware of and supplied with current policies and procedures.

Improvement needed

The employer must make arrangements to ensure that all relevant staff are made aware of and supplied with current policies and procedures concerning IR(ME)R.

In addition there were no up to date training records available and as required under IR(ME)R for staff working within theatre. We have described the improvement needed in this regard later in this report (see sub section *Entitlement*).

Incident notifications

Regulation 4(5) states that where an incident has occurred in which a person, whilst undergoing a medical exposure, has been exposed to ionising radiation

much greater than intended, this should be investigated by the healthcare organisation and reported to the appropriate authority.

The employer had a written procedure for reporting, recording and investigating incidents under IR(ME)R.

The written procedure clearly described the circumstances when an incident must be reported and how; together with the information that needs to be submitted via the health board's electronic reporting system. Reference was made, however, (within Appendix 1 of the written procedure) to using DRL multipliers. We discussed this with one of the Radiation Protection Advisers, who agreed that this required clarifying. The employer should, therefore, make arrangements to review and revise the written procedure accordingly.

Certain incidents need to be reported to HIW and the written procedure reflected this. We recommended, however, that the procedure be reviewed and revised to ensure staff are aware of the current information HIW requires, as the employer's written procedure was out of date in this regard.

Improvement needed

The employer's written procedure (Procedure J) concerning reporting incidents should be reviewed and revised to ensure staff are aware of current information required by HIW when reporting incidents under IR(ME)R.

Senior departmental staff confirmed that there had been no incidents that required reporting to HIW. Whilst we were unable, therefore, to see examples of learning from incidents, the procedure referred to the need for follow up action being taken to reduce the likelihood of similar incidents happening again.

Diagnostic reference levels

Regulation 4(3)(c) requires the employer to establish diagnostic reference levels (DRL) for radio diagnostic examinations. These are not expected to be exceeded for standard procedures when good and normal practice regarding diagnostic and technical performance is applied.

The employer had a written procedure for monitoring diagnostic reference levels (DRLs) and we saw that the employer had established DRLs for examinations performed within the radiography departments we visited.

As well as national DRLs being available, we saw that local DRLs had also been established to take account of the local population and equipment used.

We identified this as noteworthy practice. DRLs and local DRLs were available and visible within the radiography departments we visited.

We looked at a sample of patient records and saw that exposure doses had been recorded for audit and monitoring purposes. Staff were aware of the employer's procedure to follow should a DRL been exceeded.

Entitlement

Regulation 2(1) requires that duty holders must be entitled, in accordance with the employer's procedures for the tasks they undertake. Regulations 11(1) and 11(4) states that practitioners and operators must also be adequately trained and the employer must keep up to date training records of this training.

IR(ME)R defines four duty holders, namely the employer, referrer, practitioner and operator.

The employer had a written procedure for the entitlement and identification of referrers, practitioners and operators as defined under IR(ME)R. These duty holders were identified by staff group and the procedure set out the scope of practice and expected level of training for each staff group.

We saw that references were made to both dental practitioner and dental professionals. We recommended that the written procedure be revised to clearly define the category of dental practitioner/professional that was being referred to as this was unclear to the inspection team and the clinical staff interviewed. The employer may wish to refer to and use those categories used by the General Dental Council (GDC).

Through discussions with senior staff it became apparent that there were individuals performing practitioner and operator functions and who, according to the written procedure, were not entitled by the employer to do so. For example, we were informed that Consultant Orthopaedic Surgeons and a Consultant Podiatrist performed practitioner and operator functions at Brecon War Memorial Hospital, when using the Mini C Arm Fluoroscopy unit in theatres. In addition, we were also told that General Practitioners performed operator functions at Victoria Memorial Hospital and General Practitioners and Advanced Nurse Practitioners performed operator functions at Brecon War Memorial Hospital and Ystradgynlais Community Hospital when clinically evaluating images which are then acted upon to treat patients. Training records were not available for inspection for these staff.

Improvement needed

The employer must make suitable arrangements to ensure that individuals are appropriately trained and entitled as practitioners and operators to perform the tasks required.

The employer's written procedure (Procedure C) concerning entitlement and identification of duty holders must be reviewed to clearly set out staff groups, scope of practice and training requirements for entitled referrers, practitioners and operators.

We saw a sample of training records for practitioners and operators who worked as radiographers within the three radiography departments we visited. In the main these demonstrated that these duty holders had attended training and when they had been deemed competent. Where there were gaps we highlighted these to senior departmental staff and it was encouraging to find that arrangements were being made to address this during our inspection.

HIW acknowledges that many of the staff were experienced and had worked within the departments for a long time. We also saw evidence of continuing learning within individuals' continuing professional development (CPD) files. We recommended, however, that those individuals had retrospective evidence of appropriate training on file for completeness. This would formally demonstrate their training and competence to be entitled as duty holders.

Referral Criteria

Regulation 4(3)(a) states that the employer shall establish recommendations concerning referral criteria for medical exposures, including radiation doses and shall ensure that these are available to the referrer

The employer had a written procedure concerning referrals for medical exposures.

This stated that all medical and dental qualified staff were entitled to make referrals. It also described that arrangements for referrers who are non-medically trained individuals, for example, Advanced Nurse Practitioners working within the health board, are identified within local policies. Departmental staff we spoke to were aware of the local arrangements in place and applicable in their area.

The written procedure included the referral criteria to be used by referrers for both general radiography and dental radiography. It was unclear, however, which version of referral criteria for general radiography was in use.

The letter sent out to practice managers informing referrers of the responsibilities was noted as good practice. During discussions with staff it became apparent that this letter could have a wider scope and be used to remind and inform them of additional duty holder responsibilities.

There was a clear process for the staff to follow around inadequate referrals which included a log of returned forms. This was noted as noteworthy practice where learning and action was taken if trends became apparent.

The written procedure clearly set out how referrals for medical exposures were to be made and covered how to request an urgent referral.

Justification of Individual Medical Exposures

Regulations 6(1)(a) and 6(1)(b) require that all medical exposures should be justified and authorised prior to the exposure. The practitioner is responsible for the justification of the medical exposure. Authorisation is the means by which it can be demonstrated that justification has been carried out and may be undertaken by the practitioner or, where justification guidelines are used, an operator.

The employer had a written procedure concerning justification and authorisation of medical exposures. This clearly described that all radiographers working in the health board, once trained and deemed competent, were entitled to act as practitioners to justify and authorise exposures.

The procedure set out in detail the arrangements for the justification and authorisation of exposures. We did, however, recommend that the written procedure be revised to provide greater clarity around the arrangements for justifying exposures 'Out of Hours' as staff where unclear as to what this section of the flowchart referred to . We also recommended that reference to the Examination and Equipment Protocol be reviewed as staff we spoke to didn't recognise this term.

Improvement needed

The employer's procedure (Procedure F) concerning justification and authorisation should be reviewed and revised as appropriate to clarify the arrangements for justifying exposures 'Out of Hours' and the reference to the Examination and Equipment Protocol.

We saw examples of a number of completed referral forms in each of the radiography departments visited, which had been correctly completed and signed by practitioners to show that these medical exposures had been justified and authorised.

Identification

Schedule 1(a) states that written procedures for medical exposures should include procedures to correctly identify the individual to be exposed to ionising radiation.

The employer had written procedures concerning the identification of patents.

These clearly stated those staff groups responsible for confirming the identity of patients and described in detail the procedures to follow. We recommended, however, that the written procedures include more detail as to the additional checks to be made by operators in the event of a minor discrepancy in patient details being identified.

The written procedures set out the arrangements where two operators were involved in conducting a procedure. The written procedures also described the action to be taken where patients were unable to confirm their identity, for example, due to sensory loss or those without mental capacity.

Departmental staff we spoke to were able to describe the procedures to follow and we were assured that they were aware of the action to take in the event of any discrepancies being identified.

Improvement needed

The employer's procedures (Procedure A) concerning patient identification should include more detail as to the additional checks to be made where minor discrepancies in patient details are identified.

Females of child bearing age

Schedule 1 (d) states that written procedures for medical exposures should include procedures for making enquiries of females of child bearing age to establish whether the individual is or maybe pregnant.

The employer had a written procedure concerning the making of enquires of females of childbearing age. The purpose of this is to establish whether the individual is or may be pregnant or breastfeeding.

This provided detailed instructions for staff to follow depending on the outcome of the enquiry 'Are you, or might you be pregnant?'. Departmental staff we spoke to were able to demonstrate they were aware of the correct procedure to follow.

We saw information for female patients was displayed, advising them to inform operators if they are or may be pregnant.

Medico-Legal Exposures

Schedule 1 (c) states that written procedures for medical exposures shall include procedures to be observed in the case of medico-legal exposures

Of the departments we visited, we were told that medico-legal exposures were only performed at Ystradgynlais Community Hospital. These types of exposure were limited to chest X-rays only and to assess industry related illnesses of the lungs.

The employer had a written procedure concerning medico-legal exposures. The procedure stated that these types of exposures were only to be performed at district general hospitals. The written procedure should, therefore, be reviewed and revised as necessary to set out the arrangements for the type of medico-legal procedures that may be performed, if any, at community hospitals.

Improvement needed

The employer's procedure (Procedure E) concerning medico-legal procedures should be reviewed and revised as necessary to clarify what medico-legal procedures are performed (if any) at community hospitals within the health board.

Optimisation

Regulation 7(1) requires that doses for all diagnostic medical exposures are kept as low as reasonably practicable (ALARP) consistent with the intended purpose.

The employer had a written procedure concerning the optimisation of exposures.

This set out the arrangements for ensuring that medical exposures are kept as low as reasonably practicable (often referred to as ALARP). We found that opportunities had been taken to optimise medical exposures and this was reflected in the records we saw. The title of the written procedure did not reflect clearly the content of the procedure and so the employer may wish to consider giving the procedure a different title so that it is more meaningful to staff teams.

Paediatrics

Regulation 7 (7) (b) states that the practitioner and operator shall pay special attention to medical exposures of children.

The employer's written protocols concerning justification and authorisation of exposures and quality assurance made reference to special attention being needed when optimising medical exposures for children.

We saw clear protocols for medical exposures of children at each department we visited. Senior departmental staff across the departments we visited also confirmed that support and advice was available from a Paediatric Radiologist in this regard. We identified this as noteworthy practice.

Clinical evaluation

Regulation 7(8) states that the employer shall ensure a clinical evaluation of the outcome of each medical exposure is recorded in accordance with the employer's procedures.

The employer had written procedures concerning the identification of referrers and evaluation of exposures.

These set out the arrangements and the staff group that were entitled to assess and record the outcome of medical exposures. It became apparent through our conversations with senior departmental staff that there were individuals who were clinically evaluating exposures who, according to the written procedure concerning entitlement, were not entitled by the employer to do so.

Clinical evaluation is an entitled operator function and we have already identified that improvement was needed around entitlement of operators earlier in this report (see sub section *Entitlement*)

Medical Research Programmes

Schedule 1(h) requires there to be a procedure in place for medical exposures undertaken as part of research programmes.

We were told that medical exposures as part of research programmes were not undertaken at any of the radiography departments we visited. The employer may wish to reflect this within the relevant written standard operating procedure.

Clinical audits

Regulation 8 states that employer's procedures shall include provision for carrying out clinical audits as appropriate.

Information provided to HIW prior to our inspection visits referred to a number of clinical audits that had been carried out across the departments we visited.

During our inspection we saw evidence of the audits that had been done. We were told that results of this audit were shared at the Annual Radiation Protection Committee to identify and share learning.

Expert advice

Regulation 9(1) and 9(2) states that the employer shall ensure a Medical Physics Expert (MPE) is available in standardised therapeutic nuclear medicine practices, in diagnostic nuclear medicine practices and involved as appropriate in every other radiological medical exposure.

It was evident from our meetings with senior departmental staff within the three departments we visited that Medical Physics Experts (MPEs) from different health boards under contract were involved and provided input as appropriate.

Equipment

Regulation 10 requires that the employer has an up to date inventory of equipment that contains the name of manufacturer, model number, serial number, year of manufacture and the year of installation.

The employer provided up to date inventories of radiological equipment used within the three radiography departments we visited. Generally these contained all the information required under IR(ME)R. Where we identified missing information, we informed senior hospital and departmental staff who agreed to make arrangements to include this on the inventories.

Management and Leadership

We found strong and effective leadership being provided by lead radiographer staff. It was clear from our conversations with all levels of staff involved during the inspection that there was a strong commitment to learn from the inspection and to make improvements as appropriate.

As described previously, there were two vacancies within the health board's IR(ME)R governance structure and it is understood considerable efforts had been made and were continuing to address the remaining vacancy. In addition plans were described to strengthen existing support from neighbouring health boards with whom the health board had existing service level agreements with. Whilst interim arrangements were described, it was evident that the clinical team leaders were having to take on additional work and responsibility, which may not be sustainable in the longer term.

Team leaders were responsible for the day to day management of the radiography departments. There was one team leader responsible for the department at the Victoria Memorial Hospital and one who was responsible for Brecon War Memorial Hospital, Ystradgynlais Community Hospital and Llandrindod Wells Hospital. The latter sharing management time between the three departments. We found strong and effective leadership being provided by the team leaders.

Earlier within this report we have described that, at the time of our inspection, there were two vacancies within the health board's IR(ME)R governance structure. Whilst we were told that interim arrangements were in place, it was evident that the team leaders were having to take on additional work and responsibility that would have been those of the Professional Head of Radiography. This was in addition to their substantive roles and responsibilities for the day to day management of their own departments. These arrangements may not be sustainable in the longer term.

Senior health board and hospital staff gave a firm verbal assurance that considerable efforts had been made to appoint to these two key positions. We were told that a new Director of Therapy and Health Science had been appointed and the person was due to take up post imminently. In addition they described plans to strengthen existing support from neighbouring health boards with which the health board had existing service level agreements in relation to IR(ME)R.

Regarding the post of Professional Head of Radiography, HIW require an update on the progress made in appointing to this post together with details of how the responsibilities associated with this position (as detailed within the *Ionising Radiation Safety Policy*) are being fulfilled in the interim.

Improvement needed

The employer must provide HIW with an update on the progress in appointing a Professional Head of Radiography and details of how the responsibilities associated with this position are being effectively fulfilled in the interim period.

It was clear from our conversations with all levels of staff involved during the inspection that they were committed to providing patients with a safe and effective service. Whilst we did not identify any patient safety issues during our inspection, our findings demonstrated that governance systems needed to be improved. It is anticipated that when a Professional Head of Radiography is appointed, improvements should be made in this regard.

During our verbal feedback meetings we spoke to senior departmental staff, senior hospital managers and a member of the health board's executive team. All were receptive to our comments and demonstrated a strong commitment to learn from the inspection and to make improvements as appropriate.

6. Next Steps

This inspection has resulted in the need for the service to complete an improvement plan to address the recommendations identified during this inspection. The details of this can be seen within Appendix A of this report.

The improvement plan should clearly state when and how the findings identified within the diagnostic imaging departments at Victoria Memorial Hospital, Brecon War Memorial Hospital and Ystradgynlais Community Hospital will be addressed, including timescales. The health board should ensure that the findings from this inspection are not systemic across other departments/ units of the health board.

The improvement plan, once agreed, will be published on HIW's website and will be evaluated as part of the ongoing inspection process.

Appendix A

IR(ME)R: **Improvement Plan**

Hospitals: **Victoria Memorial Hospital (Welshpool), Brecon War Memorial Hospital and Ystradgynlais Community Hospital**

Department: **Diagnostic Imaging**

Date of Inspection: **13 – 15 September 2016**

Page Number	Improvement needed	Service Action	Responsible Officer	Timescale
	Quality of the Patient Experience			
-	No improvement plan required.			
	Compliance with IR(ME)R			
11	The employer should make suitable arrangements to review and revise the Ionising Radiation Safety Policy to add clarity and to reflect current arrangements.	Amend The Ionising Radiation Safety Policy to reflect employers responsibilities by adding the following paragraph under 4.1: Under the ionising radiation legislation (SI 1999, SI 2000, SI 2006, SI 2011) the Employer is ultimately responsible for the radiation protection	DoTHS/HoTh/ PRPC	1st February 2017

Page Number	Improvement needed	Service Action	Responsible Officer	Timescale
		of all workers, patients and members of the public on its premises and for work with ionising radiation carried out by its staff at other sites. For the PTHB this responsibility rests with the Chief Executive. The correct version of policy is Version 2 which was been signed by the Chief executive in August 2016. A meeting of the Radiation Protection Committee has been convened to make appropriate amendments to the Radiation Safety Policy in January 2017. The Policy will be amended to accurately reflect where fluoroscopy is being used in the Health Board.	RPC	1st February 2017
12	The employer must make arrangements to ensure that all relevant staff are made aware of and supplied with current policies and procedures concerning IR(ME)R.	1. All relevant and current policies/procedures are available on the PTHB Intranet. 2. Team Leads within radiology have removed all out-of-date policies from local departments. 3. It is the responsibility of the Team Leads/Managers to ensure that all staff are aware of how to access policies and it is	Team Leaders/Managers	Radiology - **Achieved**

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		an individual staff responsibility to ensure Policies are read and abided by. 4. This is recorded on Staff Status Spreadsheet in use within radiology. A Staff Spreadsheet will be introduced within Theatre.	Theatre Manager	31st January 2017
		5. The Staff Induction Programme also includes policies.	N/A	N/A
		6. To be highlighted in next Team Meetings and minuted accordingly.	Radiography Team Leaders Theatre Manager	**Achieved** End December 2016
13	The employer's written procedure (Procedure J) concerning reporting incidents should be reviewed and revised to ensure staff are aware of current information required by HIW when reporting incidents under IR(ME)R.	The Procedure is clearly defined in the Policy, including a hyperlink to Datix Reporting System. The hyperlink to the HIW requirement for reporting incidents is to be inserted in Appendix 3, in place of text. Staff will be reminded of this requirement via team meetings (with minuting for evidence of discussion).	Team Leads	1 February 2017

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		Following discussions with MPE and Governance Lead in BCUHB an extraordinary RPC will be held in January 2017 to ratify SOPs earlier than scheduled meeting in July 2017.	PRPC	1st February 2017
15	The employer must make suitable arrangements to ensure that individuals are appropriately trained and entitled as practitioners and operators to perform the tasks required. The employer's written procedure (Procedure C) concerning entitlement and identification of duty holders must be reviewed to clearly set out staff groups, scope of practice and training requirements for entitled referrers, practitioners and operators.	A review of procedure C will be undertaken to ensure it covers entitlement and training of various IR(ME)R functions within different parts of the Health Board and specifically for use of radiation outside of Radiology. Amend Annex B and C for Practitioner and Operator, including entitlement on visiting Consultants using the mini C Arm. Registration with HCPC: HCPC checks are undertaken as part of recruitment procedure. Registration is recorded on ESR and linked to PADR process. Records are also included in Staff Status Spreadsheet. The Director of Therapies & Health Science receives regular correspondence from HCPC and WOD regarding suspensions and any de-registrations. Training attended is recorded on ESR and linked to PADRs. Entitlement for non-PTHB staff is via SLA contracted service provider (including holding of	DoTHS/HOTh PRPC	1st February 2017 1st February 2017

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		training records). Theatre Manager is to hold up-to-date records of all required training for visiting operators and practitioners performing procedures in PTHB.		**Actioned**.
16	The employer's procedure (Procedure F) concerning justification and authorisation should be reviewed and revised as appropriate to clarify the arrangements for justifying exposures 'Out of Hours' and the reference to the Examination and Equipment Protocol.	Staff have been reminded of the out-of-hours procedure for when/if they have problems with justifying an examination. Amend procedure to give indication of out of hours radiologist available for advice and submit to PRPC	Radiography Team Leaders DoTHS/HoTh	31 December 2016 1st February 2017
17	The employer's procedures (Procedure A) concerning patient identification should include more detail as to the additional checks to be made where minor discrepancies in patient details are identified.	Amend procedure to provide advice on defining major and minor discrepancies. The existing flowchart is to be reviewed to reflect the amendments.	DoTHSA/HoTh	1st February 2017
18	The employer's procedure (Procedure E) concerning medico-legal procedures should be reviewed and revised as necessary to clarify what medico-legal procedures are performed (if any) at community hospitals	Amend policy at RPC meeting in January 2017 to reflect that Cat II procedures are carried out in PTHB.	DoTHS/HoTh	1st February 2017

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	within the health board.			
	Management and leadership			
22	The employer must provide HIW with an update on the progress in appointing a Professional Head of Radiography and details of how the responsibilities associated with this position are being effectively fulfilled in the interim period.	Service Specification for interim Head of Radiography clinical governance arrangements with neighbouring Health Boards completed and approved. Honorary Contract to be finalised. Requirements under IR(ME)R are currently delegated to Head of Therapies (HoTh) and supported by Team Leads pending recruitment of a permanent Head of Radiography for PTHB.	DoTHS DoTHS	16th December 2016 **Actioned** Review on 1st February 2017

Executive Lead: David Murphy, Director of Therapies and Health Science (DoTHS)

Operational Lead: Lorraine Haynes, Head of Therapies (HoTh)

Updated: December 2016