

**Ionising Radiation
(Medical Exposure)
Regulations Inspection
(announced)
Spire Hospital
Cardiff**

15th October 2015

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1. Introduction

Healthcare Inspectorate Wales (HIW) is the independent inspectorate and regulator of all health care in Wales.

HIW's primary focus is on:

- Making a contribution to improving the safety and quality of healthcare services in Wales
- Improving citizens' experience of healthcare in Wales whether as a patient, service user, carer, relative or employee
- Strengthening the voice of patients and the public in the way health services are reviewed
- Ensuring that timely, useful, accessible and relevant information about the safety and quality of healthcare in Wales is made available to all

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)
- Volunteers in medical research programmes are protected

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

- Quality of the Patient Experience
- Compliance with IR(ME)R
- Staffing Management and Leadership
- Delivery of a Safe and Effective Service

2. Methodology

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

- Information held by HIW
- Interviews 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 imaging 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 to ensure that they receive appropriate feedback.

Inspections capture a snapshot on the day of the inspection of the extent to which services are meeting essential safety and quality standards and regulations

3. Context

A compliance inspection against the Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) for diagnostic imaging was undertaken on 15th October 2015 at the radiology department at Spire Hospital, Cardiff.

Spire Hospital provides a range of private healthcare services which include outpatient consultations and clinics, physiotherapy, rehabilitation and diagnostic services along with a full range of surgery and inpatient services.

The diagnostic imaging department located in the hospital provides general radiology, fluoroscopy, CT, mammography, ultrasound, dental and interventional radiology.

Services are supported by a total of 39 consultant radiologists all of whom have practising privileges within Spire Hospital.

4. Summary

This was the first time HIW had undertaken an IR(ME)R inspection of the radiology department at Spire Hospital, Cardiff. The inspection was extremely well received by both management and staff and all required documentation was completed and received within timescales required.

The team within the department approached the inspection in a very positive way and they were keen to receive feedback to support their approach to maintaining high standards of care and continuous improvement. We also received a positive welcome from patients who provided feedback on their experiences.

The inspection team did not identify any breaches in relation to the Regulations and that there were no concerns about practice in relation to IR(ME)R.

Whilst we were satisfied there were no safety concerns, some key issues for action were identified during our visit. These were raised and discussed at the time of the inspection and focussed mainly on documentation. Details of these are highlighted and described in the body of the report.

At the end of the inspection we provided feedback on our main findings and key recommendations. The management team will be submitting an improvement plan in response to our findings.

5. Findings

Quality of the Patient Experience

Patients told us the quality of their experience at Spire hospital was very good. Positive feedback was received about the staff, the department, the information they received. Everyone also stated that they had not experienced any delays to treatment.

In order to gather the views of patients and their families about the service they received, we issued a brief questionnaire to a number of individuals.

Ten questionnaires were issued and all of them were completed and returned. The responses contained within questionnaires we received were mainly positive. For example:

- It is always very clean and tidy
- It was very easy to arrange an appointment
- The information received was good and appropriate
- All treatments have been very well explained to me

Where we received negative comments, these concerned issues with appointments, such as information and scheduling.

“I didn’t receive a confirmation letter in the post and had called three times to request one.”

“My initial appointment was re-scheduled and it had not been amended in the appointments department which caused some confusion.”

Feedback was particularly positive about staff, with comments including:

“They are all very friendly”

“Friendly, professional and very helpful”

“Pleasant and efficient”

“Fantastic service all round”

Compliance with IR(ME)R

Duties of Employer

The employer is defined in IR(ME)R 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.

A document entitled 'Information, Policies and Guidelines for Diagnostic Imaging Departments' is in place. This provides a framework for meeting the requirements of IR(ME)R, (as well as a number of other regulations) and is used throughout Spire Healthcare Imaging Departments.

In addition to the above there is a document within the diagnostic Imaging department which contains the employers procedures as required under IR(ME)R. This document clearly describes the employer at Spire Hospital, Cardiff as the Hospital Director and clearly sets out the responsibilities and duties of the employer and how and to whom these tasks are delegated.

Procedures and Protocols

The regulations require the employer to have written procedures and protocols in place.

The document entitled 'Radiation Protection Local Rules and IR(ME)R Employer Procedures' contained all the procedures as required under IR(ME)R however they tended to lack detail in terms of how things are done. In many cases the processes carried out by staff were appropriate however the procedures often did not reflect practice.

Work needs to be undertaken to review the content of some of the procedures, details of which are included in the relevant sections of this report.

There is a robust process in place around document control which is overseen by the Risk Manager and Governance Lead. All new or amended policies and procedures are issued with a 'document transmission sheet' for the manager who signs to say they have received it along with a 'read and sign' sheet for the staff.

The quality assurance procedure as required under Schedule 1(e) needs to be reviewed as the current procedure focuses on equipment rather than the systematic review of the documentation required under IR(ME)R.

The protocols for general radiography were in place and were fit for purpose, however there were no protocols in place for cardiology. This needs to be addressed as the cardiac catheterisation lab has been operational for 18 months.

Recommendation

Review the content of the document 'Radiation Protection Local Rules and IR(ME)R Employers Procedures' to ensure it accurately reflects the requirements under IR(ME)R and that it contains sufficient detail that reflect local practices.

Protocols need to be developed for the cardiac catheterisation lab.

Incident notifications

IR(ME)R 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 (HIW).

A procedure is in place regarding accidental or unintended exposures which describes a clear process for reporting, with all adverse events and near misses recorded on DATIX. If a serious adverse event is reported then a senior manager is assigned to undertake an investigation along with a root cause analysis.

We were informed that there had been one notifiable incident which had occurred in the last two years and all appropriate details were provided to us prior to and during the inspection. We were satisfied that all appropriate action had been taken and that learning as a result of the incident had happened in relation to changes to the referral procedure. Information had also been shared with the relevant Health Board about the investigation and findings that emerged.

A monthly hospital wide report is prepared to share information about any adverse events or near misses. This report is also shared with the clinical audit committee and other relevant groups to facilitate the sharing of learning.

Diagnostic reference levels

The regulations require the employer to establish diagnostic reference levels (DRLs) for radio diagnostic examinations stating that these are not expected to be exceeded for standard procedures when good and normal practice regarding diagnostic and technical performance is applied.

A procedure was in place in relation to DRLs however it was brief. There is no information contained within the procedure that describes where DRLs are displayed nor what to do if they are consistently exceeded.

Work had been progressed to establish local DRLs for a number of examinations and these were displayed in all examination rooms and in CT. It was pleasing to note that local data is available upon which to base the local DRLs. All DRLs in use at Spire Hospital are reviewed on an annual basis. This work was positive however for some examinations both local and National DRLs were displayed which some staff may find confusing.

Recommendation

The procedure for the use of DRLs needs to be reviewed to include local information to guide staff about their use and what to do if consistently exceeded.

The way DRLs are displayed needs to be reviewed and consideration should be given to having one figure for each common examination to avoid confusion for staff.

Duties of Practitioner, Operator and Referrer

Entitlement

The regulations require that duty holders must be entitled, in accordance with the employer's procedures for the tasks they undertake.

The entitlement procedure needs to be reviewed and amended accordingly along with the relevant appendices. References to Korner A and B should be removed as these are no longer used. There are also columns in some of the appendices that are unclear and consideration could be given to removing them if they no longer reflect practice.

The procedure should reflect the need for referrers and practitioners to be registered healthcare professionals. It also needs to be developed further to reflect current practice and provide detail as to how duty holders are entitled to carry out the functions along with the need for training records which are required to support their scope of practice.

Recommendation

The entitlement procedure and associated appendices needs to be reviewed and amended to reflect current practice and requirements.

Referral Criteria

IR(ME)R 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 Royal College of Radiologists referral guidelines 'iRefer, Making the Best Use of Clinical Radiology Services' are the referral criteria in use at Spire Hospital, Cardiff. Copies of these guidelines are made available in the hospital consulting rooms and electronically.

There are a number of ways referrers external to the organisation are reminded of the referral criteria and their responsibilities under IR(ME)R. Information is issued to GPs quarterly via a newsletter and there are two GP liaison officers working within the hospital who regularly meet with practices and distribute relevant information.

The procedure for referral should be reviewed for greater accuracy and the following issues should be addressed:

- Reference to custom's officers need to be removed as this group cannot be referrers as they are not registered healthcare professionals.
- We were assured that referrals marked 'dictated not signed by' would never happen and as such, should be removed.
- There is no reason to include reference to urgent verbal requests as there is always a RMO present to write a referral.
- There is a need to look at the process for scanned surgeons signatures.

In addition we also identified the fact there was no referral criteria available for dental imaging.

Recommendation

The procedure for referral should be reviewed and revised and referrers made aware of any changes.

Referral criteria for dental imaging needs to be made available.

Justification of Individual Medical Exposures

The regulations 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.

Radiographers are entitled as practitioners for general radiography. However there is reference in the procedure to authorisation guidelines which does not reflect practice and should be removed.

Recommendation

The procedure for justification should be reviewed to ensure the details contained within it are relevant and accurate.

Identification

The regulations state that written procedures for medical exposures should include procedures to correctly identify the individual to be exposed to ionising radiation.

A patient identification procedure was in place however it lacked detail and the following issues were highlighted:

- There was no reference in the procedure to describe how patients were identified in theatre or what happens in an emergency if there is no wristband present.
- There was no reference to accessing translation services in the patient should this be required to identify a patient.
- The good practice which had been implemented in the department in the use of the 'Pause and Check' initiative was not reflected in the procedure. This initiative is aimed at reducing the likelihood of identification errors and it's implementation by the service is positive and could be reflected in the procedure.

Recommendation

To review and develop the patient identification procedure to include the points identified.

Females of child bearing age

IR(ME)R 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.

There is a procedure in place for checking the pregnancy status of females of child bearing age which also includes reference to the process for checking pregnancy in theatres.

There is no reference in the procedure however to pregnancy testing and how this happens and neither is there reference to language barriers and any support needed as part of this process.

Whilst not an IR(ME)R issue, it would be good practice to include reference to the child protection procedure for situations where a child provides a positive response to the pregnancy question.

All staff we spoke to at the time of the visit were clear about how they check the pregnancy status of females and they all referenced how they use the pregnancy risk assessment form, a copy of which was given to us at the time. This was extremely positive however there is no reference made to it in the procedure.

Recommendation

Work needs to be undertaken to consolidate this procedure to ensure all information is contained within it regarding checking the pregnancy status for females of child bearing age.

In the revised procedure it would be good practice to include reference to the child protection procedure should a minor provide a positive response to the pregnancy question.

Medico-Legal Exposures

The regulations state that written procedures for medical exposures shall include procedures to be observed in the case of medico-legal exposures.

The medico-legal procedure contained references to some requests that are occupational rather than medico-legal. These are referred to in the procedure as 'employment – aircraft pilots, divers, asbestos workers and professional sportsmen'. It is important that the content of the procedure reflects the title.

Recommendation

The title of the procedure should be changed to 'medico-legal and occupational exposures' or the reference to occupational exposures should be removed from the procedure.

Optimisation

The regulations require that doses for all diagnostic medical exposures are kept as low as reasonably practicable (ALARP) consistent with the intended purpose.

The optimisation tools identified within the optimisation procedure are positive however there are some details within it that could be reviewed including:

- The procedure fails to recognise or highlight the positive work that has been undertaken in the department to establish local DRLs, audit programme and near miss reporting.
- Step iv in the procedure which refers to differences in practice for the non pregnant and the pregnant patient is unnecessary as the patient has already been confirmed as non pregnant.
- Steps referred to as xvi, xvii and xviii are all good practice however they are post procedure and as such are not optimisation.

Recommendation

The procedure for optimisation could be reviewed to include references to the positive work being undertaken in the department and make amendments as highlighted above.

Reducing the Probability and Magnitude of accidental or unintended doses

The regulations state that procedures to ensure that the probability and magnitude of accidental or unintended doses to patients from radiological practices are reduced so far as reasonably practicable (ALARP) for the intended purpose

The procedure for minimising the probability and magnitude of accidental and unintended doses to patients as required in Schedule 1(k) of the regulations is in place.

It was positive to note that in line with the adverse incident policy all near misses are reported and investigated. It is important, however, that reference to timescales for investigating incidents is included in the procedure

Recommendation

The adverse incident policy should be reviewed to include references to timescales for investigating incidents.

Clinical evaluation

The regulations state that the employer shall ensure a clinical evaluation of the outcome of each medical exposure is recorded in accordance with written procedures.

A procedure for clinical evaluation was in place which was fit for purpose. At the time of the visit a discussion took place regarding clinical evaluations that are undertaken outside radiology, for example, fluoroscopy in theatre and whether these could be audited to ensure they are being carried out.

Recommendation

Clinical evaluations that are undertaken outside of radiology should be audited to ensure they are being completed.

Medical Research Programmes

Schedule 1(h) of IR(ME)R requires there to be a procedure in place for medical exposures undertaken as part of research programmes. At the time of the visit we discussed the procedure for undertaking research studies. We discussed how staff were able to identify research exposures and the benefits of using a research folder to allow staff to know what the target dose and dose constraint is for each project and the specific views undertaken.

Recommendation

To consider implementing the use of a research folder to support staff to be clear about research exposures and the associated target doses/dose constraints

Paediatrics

IR(ME)R states that the practitioner and operator shall pay special attention to the optimisation of medical exposures of children.

We were informed that very little paediatric work is undertaken at the department however IR(ME)R states that special attention needs to be made to the optimisation of exposures of children. There is no reference to this in the procedure however we were informed that there is a paediatric radiologist working at the hospital

Recommendation

Reference could be made in the optimisation procedure of the importance of special attention to optimising the exposures of children and how this is demonstrated at Spire Hospital Cardiff.

Clinical audits

IR(ME)R states that employer's procedures shall include provision for carrying out clinical audits as appropriate.

There is a local audit programme in place and there was evidence of a number of audits having been undertaken at the hospital which was positive. Some of the audits carried out included:

- Regular dose audits
- image quality review
- Intra-orbital foreign body reporting

Expert advice

IR(ME)R states that the employer shall ensure a Medical Physics Expert (MPE) is involved as appropriate in every radiological medical exposure

Medical physics expertise is provided to the service by the Radiation Protection Advisors who also act as MPEs. The MPE undertakes annual dose audits and equipment testing at each site and is also available for advice in the event of an unintended or accidental exposure.

The MPE is also available to the service for consultation and advice at any time and also attends the Radiation Protection Committee.

Equipment

The regulations state that the employer shall keep an up to date inventory of equipment for each radiological installation.

An equipment inventory was in place which contained all relevant information. We did however discuss at the time of the visit the need to include pressure injectors in the inventory as these could impact on patient dose.

Recommendation

Reference to pressure injectors should be included in the equipment inventory.

Management and Leadership

It was clear from the inspection that the management team, radiology managers and staff are committed to providing a high standard of service that is safe and in line with the requirements of IR(ME)R.

The team recognised and accepted the work that needs to be undertaken to achieve this based on the feedback provided at the time of the visit.

All managers and staff that met with the inspection team engaged positively in the process as a whole and in particular in the visit itself. The management team demonstrated they were keen to receive feedback with a view to improving the service they provide

Our discussions with staff at the time of the visit confirmed that they were all clear about their roles and responsibilities as duty holders under IR(ME)R. The importance of developing the documentation to ensure that what happens in practice is clearly written into the documents is fundamentally important and was reinforced at the time of the visit.

Training

The regulations require that all practitioners and operators are adequately trained for the tasks undertaken and the employer keeps up to date records of this training.

Training records and documented induction training were in place and up to date for all staff working in the department apart from equipment training records for radiologists. Our discussions with the team at the time of the visit highlighted the importance of putting these in place.

It was suggested that references to this could be included in the documentation as part of entitlement to underpin the scope of practice.

Recommendation

To review the policies and procedures in place to clarify and simplify their use.

To review the content of some of the procedures to ensure they reflect what happens in practice.

To develop equipment training records for radiologists.

Delivery of a Safe and Effective Service

People's health, safety and welfare must be actively promoted and protected. Risks must be identified, monitored and where possible, reduced or prevented.

The inspection team were content that there were no breaches in relation to the regulations. It was clear from our discussions with managers and staff that patient and staff safety was the key priority for the department.

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 visit. The details of this can be seen within Appendix A of this report.

The improvement plan should clearly state how the improvement identified at Spire Hospital, Cardiff will be addressed, including timescales.

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

Hospital: Spire Hospital Cardiff

Date of Inspection: 15th October 2015

Page Number	Recommendation	Service Action	Responsible Officer	Timescale
Quality of the Patient Experience				
	None			
Compliance with IR(ME)R				
9	<p><i>Review the content of the document 'Radiation Protection Local Rules and IR(ME)R Employers Procedures' to ensure it accurately reflects the requirements under IR(ME)R and that it contains sufficient detail that reflect local practices.</i></p> <p><i>Protocols need to be developed for the cardiac catheterisation lab.</i></p>	<p>The Radiation Protection Local rules Policy for Spire Cardiff Hospital will be reviewed in full to incorporate recommendations from the inspection report from 15th October 2015. Changes will be communicated to Spire healthcare Central Clinical team to ensure maximising learning.</p>	<p>Rachel Bartley</p> <p>Rachel Bartley</p>	<p>End of December 2015</p> <p>End of December 2015</p>

Page Number	Recommendation	Service Action	Responsible Officer	Timescale
		Examination protocols will be established for the Cardiac Catherisation Lab and made available to staff.		
10	<p><i>The procedure for the use of DRLs needs to be reviewed to include local information to guide staff about their use and what to do if consistently exceeded.</i></p> <p><i>The way DRLs are displayed needs to be reviewed and consideration should be given to having one figure for each common examination to avoid confusion for staff.</i></p>	<p>The Diagnostic Reference Level (DRL) section of the policy will be amended to incorporate local information and guidance for staff on the use of DRL's and the process to follow if they are consistently exceeded.</p> <p>The policy and DRL's displayed in the department will be amended to include only a single figure for main examinations which will be Local if established or National if not.</p>	<p>Rachel Bartley</p> <p>Rachel Bartley</p>	<p>End of December 2015</p> <p>End of December 2015</p>
11	<p><i>The entitlement procedure and associated appendices needs to be reviewed and amended to reflect current practice and requirements.</i></p>	<p>The entitlement section of the Local Rules will be amended to reflect current and local practice. More detail regarding entitlement to be incorporated including reference to requirements and training etc.</p> <p>Appendix 1J will be amended to remove reference to Korner A + B units and other irrelevant information.</p>	<p>Rachel Bartley</p>	<p>End of December 2015</p>
12	<p><i>The procedure for referral should be reviewed and revised and referrers made</i></p>	<p>The referral section of the policy will be reviewed to contain more detailed information on referrers, the referral process and referral guidelines.</p>	<p>Rachel Bartley</p>	<p>End of December 2015</p>

Page Number	Recommendation	Service Action	Responsible Officer	Timescale
	<p><i>aware of any changes.</i></p> <p><i>Referral criteria for dental imaging needs to be made available.</i></p>	<p>Changes will be communicated to all referrers via established communication links such as Consultant and GP newsletters.</p> <p>Referral criteria for Dental Imaging to be established and made available to appropriate referrers.</p>	Rachel Bartley	End of January 2016
12	<p><i>The procedure for justification should be reviewed to ensure the details contained within it are relevant and accurate.</i></p>	<p>The Justification section of the policy will be reviewed and amended to include more detail and specifics on local practice.</p>	Rachel Bartley	End of December 2015
13	<p><i>To review and develop the patient identification procedure to include the points identified.</i></p>	<p>More detail to be included in the patient identification section of the Local Rules Policy. Specific attention will be paid to identification of patients in theatre, access to translation services and use of the 'Pause and Check' process. 'Pause and Check' posters issued by The Society of Radiographers will be displayed around the department as a reminder to staff.</p>	Rachel Bartley	End of December 2015
14	<p><i>Work needs to be undertaken to consolidate this procedure to ensure all information is contained within it regarding checking the pregnancy status</i></p>	<p>The Pregnancy section of the policy will be amended to include more detail specific to local practice..</p> <p>Reference will be made to the</p>	Rachel Bartley	End of December 2015

Page Number	Recommendation	Service Action	Responsible Officer	Timescale
	<p><i>for females of child bearing age.</i></p> <p><i>In the revised procedure it would be good practice to include reference to the child protection procedure should a minor provide a positive response to the pregnancy question.</i></p>	<ul style="list-style-type: none"> • Local Pregnancy risk assessment form which is completed when necessary. • Corporate child protection policy in cases of positive pregnancy response. Local safeguarding guidance will also be referenced. • Language barriers and access to translation services. 		
14	<p><i>The title of the procedure should be changed to 'medico-legal and occupational exposures' or the reference to occupational exposures should be removed from the procedure.</i></p>	<p>The section of the policy will be altered by changing the title and/or removing reference to occupational exposures to reflect local practice.</p>	Rachel Bartley	End of December 2015
15	<p><i>The procedure for optimisation could be reviewed to include references to the positive work being undertaken in the department and make amendments as highlighted above.</i></p>	<p>The Optimisation section of the policy will be reviewed to incorporate all the points raised in the report.</p> <p>Irrelevant information will be removed.</p> <p>Reference will be made to Local DRL's, audit programmes and near miss reporting.</p>	Rachel Bartley	End of December 2015

Page Number	Recommendation	Service Action	Responsible Officer	Timescale
16	<i>The adverse incident policy should be reviewed to include references to timescales for investigating incidents.</i>	Reference to investigation timescales for adverse incidents reported will be made in the Local Rules policy. Reference to time scales is available within the national policy for Adverse Incident management.	Rachel Bartley	End of December 2015
16	<i>Clinical evaluations that are undertaken outside of radiology should be audited to ensure they are being completed.</i>	An audit will be undertaken in January 2016 to evaluate compliance to clinical image evaluation outside of Radiology. This will incorporate outpatient clinics, wards (including ITU) and theatre cases that use imaging.	Rachel Bartley	End of January 2016
16	<i>To consider implementing the use of a research folder to support staff to be clear about research exposures and the associated target doses/dose constraints</i>	A research folder is available to staff but will be amended to include all necessary information for staff on views, dose constraints etc. The policy section on research will be amended in line with this.	Rachel Bartley	End of December 2015
17	<i>Reference could be made in the optimisation procedure of the importance of special attention to optimising the exposures of children and how this is demonstrated at Spire Hospital Cardiff.</i>	The Paediatric section of the policy will be reviewed to include specific details on dose optimisation for children in all areas. Reference to be made to access of Paediatric specific protocols on equipment where available.	Rachel Bartley	End of December 2015

Page Number	Recommendation	Service Action	Responsible Officer	Timescale
18	<i>Reference to pressure injectors should be included in the equipment inventory.</i>	Pressure injectors in CT and the Cardiac Catheterisation Lab will be added to the equipment inventory, appendix 1M.	Rachel Bartley	End of December 2015
Management and leadership				
19	<p><i>To review the policies and procedures in place to clarify and simplify their use.</i></p> <p><i>To review the content of some of the procedures to ensure they reflect what happens in practice.</i></p> <p><i>To develop equipment training records for radiologists.</i></p>	<p>Policies and procedures to be reviewed to ensure they are clear and simple and reflect local practice.</p> <p>Changes to be communicated to staff via the read and sign process currently used.</p> <p>Training records for Radiologists to be established for all relevant equipment and record of this training kept within the Imaging Department to support the hospital Annual Consultant appraisal system.</p>	<p>Rachel Bartley</p> <p>Rachel Bartley</p> <p>Rachel Bartley</p>	<p>End of December 2015</p> <p>End of January 2016</p> <p>End of January 2016</p>
Delivery of a Safe and Effective Service				
	None			

Service Representative:

Name (print):Michele Millard.....

Title:Head of Clinical Services.....

Signature: 

Date:3rd December 2015.....