

Plain Film Reporting

Department / Service:	Radiology
Originator:	Dr R Johnson Consultant Radiologist
Accountable Director:	Clinical Director of Radiology
Approved by:	Radiology Directorate Governance Meeting 18.02.2023 SCSD Quality Governance
Date of approval:	25 th January 2023
Review date:	25 th January 2026
This is the most current document and should be used until a revised version is in place	
Target Organisation(s)	Worcestershire Acute Hospitals NHS Trust
Target Departments	Radiology main target plus all departments and services that make plain film referrals to Radiology.
Target staff categories	Radiologists: Radiographers: Advanced Practitioners: All other Radiology staff: Medical and other clinical staff requesting and reviewing plain film X-Rays

Circulated & approved by :	designation	date
Mr Vincent Koo	Urology Clinical Director	06.12.22
Mr Kieron McVeigh	ENT/OMFS/Dermatology Clinical Director	03.12.22
Mr Charles Docker	Trauma & Orthopaedic Clinical Director	15.12.22

Policy Overview:

Outlines the agreed Directorate policy of which plain radiographs are clinically evaluated by trained staff in the Radiology Directorate and those which are clinically evaluated by other healthcare professionals.

It explains the importance, that where clinical evaluation is not performed by Radiology Directorate staff, the responsibility for clinical evaluation lies with the referrer to ensure that a clinical evaluation is undertaken which must be documented in the patient record/notes. This is established local practice and must be done to comply with IR(ME)R which is statute.

This policy is a review of the previous policy WAHT-RAD- 020

The internal standard (KPI) for Plain Film reporting is that all radiographs requiring a routine radiological evaluation (report) are done within 14 days of attendance and all those requiring an urgent radiological evaluation are done within 2 days of attendance.

Monitoring is done daily Mon – Fri by the PACS team and potential breeches are escalated to the lead clinician on site or Radiology management team.

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient

in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Latest Amendments to this policy:

15.11.16	Major overhaul and rewrite of WAHT-RAD- 020 by Dr Rob Johnson
01.11.17	Key changes to previous policy WAHT-RAD- 020 – see Definitions and Policy Detail
Other amendments to be advised after review in November 2017	
20.03.18	Amendment to flowchart (appendix 1) to reflect process for 4ways (additional capacity secured from an alternative outsourcing company) approved at CQC oversight meeting
09.05.18	Amendments to quick reference guide Pg 3: May 2018 (approved @ Radiology DGM) Plain X-Ray Films to be formally reported in house by Radiology Staff: All Paediatric Images (excluding trauma clinic follow-up) Orthopaedic initial trauma and Paediatrics (excluding fracture clinic follow-up) Plain X-Ray that are unlikely to be formally reported in house by Radiology Staff: Orthopaedic Skeletal films (including trauma clinic follow-up for all ages)
20.06.18	Flowchart for the Process for review of radiographs identified as having no report / documented clinical evaluation, Julia Rhodes following directorate governance agreement and consultation with radiologists.
March 2020	Radiology document approved for 3 years
11.01.23	- remove the auto reporting of any Urology abdominal x-ray as requested by the Urology body of consultants. Start date 01.02.23
11.01.23	policy review and updated to reflect current monitoring requirements & responsibilities

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Quick Reference Guide

Plain X-Ray Films to be formally reported in house by Radiology Staff

- All GP requests
- All Images requested by non-medical practitioners acting as the referrer
- All Chest X-rays
- All Paediatric Images (excluding trauma clinic follow-up)
- Orthopaedic initial trauma and Paediatrics (excluding fracture clinic follow-up)
- All A&E Radiographs
- All abdominal films
- All Rheumatology films
- Any other images not included in the section below

Plain X-Ray that are unlikely to be formally reported in house by Radiology Staff

Plain film

- Orthopaedic Skeletal films (including trauma clinic follow-up for all ages)
- Dental (OPG and cephalometry – exclude other OPG as this will be trauma or other pathology)
-

Image Intensifier images

- ERCP
- Pain clinic
- Cardiology pacing/Image intensifier radiographs
- Operating theatre intra-procedural image intensifier radiographs
- Hickman line position radiographs
- Steroid joint injections performed in the Radiology department by an Orthopaedic Consultant

Introduction

The Ionising Radiation (Medical Exposure) Regulations (IR(ME)R), require that an employer must have a procedure for recording a clinical evaluation of a medical ionising radiation exposure (1). This is the policy for Worcestershire Acute Hospitals Trust and Community Trust sites performing X-ray examinations falling under the radiology directorate.

Clinical evaluation is most commonly considered to be a written radiology report, which is frequently recorded on the RIS. It may, also include entitled radiographers and other healthcare professionals who provide initial image interpretation which could support on-going patient management and is considered a clinical evaluation (2). The radiographs covered by this scenario are detailed below.

This document outlines the agreed Directorate policy of which plain radiographs are clinically evaluated by trained staff in the Radiology Directorate and which are clinically evaluated by other healthcare professionals. It must be emphasised that where clinical evaluation is not performed by Radiology Directorate staff the responsibility for clinical evaluation lies with the referrer to ensure that a clinical evaluation is undertaken which must be documented in the patient record/notes. This is established local practice, compliant with IR(ME)R and to be subject to on-going clinical audit.

The RCR has produced standards for the reporting and interpretation by non-radiologist medically qualified practitioners (3). Example scenarios from the RCR guidance, which are not exhaustive, are given below for illustrative purposes, Fig 1.

Compliance with IRMER and RCR standards

In addition to the established discrepancy notification procedures within the Radiology Directorate, formal clinical audit by Radiology Directorate reviewing randomly selected cases which fall within the scope of this policy and have been clinically evaluated by other qualified healthcare professionals is to be undertaken on a regular basis (see section 7, Monitoring and Compliance). This satisfies the IR(ME)R and RCR standards.

Where such an audit identifies a misinterpretation of a clinical evaluation the evaluating clinician will be informed and a radiology report added to the RIS.

1. Scope of this document

- Plain radiographs undertaken at Worcestershire Acute Hospital Sites or sites where Radiology is managed by the same.
- The plain radiographs not formally reported by radiology staff cover mainly:
Orthopaedic, Dental, Image guided procedures using Mobile Image Intensifiers and Urology.

2. Definitions

IR(ME)R	- Ionising radiation (Medical Exposure) Regulations
RCR	- Royal College of Radiologists
PACS	- Picture archiving & Communication system
CXR	- Chest X-ray
RIS	- Radiology information System
CT	- Computerised Tomography
ICE	- WHAT order Comms. System
IV	- Intravenous
KUB	- X-ray of Kidneys, ureters and bladder
ERCP	- Endoscopic Retrograde Cholangio –Pancreatography
OPG	- Orthopantomogram – Dental X-ray

Reporting: The term ‘reporting’ although widely accepted in clinical practice is defined by IR(ME)R as a ‘documented clinical evaluation’. This definition is deemed useful as the connotation of ‘reporting’ as an activity provided solely by radiology directorate staff has the potential to be misleading. Particularly where a significant amount of clinical evaluation and documentation is performed by other healthcare professionals and is compliant with IR(ME)R.

Fig.1. Examples from RCR guidance.

A mobile chest X-ray is performed on an intensive care unit (ICU) following insertion of a central venous pressure line (CVP) line. To effectively manage patient treatment, the image is clinically evaluated on the unit by a suitably trained and entitled (documented in the employer’s procedures as an operator for the purpose of clinical evaluation) ICU clinician. The evaluation confirms the line is appropriately positioned for immediate use. This evaluation is documented in the patient’s notes by the clinician. In this scenario it may be that no further written evaluation (report) from radiology is required.

An orthopaedic surgeon refers a patient for an X-ray of their wrist in plaster to assess union of a scaphoid fracture. Immediately following the X-ray procedure the patient returns to outpatients for the result. The orthopaedic surgeon reviews the images, sends the patient for the cast to be removed and records in the patients notes his evaluation of the images. To be able to perform this task, the surgeon must be deemed competent and be entitled as an operator in the employers procedures. To ensure the employers procedures are complied with, the radiology department performs regular (annual) audit of evaluations not recorded on the RIS.

Auto-reporting: The term ‘auto-reporting’ is also considered to be misleading but it is accepted that it is in common usage. The policy states as a reminder to the referring clinician that it is their responsibility to evaluate these radiographs and the following text is inserted on the PACS/ICE system in place of a report:

The referring clinician should record their clinical evaluation of the examination to comply with IR(ME)R regulations.

These images are not clinically evaluated (reported) by radiology, however further advice may be sought from the Radiology directorate on a case by case basis if necessary.

Historic Images: Historic images superseded by contemporaneous imaging are commonly encountered during radiology directorate staff reporting. This policy introduces a new practice whereby these superseded images are clinically evaluated at the time of evaluating the contemporaneous image and tagged with a digital hyperlink to the most relevant contemporaneous imaging evaluation/report. The clinical evaluation of these prior studies is documented in the contemporaneous evaluation/report.

3. Responsibility and Duties

Radiology Directorate and Governance – to ensure the policy is implemented, followed, reviewed and audited

Radiographers/Radiography practitioners and HCAs – to be fully aware of the policy and to ensure that plain films not requiring a formal report issued by the radiology staff, tag the CRIS event accordingly.

Other Radiology staff - to be fully aware of the policy

PACS Staff - to be fully aware of the policy and to be aware if it is not being followed

All Clinical staff who request plain film X-rays – To be aware of the policy and importantly they must evaluate and document in the patient notes/records that this has been done.

Duty of Candour

This revised policy now details the importance of Duty of Candour which is given due consideration during all radiology directorate clinical practice and audit activity with regards to image interpretation.

The policy implementation stipulates an audit of 100 randomly selected ‘auto-reported’ plain radiographs annually. These are to be reviewed by a consultant radiologist with appropriate support from the departmental Governance Officer and Trust Audit department for all sources of potential documentation of the interpretation e.g. notes, letters, A&E notes. If the outcome of the audit identifies that a radiograph interpretation has not been recorded the radiograph will be reviewed by a consultant radiologist as per the process detailed in Appendix 1. The potential harm from no clinically evaluation of imaging is defined as a delay in diagnosis of more than two weeks from image acquisition to report/documented clinical evaluation. If the subsequent DATIX investigation determines actual harm has occurred, then the DATIX system feeds/refers the case into the Specialised Clinical Services Divisional governance oversight process. This will include an assessment of the Duty of Candour responsibilities (4).

Policy detail

The following plain radiographs must be clinically evaluated and documented in the patient notes and the responsibility for this lies with the referring clinician as detailed above:

Orthopaedic

- Orthopaedic requested skeletal plain radiographs excluding paediatric and initial trauma.
- Fracture clinic follow up radiographs, all ages including paediatrics.

Dental

- OPG radiographs for routine dental assessments (trauma and suspicious pathology will be reported)
- Dental cephalometry radiographs

Image intensifier images

- ERCP radiographs
- Pain clinic image intensifier radiographs
- Cardiology pacing /image intensifier radiographs
- Operating theatre intra-procedural image intensifier radiographs
- Hickman line position radiographs
- Steroid joint injections performed in the Radiology department by an Orthopaedic Consultant

As a reminder to the referring clinician that it is their responsibility to evaluate these radiographs the following text is inserted on the PACS/ICE system in place of a report:

The referring clinician should record their clinical evaluation of the examination to comply with IR(ME)R regulations.

These images are not clinically evaluated (reported) by radiology, however further advice may be sought from the Radiology directorate on a case by case basis if necessary.

Historic Images superseded by contemporaneous imaging

There are occasions when the clinical relevance of acquired radiographs is superseded by new imaging which may be either plain X-ray or other cross sectional imaging. These historic images are thus superseded by contemporaneous imaging and this is commonly encountered by radiology directorate staff during reporting.

For example, a patient is seen by their GP with shortness of breath. The GP arranges for the patient to have a chest X-ray. This is allocated to be reported by the Radiology Directorate in the usual way. Before the X-ray is reported the patient is admitted to the hospital as an emergency and has a CT scan of the thorax as an inpatient. During the evaluation of the CT thorax by a radiologist, the prior X-rays are reviewed. The clinical evaluation of these prior studies is documented in the contemporaneous evaluation/report. An example of the text used to document this activity which commonly forms the early part of a CT report, is: *CT of the thorax with IV contrast is correlated with the prior CXRs available for comparison on PACS.*

This policy introduces a new practice to the Trust where these historic superseded images which have been clinically evaluated at the time of the contemporaneous image evaluation are digitally tagged with a hyperlink to the most relevant contemporaneous imaging evaluation/report. This functionality has been possible within the radiology information system (RIS) but as yet has been underutilised.

When the clinician clicks on the hyperlink they are automatically forwarded to the current report.

4. Implementation

4.1 Plan for implementation

Once agreed by division this will be actioned by disseminating as below and implemented immediately. Site superintendent, will ensure it is being used on a day to day basis.

RADi checks for auto-reporting errors daily

4.2 Dissemination

- Send to all Superintendents/deputies and Office managers to distribute to all non-medical staff
- Clinical Director to ensure dissemination to all Medical staff across the Trust, through the most appropriate channel.
- Directorate to send to Directorate/Divisional core facilitators to disseminate at their own Governance meetings at Directorate meetings.
- Radiology newsletter and staff meetings

4.3 Training and awareness

Key trainers to be allocated to each of the main sites to act as a point of liaison and do 1:1 if required

5. Monitoring and compliance

The table below details the 'Who, What, Where and How' for the monitoring of this Policy.

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	WHAT?	HOW?	WHEN?	WHO?	WHERE?	WHEN?
	In house software application which auto-generates a weekly report identifying any errors	The weekly report automatically is generated to a pre-determine list of staff who correct any errors & provide feedback to staff.	Weekly	Automated check & then action by those on distribution list	Those on the distribution list	Continuous – Weekly

Link to SOP for checking adherence to this policy.

<M:\Acute\Radiology\Radiology Team Share Point\SOPs\PLAIN FILM\SOP CHECKING ADHERENCE TO PLAIN FILM REPORTING POLICY.pdf>

6. Policy Review

The policy will be reviewed at 3 yearly intervals by the radiology directorate Clinical Director or appropriately designated consultant radiologist, and any other relevant staff.

7. References

References:

Code:

1. Department of Health. The Ionising Radiation (Medical Exposure) Regulations 2000. London: The Stationery Office, 2000.	
2. The Royal College of Radiologists, The British Institute of Radiology, Society and College of Radiographers. <i>A guide to understanding the implications of the ionising radiation (medical exposure) regulations in diagnostic and interventional radiology.</i> London: The Royal College of Radiologists.	
3. The Royal College of Radiologists. <i>Standards and recommendations for the reporting and interpretation of imaging investigations by non-radiologist medically qualified practitioners and teleradiologists.</i> London: The Royal College of Radiologists, 2011	
4. https://www.rcr.ac.uk/posts/duty-candour-relation-diagnostic-radiology-position-statement	

8. Background

8.1 Equality requirements

No requirements or issues

8.2 Financial risk assessment

No financial risks

8.3 Consultation

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation	
Mr Docker	Orthopaedics Clinical Director
Mr Koo	Urology Clinical Director
Mr McVeigh	ENT/OMFS/Dermatology Clinical Director

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Radiology Governance Committee
SCSD Divisional Governance Committee
Trust Quality and Governance Committee

8.4 Approval Process

Approved by Chairs in the table above at Radiology Directorate meeting and Radiology Governance meeting, SCSD Divisional Governance committee, Trust Quality and Governance Committee.

8.5 Version Control

This section should contain a list of key amendments made to this document each time it is reviewed.

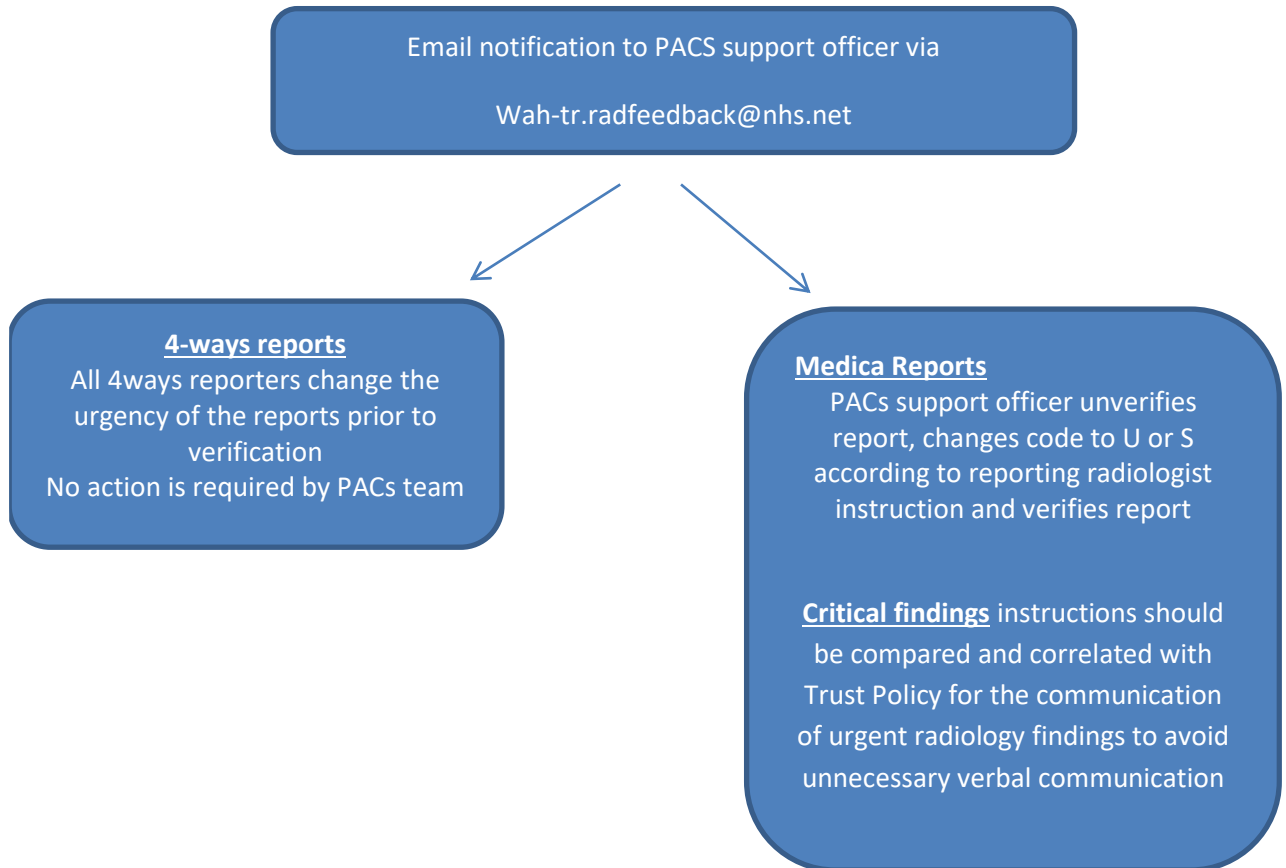
Date	Amendment	By:
15/11/16	Major overhaul and rewrite of WAHT-RAD- 020	Dr Robert Johnson
20.06.18	Flowchart for the Process for review of radiographs identified as having no report / documented clinical evaluation	Julia Rhodes following directorate governance agreement and consultation with radiologists.
11.01.2023	Remove the auto reporting of any Urology abdominal x-ray as requested by the Urology body of consultants.	Julia Rhodes following directorate governance agreement and consultation with urologists, radiology triumvirate, consultant radiographer & radiology QG team.

Appendices

Appendix 1

Process for review of radiographs identified as having no report / documented clinical evaluation

PROCESS FOR REVIEWING ANY CLINICAL FINDINGS IDENTIFIED BY AN EXTERNAL BODY



Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
1.	Does the Policy/guidance affect one group less or more favourably than another on the basis of:		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	No	
4.	Is the impact of the Policy/guidance likely to be negative?	No	
5.	If so can the impact be avoided?	N/A	
6.	What alternatives are there to achieving the Policy/guidance without the impact?	N/A	
7.	Can we reduce the impact by taking different action?	N/A	

If you have identified a potential discriminatory impact of this key document, please refer it to Assistant Manager of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Assistant Manager of Human Resources.

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	No

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval