Policy for the Communication of Critical and Urgent Radiology Reports

Department / Service:	Radiology
Originator:	Chief Radiographer
Accountable Director:	Radiology Clinical Director
Approved by:	Radiology Directorate Governance Meeting
Designation:	Clinical Director (Radiology)
Date of approval:	February 2012
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Target Organisation(s)	Worcestershire Acute Hospitals NHS Trust
Target Departments	Radiology and any radiology referrers
Target staff categories	Radiologists/Sonographers/Reporting Radiographers/Radiographers/other Radiology Staff

(a) Purpose of this document:
This policy describes the action to be taken when a radiological investigation identifies unsuspected findings, unsuspected malignancy, and life threatening findings that are deemed to be of a critical and urgent nature to ensure that appropriate and timely treatment is instigated.

Key amendments to this Document:

Date	Amendment	By:
01.05.2022	Reviewed and updated	SIRLG – chair CMO
03.10.2022	Amendments to escalation policy	SIRLG – chair CMO Radiology DGM 07.10.22
February 2024	Amendments to AAA threshold	SIRLG- chair CMO Radiology DGM 14.2.24 Vascular Team

(b) References

- Standards for the communication of radiological reports and fail-safe notification. *Royal College of Radiologists* (2016)

https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfcr164_failsafe.pdf

- Early Identification of failure to act on radiological imaging reports. *National Patient Safety Agency* (NPSA) safer practice notice 16 issued 5 February 2007.

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1. Introduction

1.1 This policy describes, for each of those involved in the radiology reporting system, their responsibilities to prevent incidents. This policy describes the action to be taken when a radiological investigation identifies significant or unsuspected findings, urgent findings or life critical findings (See Appendix A) to ensure that appropriate and timely treatment is instigated.

1.2 The aim of the policy is to assist in expediting care of patients for those at more urgent clinical need.

1.3 This policy will form part of local induction for all trust employed substantive and locum reporting staff and will be forwarded to external reporting providers. A summary is provided as Appendix E. This summary will be displayed at each radiology reporting work station

2. Scope of the Policy

Background

2.1 This policy has evolved from the NPSA report: Safer Practice notice 16, Early Identification of failure to act on Radiological reports and subsequent Royal College Guideline: Standards for the communication of Radiological reports and fail-safe alert notification (2016).

2.2 The policy is designed to make clear the roles and responsibilities of professional groups and individuals and their role in acting upon radiological findings.

2.3 Radiological reports are available to clinicians in Worcestershire by accessing the ICE system. Referring clinicians are responsible for viewing and filing in ICE all radiology reports requested under their name.

2.4 Outsourcing companies have their own policies in place for the urgent findings and will escalate this according their own policies as indicated in appendices F & G.

3. Responsibility and Duties

3.1 It is the responsibility of the radiologist or reporting radiographer or sonographer to produce reports as quickly and efficiently as possible and to flag reports when they feel a fail-safe alert is required.

3.2 It is the responsibility of employing organisations to ensure appropriate reporting and fail-safe systems are in place and to audit regularly (see audit template in appendix).

3.3 It is the responsibility of employing organisations/radiology departments to ensure that reports can be communicated to other information technology (IT) systems using HL7 standards.

3.4 It is the responsibility of the requesting doctor and/or their clinical team to read and act upon the report findings and fail-safe alerts as quickly and efficiently as possible.

3.5 It is the responsibility of the referrer, their team and/or other relevant clinicians to read and act upon all reports with a permanent audit trail of who has read the report and who has taken responsibility for acting upon it.

10. Standards of care

3.6 The radiologist or reporting radiographer/sonographer must:

3.6.1 Ensure that the reports are timely, clear and precise, and the urgency for action is clearly documented within the content of the report.

3.6.2 Clearly document advice on further management or action, where appropriate

3.6.3 Have a clear understanding of agreed local policies and workflow processes for fail-safe alert communication

3.6.4 Flag a report which has urgent, critical, significant, unexpected and actionable findings, which he/she feels may not otherwise be acted upon in a timely manner

3.6.5 Inform verbally (by telephone) the appropriate clinical team of a life or limb threatening finding which requires emergency clinical action. He/she should document that this has been done (when and to who) within the radiology report or via addendum.

3.7 The referring team will:

3.7.1 Provide a minimum data set for any patient investigation (Appendix C)

3.7.2 Read and act upon the result of every investigation requested.

- For routine reports this should be completed within 28 days of report verification.
- Critical reports should be acted upon immediately with communication via phone-call to the clinical team.
- Urgent within 24 hours and Significant, important, unexpected and actionable findings within 72hrs.

3.7.3 An audit trail of when these results are read and when they are acted upon is available on ICE.

3.7.4 Have a robust mechanism for handover of urgent imaging reports, and pending urgent imaging study requests, to ensure that all significant imaging findings are acted upon in a timely manner, regardless of which clinical staff are on duty.

3.7.5 Carry out regular audit to ensure that they have read and acted upon all imaging study reports they have requested.

3.7.6 Have a clear understanding of the locally agreed fail-safe policy within the trust and act upon fail-safe alerts in a timely manner (see above).

3.7.7 Define the process of acting on the e-mail notifications of the fail-safe policy, when the referring consultant is away, for example, on leave.

3.8 The trust will:

3.8.1 Carry out regular audit to ensure that radiology results are being read and acted upon in a timely manner

4. Actions

GP Referred and Hospital Out-Patients

4.1 If an urgent or unexpected finding is suspected by a Radiographer, then images should be brought to the attention of a radiologist/reporting radiographer before the patient leaves department. This would usually be the duty radiologist, who would then be responsible for discussing the finding with the radiographer and advising if action or an urgent report is required. The study should be alerted to the referrer. If the study cannot be reported at the time, an urgent allocation of reporting via the report allocation officer should be made.

Action: Radiographer

4.2 Critical Reports – The reporter **must** speak directly with the Clinical Team to ensure immediate communication of the findings and then immediately document the action taken within the report or in an addendum to the report and mark the report as 'C' – Critical.

Urgent Findings - Report transcribed into CRIS using Voice Recognition, (exceptionally dictated and fast tracked for typing and notification). Where a radiologist or reporting radiographer feels the report need action within 24 hours this should be marked as 'U' – Urgent.

Significant, Important, unexpected or actionable findings – Where a radiologist or reporting radiographer identifies an important, unexpected or actionable finding they will mark the report as 'S' – Significant.

Report to be marked as **Critical = C, Urgent = U, Significant, Important, unexpected or actionable = S** in the box to the right of the report screen on CRIS. *Note: routine reports are automatically marked as R which is the automatic default.*

Marking the report as 'Urgent' or 'Significant' will send an email of the report to the referring team via HSS Communicator, and will record that this email has been sent within CRIS,

Action: Radiologist/Reporter

4.3 Language or content of the report – The radiology report should be clear with the critical elements emphasised and the action needed to be taken by the referrer needs to be clearly stated.

Action: Radiologist/Reporter

4.4 Any reports that fail to transmit via Communicator will be alerted to the PACS Team who will contact the referrer or team (usually by telephone) to alert findings and update alert settings (N.B. at weekends and bank holidays there will be a delay as the PACS Team are not on site.)

Action: PACS Team

4.5 Acknowledgements of urgent emails will automatically be recorded in CRIS. Repeated emails are generated every 24hrs, automatically to the referrer and back-up email addresses for 3 days if the result is not acknowledged. If the report remains unacknowledged after 3 days, then the report will be escalated to the Divisional medical director and divisional governance teams for internal referrals or to the GP practice by telephone for the attention of the duty GP. These actions will be recorded in the CRIS event comment and once this has been done, the alerts will be manually stopped by radiology.

Action: PACS team

4.6 All Consultants and associate specialists must provide and keep updated a reliable email address for urgent reports to be sent to. The number of back up contacts provided for each consultant is the decision of the individual directorates, but could reasonably be expected to be that of themselves, and of their clinical director. DDs must ensure that the directorates have process in place to ensure that locum or retiree requested investigation reports are read, acted upon and filed in ICE. It is the responsibility of the referrer to check radiology reports, and of the directorate and division to make arrangements for the reading of reports when the referrer is not reasonably available e.g. locum staff who have left post.

Action: Referrers and DMDs

<u>Hospital Inpatients & patients attending ED</u>

Significant, Important, unexpected and actionable findings

4.7 For in-patients & ED patients, under the direct continuous clinical care of a consultant and his/her team. Reports would not usually be flagged via the email alert system as the patient has been referred for an inpatient scan and is under active management by the clinical team. As such, the team should be anticipating receiving a report and reading and acting on the report as necessary.

<u>Outsourcing reporting companies will often send alerts for In-patients too as they are engaged by a large number of different trusts all of which have varying policies and will be working to their own internal policy.</u>

Patients attending ED

It is expected that all images are reviewed and clinically evaluated by a medical practitioner.

The reporting radiographers provide a 'hot reporting' service for appendicular plain film referrals during the hours of 9-5pm Monday–Friday excluding bank holidays.

Critical Reports

The reporter **must** speak directly with the Clinical Team to ensure immediate communication of the findings and document the action taken within the report. Critical findings will not be alerted via the email system.

This excludes plain radiographs, which should be alerted in the usual manner as the report may be issued following patient discharge. These reports would be read and filed in the usual manner by the responsible clinician.

Action: Reporter

Reports from External Providers

4.8 Reports indicated for urgent attention from out-sourcing companies are either flagged by the reporter as above or sent to the PACS team. The report is then amended to an appropriate code by the PACS team to enable email alerts to be sent. Critical findings should be communicated by telephone by the reporting radiologist as per the outsourcing company policy at the time of reporting.

4.9 The external provider will comply with the standards described in section 4 for the radiologist.

5. Background

1.1 Equality **requirements**

Please see equality assessment –supporting document 1

1.2 Financial risk assessment

Please see financial risk assessment –supporting document 2

1.3 Approval process

As per the 'Policy for development, approval and management of key documents'; Approval at the Radiology Directorate, County Radiologists Group and Patient Safety Committee

6. Implementation

6.1 Plan for dissemination

Please see plan for dissemination – supporting document 3

7. Monitoring and compliance

7.1 See appendix B.

***Action:** PACS Team/Radiologist*

Key Changes Summary:

- Title changed from 'NPSA Safety alert 16: Early Identification of failure to act on Radiological Imaging Reports' to 'Policy for the Communication of Critical and Urgent Radiology Reports'
- Reports for suspected new diagnoses of cancer are no longer copied to the 2ww office in the report
- Urgent reports that are not acknowledged will be escalated to the CDs & safety net to DMDs
- Additional alert headers to reports are no longer recommended
- Process for reports from outsourcing companies incorporated
- Alert chart updated and amended

Suggestions for appropriate utilisation of the fail-safe communication policy

Appendix A

Anatomical Area	Red Category Conditions Critical finding requiring action within 1 hour Requires direct verbal communication with the team 'C' code on CRIS For both IP and OP referrals	Orange Category Conditions Urgent finding requiring action within 1 day 'U' Code on CRIS For Outpatient/GP referrals	Yellow Category Conditions* Significant, important, unexpected and actionable finding requiring action within 3 working days 'S' Code on CRIS For Outpatient/GP referrals
CNS	Cerebral haemorrhage/haematoma	Acute stroke	
	Spinal cord compression	Brain tumour	
	Acute tonsillar herniation	Depressed skull fracture	
	Brain tumour with hydrocephalus or midline shift	Carotid artery dissection/Critical carotid stenosis or CoW thrombosis	
		Subdural empyema	
		Stable C-spine fracture	
Breast			Biopsy recommendation on mammogram
Chest	Large, central or unexpected pulmonary embolism	Small pulmonary emboli	
	Tension pneumothorax	Pneumothorax not under tension	
	Aortic dissection	Intra-cardiac thrombus	
	Ruptured aortic aneurysm	Mediastinal emphysema	
	Upper airway compromise		
Abdomen	Acute bowel obstruction/volvulus	Aortic Aneurysm >3cm	
	Active haemorrhage	Appendicitis	
	Acute ischaemic bowel	Sub-acute bowel obstruction or volvulus	
	Unexpected pneumo-peritoneum		
Uro-genital	Ectopic pregnancy	Obstructed, single or dual kidney	
	Placental abruption	Placental Praevia near term	
	Testicular or ovarian torsion		
	Foetal demise		

Vascular	Ruptured abdominal aortic aneurysm	DVT	
		Acute Arterial Occlusion	
Bone	Unstable spinal fracture		Finding suggestive of new fracture (other than those described in Red Category)
	Suspicion of Non-accidental injury (NAI)		
General	Significant Line/ or Tube misplacement (e.g. feeding tube in airway or other unsafe position)	Finding highly suggestive of a new malignancy with complicating features (e.g. lung cancer, obstructed biliary tree with malignancy, obstructed collecting system as a result of malignancy or obstructing colonic tumour with or without perforation).	Malignancy with no complicating features e.g. new nodule on CXR, diffuse lymphadenopathy on abdominal CT or tumour in other region without an urgent complication.

Appendix B

Audit template for the communication of fail-safe alerts

1. Indicators and targets:
    a. Flagging of radiology findings that need a fail-safe alert in a report: target 100%
    b. Electronic communication of fail-safe alerts to referrer: target 100%
2. Assess local practice:
    a. Choose a site specific cancer (for example, lung) or other agreed pathology and determine whether alerts were appropriately used and issued. For example, for lung cancer, ask for a list of all new cases of newly diagnosed lung cancer from the lung MDT for the past 3 months, including the date of diagnosis. Review all the radiology reports prior to the diagnosis to assess whether the reports have been flagged with a fail-safe alert.
    b. Review fail-safe system for these reports to see if alert was successfully electronically transmitted.
    c. Review RIS to evaluate whether report was acknowledged or whether a manual fail-safe was required.
    d. Assess whether there was any overt delay between report acknowledgement and action.

Time required: 8 hours per year.

Audit of acknowledgement of report on ICE:

1. Indicators and targets:
    a. Reports viewed and filed in defined timescales (Section 4.2.2): Target 100%
2. Asses local practice:
    a. Identify all reports flagged as routine for a 2 week period and extract data from ICE for comparison.
    b. Similar for all ‘S’ and ‘U’ reports for a defined time period.

Appendix C

NPSA report: Safer Practice notice 16

Early Identification of failure to act on Radiological reports

Supporting information for referrers:

This NPSA report made a number of recommendations to improve upon the rapid communication of urgent radiological reports to the referrer. A number of the recommendations made, require an improvement in standards of the request made by the referrer. The Directorate of Radiology has provided some recommendations below.

In addition to this, clinicians are respectfully reminded that:

1. They have a responsibility to view and file reports of radiological investigations that they request, **within an appropriate time frame**.
2. To acknowledge receipt of all (urgently communicated*) radiology reports.
3. To record in the patients notes the outcome of any investigations undertaken but not formally reported upon by radiology (IRMER requirement).
4. To ensure that they have a safety net in place to bring to the attention of the radiology department any concerns of investigations which have not yet been completed within a reasonable timescale.
5. To advise patients how their test results will be communicated to them.

Minimum data set requirements:

- Patients full name
- Patients Date of birth
- Patients Address
- Patients telephone number if not an in patient
- NHS Number or Hospital number
- Investigation required
- Clinical History
- What do you expect the examination to reveal
- The urgency either- Routine/ Urgent/ 2 week wait

Identity of requesting health professionals:

- Referrers printed name (for legibility)
- Referrers Signature and Occupation
- Bleep Number
- Location (if an inpatient)
- Address for report to go to if different from your normal address

Empowerment to reject inadequately completed requests for studies:

- The request will be rejected and sent back if the above information is not provided
- or if the examination is inappropriate

*The NPSA notice requires all report receipts to be acknowledged, in an auditable way.

Appendix D

SUMMARY OF ACTIONS

Communicating Critical, Urgent and Unexpected Significant Radiological Findings

Critical Findings

- These are findings that may need immediate action, or action within hours.

- The radiologist or other reporting clinician should contact directly the referring clinician, (or other member of that team). Ensure you document within the report, (main body or addendum), the action taken.

Urgent or Significant Unexpected Findings

- These are transmitted via email to the referring clinician/team for outpatient or GP referrals. In order to trigger this when you have completed the report and prior to verification, mark the report as either **urgent = U**, **significant/unexpected finding = S** in the box to the right of the report screen on CRIS.

- This will prompt an email to be sent within 5 minutes. The record of this email is recorded within CRIS, as is any subsequent acknowledgement.

- Any failures will be picked up by the PACS Team who will ensure urgent communication is made.

- The urgency of the report is automatically conveyed within the email subject line.

- **NOTE: If you verify a report before changing the urgency status to U or S, please contact the Officer Managers or PACS Team who will arrange for the report status to be changed and the report resent.**

There should be clear documentation in the report of advice of further management or action**.**

Appendix E

In certain sub-speciality areas the process for alerting critical/ urgent findings differs from the standard 'Alert Chart' provided in Appendix A.
For any fetal anomalies detected during ultrasound examination (this includes the dating scan, anomaly scan and growth scans), sonographers MUST enter a referral via Badgernet to the Fetal Medicine Team. The referral sends a PDF alert to the screening team who will then triage and action the referral.
This must be sent for any anomaly regardless of the patient destination after the scan. (i.e. even if patient is going to antenatal clinic (ANC) that day), this includes all FASP reportable conditions, 3rd trimester anomalies and raised NT over 3.5mm.
Neither a referral nor and alert need to be sent for changes in fetal growth, Doppler or liquor volume. These will be managed by the team in ANC, DAU or Triage as appropriate after the scan.
For details of how to enter a fetal medicine referral please see associated 'SOP for sonographers entering scans and referrals onto the Badgernet system for Obstetric ultrasound performed within the Radiology Department.'
Any concern relating to an issue with the placenta in the third trimester is to be verbally passed on and to the relevant clinic or DAU, documented on the CRIS report and Badgernet System and the patient must be reviewed before leaving the department.
Any woman scanned with a fetal demise to be transferred immediately to the most relevant midwife care available depending on the site the scan is performed on.

In axial plain radiograph reporting for A&E, as an interim measure until there are measures in place to reliably pick up these urgently in A&E, the following conditions should also be alerted directly to A&E by telephone:

- Missed Cervical Spine fractures
- Missed #neck of femur
- Missed peri-lunate / lunate dislocations

Appendix F

Medica policy

Appendix G

4ways policy

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:**	N	
	• Race	N	
	• Ethnic origins (including gypsies and travellers)	N	
	• Nationality	N	
	• Gender	N	
	• Culture	N	
	• Religion or belief	N	
	• Sexual orientation including lesbian, gay and bisexual people	N	
	• Age	N	
2.	**Is there any evidence that some groups are affected differently?**	N	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	N/A	
4.	**Is the impact of the policy/guidance likely to be negative?**	N	
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 Risk 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	N
2.	Does the implementation of this document require additional revenue	Please see 'other comments'
3.	Does the implementation of this document require additional manpower	N
4.	Does the implementation of this document release any manpower costs through a change in practice	N
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	N
	Other comments: 'ICE' the new order comms system will change the way this risk is handled. This system is now operational for reports but is not able to yet reduce this risk until work flow issues have been finalised.	

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

Supporting Document 3

Plan for Dissemination of Key Documents
To be completed by the key document author and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

Title of document:	NPSA Safety alert 16: Early Identification of failure to act on Radiological Imaging Reports		
Date finalised:		**Dissemination lead: Print name and contact details**	David Hill
Previous document already being used?	Yes October 2007		
If yes, in what format and where?	Trust policies on Intranet		
Proposed action to retrieve out-of-date copies of the document:	To inform update on Trust Policies, Intranet and Trust Notice board via Clinical Governance.		
To be disseminated to:	**How will it be disseminated, who will do it and when?**	**Paper or Electronic**	**Comments**
Radiologists	County Radiologists group meeting	Verbal, Paper	
Reporting Radiographers	Site meetings, 1:1	Verbal, Paper	
Clerical Staff	Site meetings, 1:1	Verbal, Paper	

Dissemination Record - to be used once document is approved.

Date put on register / library of procedural documents	2010	**Date due to be reviewed**	May 2012

Disseminated to: (either directly or via meetings, etc)	**Format (i.e. paper or electronic)**	**Date Disseminated**	**No. of Copies Sent**	**Contact Details / Comments**

See above				