Standards for the communication of critical, urgent and unexpected significant radiological findings
Second edition
RCR Standards

The Royal College of Radiologists (RCR), a registered charity, exists to advance the science and practice of radiology and oncology.

It undertakes to produce standards documents to provide guidance to radiologists and others involved in the delivery of radiological services with the aim of improving the service for the benefit of patients by defining best practice, and promoting advances in practice.

The standards documents cover a wide range of topics. All have undergone an extensive consultation process to ensure a broad consensus, underpinned by published evidence where applicable. Each is subject to review four years after publication or earlier if appropriate.

The standards are not regulations governing practice but attempt to define the aspects of radiological services and care which promote the provision of a high-quality service to patients.

All of the standards produced by The Royal College of Radiologists can be found on the College website www.rcr.ac.uk/standards

Current standards documents

- Standards for patient consent particular to radiology, Second edition
- Standards and recommendations for the reporting and interpretation of imaging investigations by non-radiologist medically qualified practitioners and teleradiologists
- Standards of practice and guidance for trauma radiology in severely injured patients
- Standards and recommendations for the reporting and interpretation of imaging investigations by non-radiologist medically qualified practitioners and teleradiologists
- Standards for the NPSA and RCR safety checklist for radiological interventions
- Standards for the provision of teleradiology within the United Kingdom
- Standards for the recording of second opinions or reviews in radiology departments
- Standards for a results acknowledgement system
- Standards for intravascular contrast agent administration to adult patients, Second edition
- Standards for the introduction of new procedures and new devices - updated in January 2010 to reflect new guidance from the MHRA on ‘off label’ use
- Standards for radiofrequency ablation (RFA)
- Standards for providing a 24-hour diagnostic radiology service
- Standards for patient confidentiality and PACS
- Standards for providing a 24-hour interventional radiology service
- Standards for Self-assessment of Performance
- Standards for Radiology Discrepancy Meetings
- Standards for the Reporting and Interpretation of Imaging investigations
- Cancer Multidisciplinary Team Meetings – Standards for Clinical Radiologists
- Standards for Ultrasound Equipment
- Standards for the communication of critical, urgent and unexpected significant radiological findings, Second edition
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Foreword

In most of the work that we do as radiologists, the report of the imaging studies contributes significantly to the management of the individual patient’s care.

However, the National Patient Safety Agency¹ (NPSA) highlighted a significant number of serious untoward incidents where patients were harmed by delays in appropriate management due to the clinical teams not having received or read the report of the imaging investigation they had requested. As a result of this, the NPSA issued Safer practice notice 16. Early identification of failure to act on radiological imaging reports, in 2007.

The RCR issued its initial guidance based on this document in 2008, Standards for the communication of critical, urgent and unexpected significant radiological findings, which is now withdrawn.

Despite this, there are a significant number of such serious untoward incidents still occurring – some of which result in the death of patients who put their trust in the system.

Throughout this updated document, we re-emphasise the responsibilities that all those involved in this system have to avoid such incidents happening in their care. It is the responsibility of the radiologist to produce reports as quickly and efficiently as possible. It is the responsibility of the requesting doctor and/or their clinical team to read, and act upon, the report findings as quickly and efficiently as possible. It is the responsibility of the trust, or other equivalent healthcare organisation, to provide systems, whereby as soon as a verified imaging report has been produced, it is easily available to be read and acted upon by the referrer, their team, and other relevant clinicians.

As the failure of these processes can have profound effects on individual patients’ wellbeing, it behoves us to develop fail-safe back-up mechanisms to avoid such failures occurring.

This document highlights the key responsibilities with regard to the primary system and these fail-safe mechanisms.

I would commend this update document as essential reading to all those who have a responsibility in this area, at organisational level, in leadership of clinical teams and in radiological services.

I would like to take this opportunity of thanking Dr Nicola Strickland, Dr Rob Manns and Dr Neelam Dugar for updating these standards.

Dr Pete Cavanagh
Vice-President and Dean
Faculty of Clinical Radiology
The Royal College of Radiologists

¹ On Friday 1 June 2012 the key functions and expertise for patient safety developed by the National Patient Safety Agency (NPSA) transferred to the NHS Commissioning Board Special Health Authority.
1 Background

The issue of the communication of reports has been highlighted as a problem for UK radiology departments in recent years, particularly with the publication of *Safer practice notice 16. Early identification of failure to act on radiological imaging reports* by the National Patient Safety Agency (NPSA). At present, the situation is different from that in the United States where the second most common cause of malpractice litigation is failure to communicate results of radiological examinations. Data disclose that communication problems are at least a causative factor in up to 80% of medical malpractice cases. In the USA, communicating the results of radiologic examinations appears to have become just as much the duty of radiologists as is the rendering of interpretations. Both the courts within the USA and the American College of Radiology have clearly stated that radiologists must verbally communicate urgent or significant unexpected findings to referring physicians. The judicial system seems to be expanding the radiologist’s duty to communicate directly to patients as well as to referring physicians.

This is not yet the position of the UK judicial system. Electronic communication of results improves the efficiency of the report receipt by the clinical team requesting the imaging study, but cannot guarantee the quality of the clinical outcome from a rapid report. Patient safety concerns for urgent and significant reports require active involvement by the requesting clinical team and the radiologist, and back-up safety net mechanisms within radiology reporting systems.

It is incumbent on trusts, departments and individuals to ensure that the designated pathways between radiology departments and referrers are designed to minimise the risk of serious harm to patients by significant imaging findings being overlooked – even though they have been correctly reported.
2 Definitions of communication

There are two elements of communication with regard to the radiology report.

1. Language or content of the report. NPSA Safer practice notice 16 states that the radiology report needs to be clear, the critical elements must be emphasised and the action that needs to be taken by the referrer needs to be clearly stated in the report by the radiologist. It is common sense for reporting radiologists to ensure that reports document clinical advice and recommendations regarding patient management, where appropriate.

2. Transport mechanism of the report. Once a report is complete/authorised, the report should be communicated to the referring/requesting clinician in a timely manner. Previously reports were largely communicated by paper and by post. However, more recently, all radiology reports within secondary care are communicated using electronic systems (and are visible on the picture archiving and communications systems [PACS]). Paper reports may still be sent for inclusion into the paper clinical notes, which remains the integrated clinical record for much of the NHS, until NHS hospitals acquire proper electronic paper records.

NPSA Safer practice notice 16 states that for critical and significant unexpected results, there should be safety nets established with additional steps of communication.

However, it will be a matter of professional judgement on the part of the reporting radiologist when additional steps need to be taken to supplement the normal systems of communication to referrers. There will be variations for cases where radiologists may feel results may not be acted upon by referrers in a timely manner (for example, a chest X-ray from a gynaecologist showing a primary lung tumour and so on) and thus the need to initiate safety net processes.

Suggested categories are:
- **Critical findings.** Where emergency action is required as soon as possible
- **Urgent findings.** Where medical evaluation is required within 24 hours
- **Significant unexpected findings.** Cases where the reporting radiologist has concerns that the findings are significant for the patient and maybe be unexpected by the referrer.
The NHS National Patient Safety Agency (NPSA) published Safer practice notice 16 (see Appendix A), following the receipt of 22 reports where the failure to act on radiological imaging reports led to patient safety incidents, most of which involved fatalities or significant long-term harm. Trusts were given a deadline of 28 April 2007 to agree an action plan, with an implementation deadline of 28 February 2008.

There were recommendations for actions by:

- The referring registered healthcare professional
- The radiology department and the individual reporting the study
- Medical and nursing directors.

**Recommendations for referrers include:**

- ‘Ensure systems are in place to provide assurance that requested images are performed ... and that the results of these are viewed, acted upon accordingly and recorded. It is the referring health professional’s responsibility to ensure that this is followed’
- ‘When using hard copies of reports, ensure that they are reviewed, signed, timed and dated, and any clinical decision noted before filing in the patients’ records’.
- Always access electronic systems using your allocated log-on and, if acknowledgement functions for the receipt of results or reports exist, use them.

**Recommendations for action by radiology departments and reporting radiologists and radiographers relevant to critical or urgent findings include:**

- Radiology reports should ensure that critical findings are emphasised and obvious and that the degree of urgency for action by the referring health professional is clear
- Defining and developing a policy for radiological imaging reports which require particularly timely and reliable communication; for example, abnormal, unexpected and/or critical ranges
- Define and document ‘safety net’ procedures; for example, copy reports to the GP, cancer services multidisciplinary team or other identified health professional in consultation with the referring health professional.
4 Standards for the communication of reports and developing safety nets

4.1 The essential requirement is for each referrer/referring team to be responsible for reading and acting on the result of every investigation it generates. There needs to be hospital-wide electronic tracking of radiology reports (whether radiology results have been read or not) within each NHS trust or equivalent. The tracking processes involved should be auditable (Appendix B), transparent and represent a clear trust policy.

4.2 Clinical teams requesting imaging studies must have a clear policy as to how they access reports on imaging studies that they have requested, keeping an audit trail of when these results are read and when they are acted upon. The clinical teams must have a robust mechanism for handover of urgent imaging reports, and for handover of pending urgent imaging study requests, to ensure that all significant imaging findings are acted upon by the clinical team in a timely manner, regardless of which clinical staff are actually on duty.

4.3 Individual radiologists are responsible for ensuring that the reports are timely, clear and precise, and the urgency for action is documented within the content of the report. Advice on further management or action also needs to be clearly documented, where appropriate.

4.4 Trusts should also aim to provide a safety net for the highlighting of significant unexpected findings, where radiologists may be concerned that patients’ reports may not be read unless a safety net communication is added.

4.5 Every radiology department should define and develop safety nets for the communication of critical, urgent and unexpected significant findings (in the interest of patients) as outlined in the Safer practice notice 16 (Appendix A).

4.6 Trusts should develop and provide the appropriate IT support and resource required to achieve compliance with this Safer practice notice by reliable electronic tracking systems for reading, acknowledging and taking responsibility for acting upon radiology reports (Appendix C). IT systems must ensure that all urgent, unexpected results appear at the top of the list. It is the responsibility of the clinical teams to regularly audit that they have read and acted upon all imaging study reports requested by their team.

These standards apply to all patients and investigating units, including independent sector services.
5 Guidance for the establishment of relevant processes

5.1 Emergency cases and inpatients

In this group, communication of important findings usually focuses on imaging findings that may need action immediately or within hours. It is the responsibility of the referring doctor and/or their team to read these radiology reports as soon as they have been signed off by the radiologist, and to act upon the findings in the report. The trust (or other healthcare institution) must provide these referring doctors with robust electronic feedback of results systems which are fit for purpose, automatically presenting the referring clinicians with the reports of their most recently requested imaging studies. The radiologist should contact the referring clinician, or another appropriate member of their clinical team, if they consider that there is a danger of unexpected relevant information contained in the report not being acted upon. This communication (whether successful or unsuccessful) should be documented either at the end of the formal report or in the patient’s case notes, with details of the named clinician contacted, and the time and date of the communication.

5.2 Outpatient and primary care patients

In this group of patients, the main issues are usually a diagnosis of possible cancer or unexpected significant findings (such as active TB), which may be overlooked and not be acted on. Unfortunately, it will not always be possible for the reporting radiologist to know whether a finding is expected or unexpected from the details given in the request. Many radiology information systems (RIS) have the facility to put alert flags on reports which may be transmitted to electronic tracking systems used by referrers.7–9 This will allow referrers to be aware of alerts.

Where IT systems are not in place to allow electronic alerts, more laborious methods such as telephoning and faxing reports may be necessary, or emailing the referring consultant. It is helpful for departments to keep contact details for all referring clinicians to allow this to occur. A permanent record of such communications should be kept.

Several models exist for the rapid referral of patients with suspected cancer found on imaging. This may include copies of reports being faxed (or sent) to cancer offices or cancer multidisciplinary team co-ordinators, who then take responsibility for following up the referral.

5.3 Responsibility for report acknowledgement

The radiology department has a responsibility to deliver a radiology report with clear emphasis on whether there are urgent/critical findings within the report. Ideally, electronic systems for report tracking should allow referrers to access, acknowledge, and sign off as read all reports received. Responsibility for report acknowledgment lies with the referrer. Electronic communication greatly simplifies this process. Absence of modern IT facilities in the referring community of a radiology department is time-consuming and expensive for the radiology department, which then has to invoke safety net processes for a large number of reports.
6 Summary of responsibilities

6.1 The responsibilities of the radiologist are:

- To ensure that the reports are timely, clear and precise, and the urgency for action is documented within the content of the report.
- To clearly document advice on further management or action, where appropriate.
- To contact the referring clinician, or another appropriate member of their clinical team, if they consider that there is a danger of unexpected relevant information contained in the report not being acted upon.
- To document – either at the end of the formal report or in the patient’s case notes – the details of the named clinician/team member contacted, and the time and date of the communication (regardless of whether the communication was successful or unsuccessful).

6.2 The responsibilities of the referrer/referring team are:

- To acknowledge the report.
- To read and act upon the result of every investigation it generates.
- To have a clear policy as to how to access reports on imaging studies that they have requested.
- To keep an audit trail of when these results are read and when they are acted upon.
- To have a robust mechanism for handover of urgent imaging reports, and for handover of pending urgent imaging study requests, to ensure that all significant imaging findings are acted upon by the clinical team in a timely manner, regardless of which clinical staff are actually on duty.
- To carry out regularly audit to ensure they have read and acted upon all imaging study reports they have requested.

6.3 The responsibilities of the trust/organisation are:

- To provide referring doctors with robust electronic feedback of results systems which are fit for purpose, and automatically present the referring team with the reports of their most recently requested imaging studies.
- To ensure service-wide electronic tracking of radiology reports (whether radiology results have been read or not). The tracking processes involved should be auditable, transparent and represent a clear trust policy.
- To define and develop safety nets for the communication of critical, urgent and unexpected significant findings (in the interest of patients) as outlined by NPSA Safer practice notice 16.¹
7 Conclusion

The original 2008 *Standard for the communication of critical, urgent and unexpected significant radiological findings* remains a sensible, balanced and responsible radiological standard today. The minor revisions of the original standard in this latest edition emphasise the following.

- All radiological reports should be produced, read and acted upon in a timely fashion in order best to serve the patients’ needs.
- It is the responsibility of the radiologist to produce reports as quickly and efficiently as possible.
- It is the responsibility of the requesting doctor and/or their clinical team to read, and act upon, the report findings as quickly and efficiently as possible.
- It is the responsibility of the trust, or other healthcare organisation, to provide systems (electronic systems in current UK practice), whereby as soon as a verified imaging report has been produced, it is easily available to be read and acted upon by the referrer, their team, and other relevant clinicians; (with a permanent audit trail of who has read the report, and who has taken responsibility for acting upon it).

If we cannot be sure that the relevant clinician has received an urgent radiological report (for example, due to a lack of adequate electronic feedback of results systems being in place, or lack of information about the referring clinical team), fall-back safety net mechanisms, such as organising urgent outpatient appointments for the patient, need to be instituted. Electronic means of reporting and communications will continue to advance. Patient safety remains the most important aspect in this for clinical radiologists.10

Approved by the Board of the Faculty of Clinical Radiology: 15 June 2012
References

APPENDIX A

NPSA Safer practice notice 16. Reproduced with kind permission of the NHS Commissioning Board Special Health Authority

NHS
National Patient Safety Agency

Safer practice notice

16

5 February 2007

APPENDIX A

Early identification of failure to act on radiological imaging reports

Patient safety incidents are being caused by a failure to acknowledge and act on radiological imaging reports. Radiology imaging tests are requested by a registered health professional who relies on a report and image usually generated by a radiologist or radiographer. The report and image are sent to the referring health professional, who then acts on the result. The system for requesting radiology imaging tests and sending reports to the referring health professional is unreliable and has been proven to fail.

Between November 2003 and May 2006, the National Patient Safety Agency (NPSA) received 22 reports where failing to follow up radiological imaging reports led to patient safety incidents, most of which involved fatalities or significant long-term harm. NHS Litigation Authority data for the 10 years up to May 2006 identified 69 cases logged on their database, some of which involved significant harm and monetary claims.

This safer practice notice advises healthcare organisations to make changes to ensure that radiology imaging results are communicated and acted on appropriately.

Action for the NHS and other healthcare organisations

The NPSA is recommending that all healthcare organisations providing or commissioning radiological imaging services should:

1. Ensure that the radiological imaging reports of all patients are communicated to, and received by, the appropriate registered health professional and, where necessary, action is taken in a manner appropriate to their clinical urgency;

2. Ensure registered health professionals design ‘safety net’ procedures for their specialty;

3. Make it clear to patients how and when they should expect to receive the results of a diagnostic test;

4. Review relevant policies and procedures in line with the safer practice recommendations outlined in this safer practice notice.

For response by:
- All NHS acute and foundation trusts and local health boards in England and Wales
- Commissioners of radiology services
- Independent sector providers of radiology services

For action by:
- Medical directors
- Clinical directors
- Radiology directors
- Radiology departments
- Clinical leads
- Risk managers

The NPSA recommends NHS organisations inform and involve:
- Patient liaison service staff in England and Wales
- Clinical governance leads
- Contracts and legal services managers
- Radiology staff
- Nursing and midwifery staff
- Other healthcare staff that order or receive radiology reports
- IT leads

The NPSA has informed:
- Chief executives of acute, primary care and foundation trusts
- Chief executive/regional directors and clinical governance leads of strategic health authorities (England) and regional offices (Wales)
- Healthcare Commission
- Healthcare Inspectorate Wales
- Medicines and healthcare products Regulatory Agency
- Royal colleges and societies
- NHS Direct
- Relevant patient organisations and community health councils in Wales
- Independent healthcare advisory services
- Relevant education providers
- Health Protection Agency
- NHS Litigation Authority
- Quality Improvement Scotland and DHSSPS Northern Ireland
- NHS Connecting for Health
- Informing Healthcare (Wales)
- Relevant professional bodies

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Action deadlines for the Safety Alert Broadcast System (SABS)

Deadline (action underway): 28 April 2007
Action plan to be agreed and actions started

Deadline (action complete): 28 February 2008
All actions to be completed

Further information about SABS can be found at www.info.doh.gov.uk/sar2/cmopatie.nsf

National Reporting and Learning System data
A review of data from the NPSA’s National Reporting and Learning System (NRLS) between May 2006 and October 2006 indicated a significant rise in reporting rates, which may have been connected to publicity about this project. During this period, 31 incidents were reported of which the outcome for the patient was severe in eight cases and moderate in nine, with the remaining cases resulting in low or no harm.

Recommendations for action

Recommendations for action by referring registered health professionals

- Ensure your name and/or code is clearly identified on the request form along with an adequate clinical history and reason for the radiology image.
- Ensure systems are in place to provide assurance that requested images are performed, (or alternatively that the request has been assessed by the radiology department as unjustified) and the results of these are viewed, acted upon accordingly and recorded. It is the referring registered health professional’s responsibility to ensure this is followed.
- Ensure your specialty or disease group designs a ‘safety net’ procedure in case these systems fail. This is particularly important in accident and emergency departments and assessment areas.
- Always access electronic systems using your allocated log-on and, if acknowledgement functions for the receipt of results or reports exist, use them.
- In the absence of electronic tracking systems, adopt hard copy tracking systems such as ward books or results acknowledgement sheets.
- When using hard copies of reports, ensure they are reviewed, signed, timed and dated, and any clinical decision noted before filing in patients’ records.
- Inform patients of all results, positive or negative, and document that this has been done. A standard letter to patients could be an additional safety mechanism.
- If a patient’s radiology imaging report is not available at the time of accident and emergency attendance, in-patient discharge or out-patient consultation, check the results as soon as possible and ensure the patient is informed of them. Patients may be informed through standard letters, phone calls or other appropriate means.
- Ensure patient information and contact details are correct and clear.
- Provide patients with details of when test results are expected and how they will be communicated, giving contact details for enquiring about any concerns or delays.
- Audit your communication tracking systems to ensure compliance with these recommendations.
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Recommendations for action by radiology departments and reporting radiographers and radiologists

- Ensure systems are in place to assure your organisation that radiological imaging reports are accurately and effectively communicated to the responsible health professional. These should include:
  - defining and developing a policy for radiological imaging reports which require particularly timely and reliable communication, for example, abnormal, unexpected and/or critical ranges;
  - empowerment to reject inadequately completed requests for studies where appropriate;
  - explicit timeframes for reporting results;
  - regular audits of compliance with the above points.
- Consider providing standard letters to patients if an examination is abnormal. These could be generated at the same time as an alert is sent to the referring health professional.
- Introduce minimum data set requirements for requests, in line with the Royal College of Radiologists standards and Ionising Radiation (Medical Exposure) Regulations [IR(ME)R 2000], for example, clinical history and reason for test.
- Ensure the identity of the requesting health professional and their contact details are on all requests.
- Ensure processes are in place to provide assurance that all results are reported and that there are clear policies and/or service level agreements for the management of any results that will not be reported by a radiologist or appropriately trained radiographer.
- Radiology reports should ensure that critical findings are emphasised and obvious, and that the degree of urgency for action by the referring health professional is clear.
- Define and document ‘safety net’ procedures, for example, copy reports to the GP, cancer services multidisciplinary team or other identified health professional in consultation with the referring health professional.
- Where acknowledgement or audit functions exist on electronic systems, for example, Patient Administration System (PAS), Electronic Patient Record (EPR), Order Communications, Picture Archiving and Communications System (PACS) and work lists, use them where feasible.
- Audit compliance with these recommendations regularly.

Recommendations for action by medical and nursing directors

- Ensure existing policies, procedures and ‘safety net’ mechanisms for the management of radiological imaging reports are reviewed and developed, where necessary, to meet the requirements of this safer practice notice.
- Ensure timely and accurate data entry and tracking of patients and their information through PAS, Hospital Information System (HIS) or Radiology Information System (RIS) throughout the organisation, including the responsible clinical team.
- Ensure health professionals are adequately trained in the use of their organisation’s software systems, for example, RIS, PACS and Order Communications.
- Enforce and audit the use of individual NHS email addresses and individual log-on by registered health professionals to ensure clear communication channels that are consistent throughout the organisation.
- Advise patients, through leaflets, posters and/or inserts in letters, to check how their test results will be communicated to them.
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Reporting incidents
All healthcare staff should report incidents via their local risk management reporting system. This will enable both local and national monitoring of the incidence of failure to act on diagnostic test reports, and can inform future understanding of these issues.

Keeping patients informed
To assist in the early identification of failure to follow up on radiological imaging reports, it is recommended that patients are given the NPSA patient briefing (available at www.npsa.nhs.uk/health/alerts) and the following guidance:

- to ask when and how they will be informed of test results;
- to be aware of how to get their results;
- to have the relevant health professional’s contact details and to speak to them if they are in doubt;
- to ensure that their, and their next of kin’s, contact details are recorded correctly in their health records and that contact arrangements are clear;
- not to assume their results are okay if they do not hear anything.

Key information could be included in patient leaflets. The NPSA has produced a flyer to encourage patients to follow up results of their X-rays. This can be downloaded from www.npsa.nhs.uk/health/alerts and hard copies can be ordered from the NHS response line (08701 955 455) using stock code XRAYFPWelsh. A Welsh language version is also available, to order please use stock code XRAYFPWelsh.

Patient leaflets are also available from a variety of other sources including the Royal College of Radiologists (www.rcr.ac.uk/index.asp?PageID=323).

Cost implications of implementing the NPSA recommendations
Given the diversity of existing resources, systems and practices within healthcare organisations, it has not been possible to estimate the cost implications of these recommendations. However, the NPSA anticipates that all acute trusts will have PACS in place by the end of 2007 and that many will have Order Communications, both of which assist in achieving compliance with these recommendations.

Evaluation
It is the responsibility of healthcare organisations to evaluate the implementation of this safer practice notice locally. However, to analyse the effect of the recommendations nationally, the NPSA will:

- undertake, through the NRSL, routine monitoring of patient safety incidents involving failure to act on radiological imaging reports;
- liaise with selected trusts to audit the degree of implementation of these recommendations and their perceived outcome.

The impact will also be evaluated in England through the Safety Alert Broadcast System 12 months after issue, and in Wales through the Regional Offices of the Welsh Assembly Government. The Healthcare Commission and the Regional Office in Wales will also monitor the implementation of the recommendations in this safer practice notice.
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Future action
In the long term, it is proposed that radiological imaging reports should be routinely provided in a comprehensive EPR system and that this should include functionality to acknowledge receipt of the information. An automatic alert through the system for early notification of unread reports/results should also be provided. The timescale of the electronic alert should be configured to appropriately match the clinical requirements. The NHS Connecting for Health and Informing Healthcare (Wales) programme recognises the need to include the functionality described above within its systems and it is recognised that this may present the programme with a major challenge in the development of different regional systems.

Further details
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Further background information, supporting documents and examples of best practice are available on the NPSA website at www.npsa.nhs.uk

Acknowledgements
The NPSA would like to thank the Royal College of Radiologists, and the many NHS acute trusts, staff and other organisations and individuals who have contributed to this safer practice notice.
A safer practice notice strongly advises implementing particular recommendations or solutions.

This safer practice notice was written in the following context:
It represents the view of the National Patient Safety Agency, which was arrived at after consideration of the evidence available. It is anticipated that healthcare staff will take it into account when designing services and delivering patient care. This does not, however, overrule the individual responsibility of healthcare staff to make decisions appropriate to local circumstances and the needs of patients and to take appropriate professional advice where necessary.

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5 February 2007 0472
Appendix B. Audit template for communication of urgent reports

This audit provides evidence on clinical effectiveness

Organisation and delivery

Organising this audit and delivering the report is the responsibility of the clinical director and radiology services manager.

The Cycle

1. The standards
   - Every department should provide a means for the communication of urgent reports as outlined by Safer practice notice 16.
   - The processes involved should be transparent and form clear available trust policy agreed between the radiology department and requesting clinicians.
   - The processes involved should be subjected to regular audit.
   - There should be defined ‘safety net’ procedures (preferably electronic and automatic); for example, copy reports to the GP, cancer services multidisciplinary team or other identified healthcare professional in consultation with the referring healthcare professional.

2. The indicators and targets
   2.1 Communication of possible malignancy in a report by clearly agreed pathways. Target 100%
   2.2 All patients with a possible malignant diagnosis are referred appropriately. Target 100%

3. Assess local practice
   3.1 Data collection requirements. Choose a site-specific cancer (eg, lung) and ask for a list of referrals from the MDT for the past three months. Review the radiology reports to assess whether the reports indicated urgent referral according to local policy.
   3.2 Obtain a list of the last month’s reports coded urgent according to local policy, if the radiology management system (RMS) allows. Cross check with the hospital patient information system/electronic patient record to ensure patients have been referred appropriately.
   3.3 If the RMS system does not allow for an ‘urgent’ report to be coded in your institution, the audit should be carried out prospectively. Copies of all reports with a suspected diagnosis of malignancy should be kept for 1–4 weeks (according to local workload). The hospital patient information system should be interrogated to ensure all patients have had appropriate onward referral.

4. Resources needed
   - Personnel: IT facilities and clerical time to pull the necessary lists.
   - Clinical time to deal with all the safety net queries.
   - Clerical time for performing the electronic feedback of results system check. This person needs appropriate clinical experience and skills to understand information presented in the hospital information system. Time will also be needed for GP cases as direct contact will, in the main, be the only way of checking the correct actions and referral have occurred.
   - Time: Allow eight hours per year for scrutinising records and preparing formal annual reports.

Taken from AuditLive on www.rcr.ac.uk
Appendix C. Requirements of an electronic system to communicate imaging study results

1. It must be seamlessly integrated with:
   a. The remote electronic requesting system/‘order comms’ (which itself may be part of the hospital information system/patient administration system [PAS]/ electronic patient record [EPR])
   b. The RIS
   c. The speech recognition system
   d. The PACS.

2. It must allow the results of the requested imaging studies to be seen not only by the requesting clinician and the consultant in charge of the patient (if different), but also by the whole of their clinical team. This will be configured according to local working practices. It must allow clinicians to belong to more than one clinical team.

3. It must show the requesting clinician a list of all the imaging studies their clinical team have requested, searchable by date, with a status as to how these studies are progressing (booked, in progress, performed, reported, report verified).

4. It must allow the reporting radiologist to mark a report ‘urgent’ for unexpected or urgent findings at the time of reporting within the speech recognition system and/or within PACS-RIS.

5. It must flag these urgent reports to the requesting clinical firm with some form of alert (eg, a flag icon, highlighting in colour).

6. It must provide an audit trail of which member of the clinical team has read the report, and when.

7. It must provide a second audit trail, produced by an active action such as clicking a check box, of the person who has taken responsibility for acting upon the result.

8. It must be easily possible for the patients’ results to be transferred to, and stored in, a separate folder on the electronic patient record/feedback of results system, so they can be kept under review and followed up.

9. Each clinical consultant referrer (and their team and administrative staff) must be able easily to display, print and audit the imaging examinations requested by their team which have not been (1) read, (2) ‘actioned’ (i.e. responsibility taken for acting upon the results), or both, on a daily, weekly and monthly basis.

10. There must be a formal contract for the equipment and software specifying maintenance procedures with specified uptimes, fix times and upgrades and so on.
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