**Audit of practitioner reporting in non-obstetric ultrasound imaging [QSI Ref: XR508]**

**Descriptor:**

Non-radiology trained practitioners and sonographers are performing and reporting non-obstetric ultrasound examinations on an ever-increasing basis. It is important to audit/quality assure ultrasound examinations to ensure standards are maintained and secondly to ensure that the levels of autonomy and case review are appropriate [1,2].

**Background:**

There are several described QA methods covered in the recent RCR guidance [1]. Retrospective expert review is the most commonly described and is the technique used in this template. This can be applied to all non-obstetric ultrasound examinations.

Template aims:

1. To evaluate image quality and overall report accuracy and quality (clarity, content, readability and relevance) and adherence to local/national scanning protocols

2. To ensure that abnormal examinations are discussed with a senior radiologist or appropriate supervisor as per protocol and that this is documented in the report

## The Cycle

**The standard:**

Auditing standards may include the following (with target compliance rate in parentheses) -

Images of examination (All 100%):

   1. Available on PACS

   2. Appropriate probe settings/utilization

   3. Specific set of images as per locally agreed protocol

   4. Appropriate image annotations

   5. If images are suboptimal due to patient factors, this is documented

Report:

   1. Is validated on CRIS (100%)

   2. Is of high quality, clear, well constructed, and answers the clinical question (95%). A subjective global score (poor, average, good) assessing clarity, content, readability, relevance, can also be utilized

   3. If normal report:

      a. Expert review of images is in agreement? If disagreement or minor discrepancy, it is unlikely to result in change in management or in patient harm (95%)

      b. Follows locally agreed ‘normal report’ protocols in use (100%)

   4. If abnormal report:

      a. Expert review of images is in agreement? If disagreement or minor discrepancy, it is unlikely to result in change in management or in patient harm (95%)

      b. Contains appropriate differential diagnoses and recommendations for further investigation/management (95%)

      c. Follows locally agreed ‘abnormal report’ protocols if in use (100%)

   5. In complex cases or as per local ‘abnormal report’ protocols, a discussion with a senior radiologist may be indicated. In such cases - There is evidence of discussion with senior radiologist (100%)

**Target:**

To achieve percentage targets as listed in the standards.

## Assess local practice

**Indicators:**

1. Percentage of examinations with images fulfilling minimum dataset as listed in the Standard

2. Percentage of examination reports that fulfill requirements as listed in the Standard

**Data items to be collected:**

All data items as listed in the Standard described above.

**Suggested number:**

30 retrospective non-obstetric examination of all types included, per sonographer / non-radiologically trained practitioner.

**Suggestions for change if target not met:**

1. Dissemination of audit findings amongst sonographers or non-radiologically trained practitioners, meet sonographers to discuss findings and agree on processes around reporting and technical optimization of scans. Reinforce the need to adhere to local protocols and to document discussion in the report

2. Review of reports that did not have the minimum dataset of images and report

3. Review of reports where there were discrepancies between expert review and report

4. Review of locally agreed sonographer reporting guidelines for normal/abnormal examinations

5. Review or introduction of locally agreed criteria for abnormalities that should be discussed with radiologist

6. Re-audit after six months after sonographer discussion/meeting

**Resources:**

• Review of reports and images on CRIS/PACS or local equivalent

• Radiologist time: 8 hours

**References:**

1. The Royal College of Radiologists. Standards for the provision of an ultrasound service. [Internet]. London; 2014. Available from: [https://www.rcr.ac.uk/publication/standards-provision-ultrasound-service](https://www.rcr.ac.uk/sites/default/files/documents/BFCR%2814%2917_Standards_ultrasound.pdf)
2. The Royal College of Radiologists. Standards for interpretation and reporting of imaging investigations, second edition. London; 2018. Available from: <https://www.rcr.ac.uk/publication/standards-interpretation-and-reporting-imaging-investigations-second-edition>

**Submitted by:**

Dr Subramanian Nachiappan. Updated by P Mehrotra

**Co-authors:**

Dr David Howlett

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