University Health Board – Sonographer Reporting Protocol

Introduction and Aim

- The aim of the protocol is to provide a clear guideline to staff in the UHB regarding the reporting remit of UHB Sonographers.

Objectives

- To make best use of the clinical expertise of the Sonographer.
- To improve the efficiency and efficacy of the UHB diagnostic ultrasound.
- To encourage and foster the further development of such staff.
- To ensure that such role extension is properly managed and audited in line with sound clinical governance principles.
- To support CPD (continual professional development).

Scope

This protocol applies to all UHB Radiology Sonographer staff including those with honorary contracts who undertake and report Non – Obstetric Ultrasound Examinations.

Equality Impact Assessment

An Equality Impact Assessment has not been completed.

It did not appear relevant and proportionate at this time to undertake a full Equality Impact Assessment.

Equality Statement - Section 1.8 of the protocol document agreed as sufficient information.

Documents to read alongside this Procedure

Standards for the provision of an Ultrasound service –
https://www.rcr.ac.uk/sites/default/files/publication/BFCR%2814%2917_Standards_ultrasound.pdf

Standards and recommendations for the reporting and interpretation of imaging investigations by non-radiologist medically qualified practitioners and teleradiologists –
https://www.rcr.ac.uk/standards-and-recommendations-reporting-and-interpretation-imaging-investigations-non-radiologist
| Ultrasound Training, Employment, Registration and Professional Indemnity Insurance |

| BMUS – Peer Review Audit Tool |
| http://www.bmus.org/members/mb-recommended-audit.asp |

| BMUS - BMUS Recommended good practice guidelines-Justification of Ultrasound Request |
| http://www.bmus.org/members/BMUS%20Justification%20of%20Ultrasound%20Requests.pdf |

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**Disclaimer**  
If the review date of this document has passed please ensure that the version you are using is the most up to date either by contacting the document author or the Governance Directorate.
### Summary of reviews/amendments

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<th>Date Published</th>
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<td>3rd Nov 2015</td>
<td>17th Nov 2015</td>
<td>New Sonographer Reporting Protocol</td>
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1. INTRODUCTION

1.1 A medical report is a report of the results of a medical examination of a patient (Online Dictionary.)

1.2 A report is defined for the purposes of this document as the interpretation and recording of observations made from an ultrasound examination.

1.3 In accordance with The Royal College of Radiologists Guidelines: “Inter-professional Roles and Responsibilities in a Radiology Service” - Section 6.5.1.

A descriptive report may be provided by those members of the team who are competent to do so, in accordance with a protocol agreed by the medical members of the team. The author of the descriptive report bears responsibility for its content. A Radiologist, or their delegated representative, under an agreed scheme of work should only make the medical interpretation.

1.4 Obstetric Ultrasound is performed and reported by Sonographers in Cardiff and Vale University Health Board (subsequently referred to as UHB) as per Antenatal screening Wales (ASW) and local guidelines.

1.5 Sonographers have been reporting general ultrasound in UHB since the first local policy and protocols were agreed in 2002. Since then Sonographer led ultrasound lists have increased. This has resulted in a need for a greater scope of practice undertaken by the UHB Sonographers.

1.6 This protocol recognises the role development of Sonographers with regards to the interpretation and reporting of non-obstetric ultrasound examinations undertaken in UHB. In doing so this so this protocol will make the best use of the clinical expertise of the UHB Sonographers.

1.7 This protocol supersedes the existing reporting policy from 2002.

1.8 EQUALITY STATEMENT

Cardiff and Vale UHB is committed to ensuring that, as far as is reasonably practicable, the way we provide services to the public and the way we treat our staff, patients and others reflects their individual needs and that we will not does not discriminate, harass or victimise individuals or groups unfairly on the basis of sex, pregnancy and maternity, gender reassignment, disability, race, age, sexual orientation, disfigurement, religion and belief, family circumstances including marriage and civil partnership. These principles run throughout our work and are reflected in our core values, our staff employment policies, our service delivery standards and our Strategic Equality Plan and Equality Objectives. We believe that all staff should have fair and equal access to training as highlighted in both the Equality Act 2010 and the 1998 Human Rights Act. The responsibility for implementing the Plan falls...
to all employees and UHB Board members, volunteers, agents or contractors delivering services or undertaking work on behalf of the UHB.

It did not appear relevant and proportionate at this time to undertake a full Equality Impact Assessment on the way the protocol operates based on the characteristics mentioned above. However, we did want to acknowledge and clarify that the circumstances around young people having an ultrasound examination needed clarification about young people aged <16 yrs and the impact of the protocol. The statement about young people has been added to the document to cover any instance of a young person being scheduled on a Sonographer Adult list. Where appropriate we will make plans the necessary actions required to minimise or mitigate against any stated or potential impact to ensure that we meet our responsibilities under the equalities and human rights legislation. In this instance, if the requested examination was not within the remit of the Sonographers working practice then a Consultant Radiologist would be asked to perform the ultrasound scan. The scheme of work categorises the type of report that can be issued by a Sonographer dependent on their agreed level of working. At no time should a Sonographer work outside their agreed Level of Work.

2. **AIM**

2.1 The aim of the protocol is to provide a clear guideline to staff in the UHB regarding the reporting remit of UHB Sonographers.

3. **OBJECTIVES**

3.1 To make best use of the clinical expertise of the Sonographer.

3.2 To improve the efficiency and efficacy of the UHB diagnostic ultrasound service.

3.3 To encourage and foster the further development of such staff.

3.4 To ensure that such role extension is properly managed and audited in line with sound clinical governance principles.

3.5 To support CPD (continual professional development).

4. **ROLES AND RESPONSIBILITIES**

4.1 All Sonographers wishing to undertake some element of independent reporting must be in possession of the following:

4.1.1 Diploma of the Royal College of Radiographers or BSc in Diagnostic Radiography or equivalent graduate status.
4.1.2 Current State Registration with the Health Professions Council.

4.1.3 Diploma in Medical Ultrasound or postgraduate equivalent approved by the Consortium for the Accreditation of Sonographic Education.

4.1.4 A Certificate of Competence as issued by the Department of Radiology on behalf of the UHB.

4.2 Sonographers may report different categories of examinations depending on their particular training and experience, but each individual will need to be able to demonstrate such competence to the satisfaction of the UHB and in line with local policy.

4.3 The UHB must be informed in writing of those individuals who will be undertaking Sonographer reporting.

4.4 The Radiologist(s) charged with assessing competency must be in possession of the Fellowship of the Royal College of Radiologists (FRCR).

4.5 All examinations and reports will be carried out according to departmental protocols.

4.6 The report may be recorded using the various departmental systems: -

4.8.1 RADIS – Radiology Information System.
4.8.2 Digital (G2 interactive and sign off).

4.7 Validation (signing off) of the report is the responsibility of the Sonographer performing the examination, except where service provision and patient care/safety would be compromised should a second opinion not be given.

4.8 Additional communication of the report may be made verbally and/or written in the patient’s notes where appropriate and in accordance with local policy.

4.9 Sonographers will be expected to comply with regulations imposed by their own statutory body and to heed the advice given by that professional body.

4.10 Sonographers should hold professional indemnity insurance. The UHB will formally indemnify the sonographer who performs work which has been appropriately delegated and carried out in accordance with the terms of the delegation and the departmental protocols which may be revised from time to time.
5. REPORTING PROCEDURES

5.1 An ultrasound examination should not be performed unless a valid request has been received.

5.2 The requester must be identified and should receive the report promptly.

5.3 All examinations and reports will be carried out according to departmental protocols/guidelines.

5.4 Reports will be issued under the name of the Sonographer performing the examination.

5.5 The Sonographer must only report on those examinations performed by him/herself. Except where service provision and patient care/safety would be compromised should a second opinion not be given.

5.6 The report should address the clinical question. It should describe the image appearances and should discriminate between normal and abnormal. Further information about the nature of any abnormal appearances identified may be included.

5.7 The style of the report should be clear, concise and easily understood. Technical shorthand should only be used in cases where it is known that the recipient will be able to interpret it correctly.

5.8 The Sonographer should at all times be aware of the limitations of his/her skills, knowledge and experience in the interpretation of the clinical information and/or making of a report. In such instances the assistance of a Radiologist must be obtained.

5.9 Any limitations of the examination should be clearly stated and if an organ/region has not been examined, it should be included in the report.

6. AUDIT

6.1 All Sonographers undertaking reporting must:

6.1.1 Maintain an up to date Continuing Professional Development Portfolio.

6.1.2 As part of the proposed scheme of work a proportion of patients—particularly difficult cases are passed onto a consultant Radiologist for reporting together with a written proforma. Another group of patients will be discussed with a consultant Radiologist prior to Sonographer reporting. This constitutes an informal but robust ongoing quality check.
6.1.3 Subject themselves to regular peer review and ongoing audit (Appendix 1)

6.1.4 If a concern is identified regarding an individuals reporting performance an interval audit should be undertaken.

7. REVIEW

7.1 This protocol will be reviewed every 3 Years as a minimum or more frequently should a need be identified.

Appendix 1

Audit

A formal audit will be undertaken every 12 months utilising the BMUS peer review audit tool.

A selection of 10 patients from each examination area e.g. Abdominal, Gynae, Scrotal etc. will be reviewed.

If deficiencies / training needs are identified this will be addressed individually and at an Annual Ultrasound Review Meeting.
# ULTRASOUND PEER REVIEW AUDIT TOOL

<table>
<thead>
<tr>
<th>Date of Scan</th>
<th>Reporter</th>
<th>Machine / Site</th>
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<table>
<thead>
<tr>
<th>Date of Review</th>
<th>Reviewer</th>
<th>Patient Identification</th>
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### Image Quality (I)

<table>
<thead>
<tr>
<th>Score</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>Good Image Quality</td>
</tr>
<tr>
<td>2</td>
<td>Acceptable Diagnostic Quality</td>
</tr>
<tr>
<td>1</td>
<td>Poor Image Quality <em>(Images of an unacceptable standard)</em></td>
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### Report quality (R)

<table>
<thead>
<tr>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>Report Content and Structure Optimal</td>
</tr>
<tr>
<td>2</td>
<td>Report of Acceptable Quality</td>
</tr>
<tr>
<td>1</td>
<td>Poor Report Quality</td>
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### Clinical Quality (C)

<table>
<thead>
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<th>No</th>
<th>Comments</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Clinical Referral Appropriate</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Clinical Question Answered</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Appropriate advice or conclusion <em>(including no abnormality demonstrated)</em></td>
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<table>
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<tr>
<th>I</th>
<th>R</th>
<th>C*</th>
<th>Total:</th>
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Descriptors:

**IMAGE QUALITY (I)**

3 Good Image Quality

High quality examination. Organs identified by characteristic features and/or labelling. Appropriate measuring made. May include suboptimal images but with evidence that this was due to patient factors and attempts have been made to address these.

2 Acceptable Diagnostic Quality

Reasonable image quality but a few poorer quality images and parameters (i.e. incorrect focus, measurement, protocol, colour, label, etc).

1 Poor Image Quality

Images of an unacceptable standard.

**REPORT QUALITY (R)**

3 Report Content and Structure Optimal

Report answers clinical questions and gives appropriate advice and conclusion (within local guidelines). Report may also include additional clinical information gained from verbal feedback from patient and include documentation of any information given to the patient.

2 Report of Acceptability Quality

Report satisfactory but additional diagnosis or advice could have been provided.

3 Poor Report Quality

Report of an unacceptable standard. List of descriptive findings with no attempt to correlate to clinical setting or answer clinical question posed. May also include disagreement with the report findings.

**CLINICAL QUANTITY (C)**

Yes = 1 point, No = 0 points

Clinical Referral Appropriate

The referral contains a clear clinical question and is appropriate for ultrasound imaging. See BMUS recommendations for justification of referrals.

*NB add q to total score if clinical referral is inappropriate to differentiate between examination quality and referral quality (e.g. a referral where the clinical question has not been specified, and may not therefore be answered, with normal findings on Ultrasound could therefore score C1 *q). Highlighting poor referrals should allow appropriate audit of the referral process.

Clinical Question Answered

The report answers the clinical question posed or the question gleaned from questioning the patient during the examination.

Appropriate advice or conclusion

The report includes a conclusion or appropriate advice where applicable and in line with local guidelines. This may include a statement of normality including no abnormality demonstrated or no cause for symptoms in normal examinations.
The total score (max 9) is thus subdivided as per:
1 (1-3), R (1-3), Q (0-3 (+/-q))

Ref: BMUS Professional Standard Group
Recommended Peer Review Audit Tool  Dec 2014

Discrepancy reporting

Ongoing discrepancy reporting will be logged and reviewed at 3 monthly intervals.
ULTRASOUND DISCREPANCY FORM

Date of scan(s)                  Date discrepancy identified

Patient Name
Patient Number
Scan operator(s)
Summary of Discrepancy

Category of Discrepancy (X)
1. Poor Imaging Technique
2. Observation / interpretation error
3. Ambiguity of wording or report findings
4. Inadequate / misleading or incorrect clinical information
5. Not evident / identifiable on scan

Grade of Discrepancy (X)
0 = no discrepancy
1 = minor discrepancy
2 = moderate discrepancy
3 = major discrepancy

FEEDBACK

Date.......... Action Recommended

Action completed                  Date..........
SCHEME OF WORK FOR SONOGRAPHER REPORTING OF NON-OBSTETRIC ULTRASOUND SCANS

Pre reporting competency for non-obstetric scans
The sonographer must complete a competency audit conducted by senior colleagues/consultant radiologists. This should include 10 abdominal scans, 10 Pelvic scans and 10 scrotal scans. Once successfully completed a certificate of reporting competency must be signed off and the sonographer progresses to level one reporting. Competency documentation must be retained in the sonographers personal file.

Level 1
The following categories of ultrasound examinations have been agreed as appropriate for sonographer reporting level 1.

- Normal upper abdominal examinations.
- Normal renal tract examinations and post micturition residual volumes.
- Normal pelvic examinations.
- Normal scrotal examinations.
- Normal aortic examinations.

Level 2
To progress to level 2 the sonographer must undertake supervised reporting of level two pathologies until competent (50 mixed cases documented). Once completed the certificate of reporting competence must be signed off and the sonographer can report at level 2.

The following ultrasound new findings/pathologies have been agreed as appropriate for sonographer reporting level 2 with the exception of pathology in italics unless previously reported by a Consultant and appearance and size remains unchanged

- LIVER - Fatty livers, Fatty sparing, Simple liver cysts, Haemangiomas.
- BILIARY SYSTEM - Gallstones, Gallbladder polyps,
- SPLNEE - Enlarged spleen.
- RENAL SYSTEM - Simple renal cortical cysts, Renal calculi, Hydronephrosis. **Cortical cysts with a thin septum, Renal angiomyolipomas AMLs**, 
- RENAL BIOPSIES - descriptive report of any pathology and note of procedure.
- AORTA - Atheromatous aorta, Aorta AP diameter up to 3cm.
- UTERUS - Fibroids, Adenomyosis, Endometrial polyps, IUCD presence/location, Generalised endometrial thickening.
- OVARY - Simple ovarian cysts, Complex ovarian cysts, Haemorrhagic ovarian cysts, Dermoid cysts, Polycystic ovaries, Hydrosalpinx.
- SCROTUM - Epididymal cysts, Hydroceles, Varicoceles.
- PROSTATE - Prostate volume.
- TRANSRECTAL BIOPSIES - Descriptive report of pathology and note of procedure.
• YOUNG PERSON (< 16 years of age) - On occasion these patients will be scanned by sonographers. Normal scans can be reported by a sonographer. Abnormal scans are to be reviewed by a Consultant Paediatric Radiologist.

Level 3
To progress to this level the sonographer must undertake supervised reporting of level 3 pathologies until competent. (50 mixed cases documented). Once completed the certificate of reporting competence must be signed off and the sonographer can report at level 3.

The sonographer can report all pathologies within their scope of practice, this may include the following pathologies if previously reported by a Consultant and the appearances and size remains unchanged.

- **Haemangioma**
- **Renal cortical cysts with a thin membrane**
- **Renal angiomyolipoma (AML)**

A consultant radiologist review and report is required for the following:

- Any case with ultrasound findings of suspected malignancy.
- Any pathology that requires further imaging.
- Any appearances of uncertain nature.

If a radiologist is not available then an interim report may be issued consisting of a descriptive report of the ultrasound findings. The case should then be discussed with a consultant radiologist when available who can add an addendum to the report if necessary.

Level 3 sonographers may report normal scans performed by non-reporting sonographers.

Other examinations undertaken at level 3 are:
- MSK.
- Vascular.
- Paeds.