

Successful Implementation of a Performance-Related Audit Tool

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- BMUS Professional Standards Group



Background

- Sonographers now undertake and report medical ultrasound examinations in most UK hospitals
- RCR view this as a delegated task
- Quality assurance is important
 - to ensure that delegation is appropriate
 - to guarantee safe and effective practices to service users

Implementing Audit

- Ultrasound is renowned for its operator dependence
- A 'real-time' imaging modality
- Immediate interpretation of the moving ultrasound image
- An audit programme should be a process of review, learning and improvement for both the service and individuals

Implementing Audit

- A robust, sustainable audit programme for diagnostic ultrasound is hard to implement
- Time and resources are required
- Relevant to clinical practice
- No one accepted method of performing a review of practice

Implementing Audit

- Retrospective analysis of hardcopy imaging is an effective method of assessing report accuracy for many medical imaging modalities
- Is a retrospective review an effective method that can be sustainably used to assess quality in ultrasound imaging?

Audit Aims

- Provide a robust, sustainable and useful audit and case review process that identifies needs for service improvement that will ultimately lead to better patient care.
- Provide a process of review and learning that contributes positively to sonographers' continuing professional development.

Audit Methods

	Most likely to undertake	Most useful learning tool	Likely to alter practice	Will contribute to HCPC framework
Discrepancy reflection template	9	10	9	11
5% Peer review template	9	7	8	9
Self-review of practice	4	3	2	10
Disease detection rate	4	3	2	10
Abnormal interpretation rate	6	7	7	1
2 nd Opinion rate	5	4	5	
Symptom solution)	3	4	3	1

Discrepancy Reflection

	Type of Discrepancy
Α	Observation
В	Interpretation
С	Poor imaging technique
D	Poor Wording

	Grade of discrepancy
0	No Discrepancy
1	Discrepancy with report – no action required
2	Discrepancy with report – report amended
3	Significant discrepancy with report – action required

Peer Review

1	Image Quality
3	High quality examination or suboptimal images with evidence that this was due to patient factors and attempts have been made to address these.
2	Reasonable image quality but a few poorer quality images(incorrect focus, measurement, protocol, colour, label, etc)
1	Poor quality image with inadequate attempt to optimise

R	Report Quality
3	Content and structure optimal
2	Report satisfactory but additional diagnosis or advice could have been provided
1a	Disagreement of interpretation: Requiring action
1b	Disagreement of interpretation: Not requiring action

British Medical Ultrasound Society

- Professional Standards Group (PSG)
 develop standards relevant to ultrasound
 practice.
- These include:
 - criteria for referral for ultrasound
 - image and reporting quality
 - equipment performance including criteria for suspension



British Medical Ultrasound Society

- The BMUS recommended peer review audit tool
- Reproducible mechanism with which quality factors can be measured reliably and repeatedly.
 - Image Quality
 - Report Quality
 - Clinical Quality



Recommendations for Use

- Audit is undertaken in conjunction with a discrepancy meeting.
- A tolerance level of acceptable quality is agreed
- Cases falling below this tolerance level should be discussed openly within a discrepancy meeting
- Learning points and further action agreed

Recommendations for Use

- A reasonable estimation of time required is to allocate an average of 5 mins per case reviewed.
- Aim for a review of 5% of all examinations and reports (RCR recommendation by 2017)
- A timely retrospective audit of cases is required



Points to Consider

- Randomised audit sample
- Anonymity
- Reviewers
- Quality Benchmarks
- Feedback
- Learning from discrepancies





Score Criteria

IMAGE QUALITY (I)

- 3 Good Image Quality
- 2 Acceptable Diagnostic Quality
- 1 Poor Image Quality

REPORT QUALITY (R)

- 3 Report Content and Structure Optimal
- 2 Report of Acceptable Quality
- 1 Poor Report Quality

CLINICAL QUALITY (C) Yes = 1 point, No = 0 points

Clinical Referral Appropriate
Clinical Question Answered
Appropriate advice or conclusion

PEER REVIEW AUDIT TOOL

Date of Scan	Reporter	Machine / Site
Date of Review	Reviewer	Patient Identification

Image Quality (I)

1		Score	Comments
3	Good Image Quality		A XX
2	Acceptable Diagnostic Quality	3	VI A
1	Poor Image Quality (Images of an unacceptable standard)		

Report Quality (R)

R		Score	Comments	
3	Report Content and Structure Optimal			
2	Report of Acceptable Quality			
1	Poor Report Quality			

Clinical Quality (C)

C (Y=1;N=0)	Yes	No	Comments
Clinical Referral Appropriate	·	*q	
Clinical Question Answered	* is		
Appropriate advice or conclusion (including no abnormality demonstrated)		52	

		Comments:			
1	R		C*	Total:	



Image Review

- Review the reports of the following cases
- Use the BMUS recommended audit tool provided

