

# Thyroid U-scoring and subsequent fine needle aspiration cytology: A quality improvement project

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## Background

- The British Thyroid Association (BTA) 2014 guidelines recommend assigning a U-score to thyroid nodules based on their sonographic characteristics and advise which nodules require ultrasound-guided fine needle aspiration cytology (FNAC) based on the u-score.
- They also recommend which sampled nodules require further management, including repeat FNAC, based on their cytology results (Thy-score).
- This has implications in terms of time, cost and on the two-week rule pathway

## Aim

- This quality improvement project assessed compliance with these guidelines.
- The aim was also to increase compliance by implementing different interventions.

## Methods

- Thyroid ultrasound reports between March 2021 and June 2021 were reviewed for a U-score and whether FNAC was subsequently performed in the appropriate patients based on the U-score in line with the current BTA 2014 guidelines.
- A change was proposed by educating sonographers and placing laminated educational U-scoring guidelines with corresponding ultrasound examples in all ultrasound rooms to increase the compliance with the guidelines with target of 100% of ultrasound report to include a U-score and FNAC to be performed in U3-U5 nodules only.
- A second cycle audit was performed after the intervention identifying patients from March 2022 and May 2022

## Results

- 132 patients were identified before the intervention in the first cycle
- 78 patients were identified after the intervention in the second cycle

## Results

U-score included	61/132		44/78
	45%		56%

FNAC performed	9/12		11/11
	75%		100%

**100%**

- U-score assignment increased from 45% to 56%
- FNAC performed increased from 75% to 100%

## Learning and next steps

### Learning

- Educating sonographers and placing laminated educational U-scoring guidelines with corresponding ultrasound examples in all ultrasound rooms increased compliance with the BTA 2014 guidelines
- U-score assignment increased from 45% to 56%
- However, the 100% target was not reached

### Next steps

- Further education is required in the radiology department regarding the BTA 2014 guidelines.
- Regular teaching sessions with sonographers on thyroid nodules and U-scores to be organised
- Re-audit after these interventions to reassess compliance with the BTA 2014 guidelines