

Project scope: Disposable biopsy equipment

10/05/2022

Research question

Healthcare Improvement Scotland (HIS) has been asked to evaluate the clinical and cost-effectiveness of adding the use of disposable (single use) biopsy equipment in an outpatient setting to the diagnostic pathway of suspicious laryngeal/pharyngeal lesions in NHSScotland.

To do this, the Scottish Health Technologies Group (SHTG) will conduct a systematic literature review on the diagnostic accuracy, impact on waiting times and patient and clinician reported outcomes associated with outpatient biopsy procedures (disposable) and re-usable biopsy equipment). If data are available, this would be supplemented by results from an ongoing feasibility study in NHS Greater Glasgow and Clyde.

SHTG plans to conduct an economic evaluation in the form of a cost-utility analysis to provide an estimate of the incremental cost-effectiveness ratio (ICER) associated with improvement in time to diagnosis/treatment and the associated survival benefits as a result of using disposable biopsy equipment, found in the literature. If available, the economic model will utilise data from the ongoing feasibility study in NHS Greater Glasgow and Clyde. The economic evaluation will be supplemented by a budget impact analysis.

The results will be used to inform decision-making in NHSScotland on the feasibility of using disposable biopsy equipment in the diagnostic pathway of suspicious laryngeal/pharyngeal lesions.

Inclusion criteria

The selection of studies for inclusion in the literature review and economic evaluation element of the project will be based on the following criteria:

Population	Adult patients with suspicious laryngeal/pharyngeal lesions who need a biopsy and are referred via the Urgent Suspicion of Cancer (USOC) pathway
Intervention (diagnostic pathways)	Biopsy procedure using disposable (single use) equipment, followed by a second biopsy in the same setting, if result is negative Biopsy procedure using disposable (single use) equipment, followed by an inpatient biopsy procedure under general anaesthesia, if result is negative

Comparator (diagnostic pathways)	<p>Inpatient biopsy procedure under general anaesthesia</p> <p>Outpatient procedure using re-usable biopsy equipment, followed by a biopsy procedure under general anaesthesia, if test result is negative</p> <p>Outpatient procedure using re-usable biopsy equipment, followed by a second re-usable biopsy procedure, if test result is negative</p>
Outcomes	<p>Outcomes include but not limited to:</p> <ul style="list-style-type: none"> • Diagnostic accuracy • Procedural complications • Impact on waiting times and their knock-on effect on patient outcomes such as cancer recurrence rates and survival • Cost-effectiveness (if possible) • Budget impact • Environmental costs (if possible) • Patient and clinician reported outcomes
Limits	N/A

Planned activities

SHTG have agreed on the following activities to support the development of Recommendation on the use of disposable biopsy kits for diagnosing adult patients with suspicious laryngeal/pharyngeal lesions who need a biopsy and are referred via the Urgent Suspicion of Cancer (USOC) pathway in NHSScotland:

1. Conduct a systematic literature review, develop a cost-utility analysis, if possible, and a budget impact analysis as part of the health technology assessment process
2. Engagement and consultation with peer reviewers and public partners

End products

At the end of the project, SHTG will publish:

- SHTG Recommendation, following internal and external peer-review, consultation and consensus with Evidence Review Team (ERT) and SHTG council members
- Plain Language Summary

Timescales (approximate)

October 2022