

# Cough reflex testing in acute stroke: current UK service provision and SLT perceptions

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## Background

- Silent aspiration (SA) is common post-stroke
- Clinical swallowing examination misses up to 40% of patients with SA
- Cough reflex is frequently impaired after stroke and significantly associated with pneumonia
- Cough reflex testing (CRT) (inhalation of irritant to elicit cough) is increasingly being used by SLTs as potential means to improve clinical identification of patients at risk of SA
- **BUT**, lack of consensus on methodology & protocols & widely varying outcomes in CRT literature



CRT (citric acid nebulised using facemask method)  
Image courtesy of wikiHow.com

## Aims

- Gain overview of current clinical practice of CRT in acute stroke settings in UK
- Explore perceptions regarding potential application of CRT in clinical dysphagia management
- Explore barriers & facilitators to use of CRT in clinical practice.

## Methods

- Web-based survey of 129 UK-based SLTs working in acute stroke settings representing all UK regions with varying levels of knowledge and experience of CRT
- Quantitative responses analysed using descriptive statistics and open text responses grouped by theme

## Outcomes

- 4 acute stroke services in UK currently using CRT clinically
- Variation in procedures and protocols
- 34% non-users (n=29) considering adding CRT to their service's dysphagia protocol

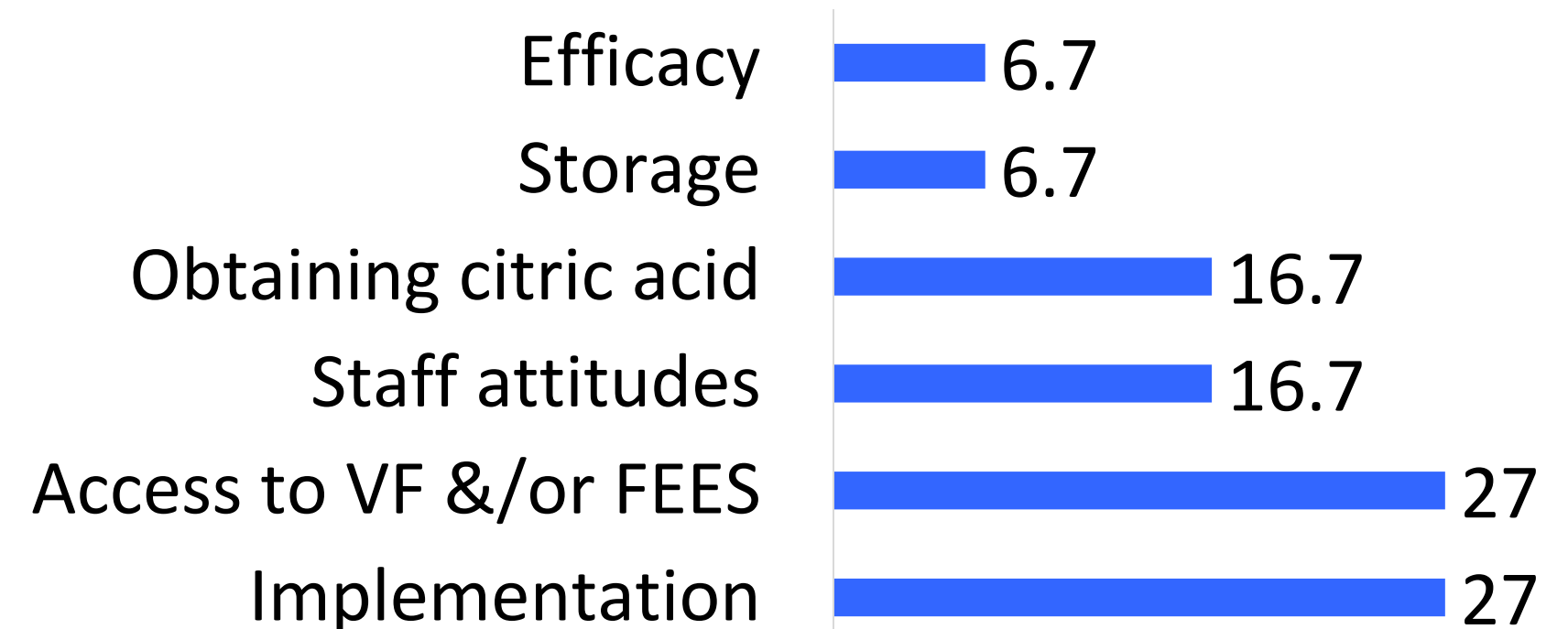
**Benefits** included perceived improvements in confidence in clinical detection of silent aspiration & patient-related outcomes

**Barriers** included procuring citric acid, time for service set-up and delivery of CRT, restricted access to instrumental assessment (VF &/or FEES)

### Perceived benefits of CRT use (positive impact)



### Perceived barriers to use of CRT



% comments from current & previous CRT users  
(n = 21 relating to facilitators & 30 to barriers)

## Conclusions and Implications

- Valuable insight into current practice & perceptions of UK-based SLTs in acute stroke settings relating to CRT
- Number of services in UK using CRT is currently small
- Responses highlight discrepancies between reported approaches & recommendations from existing guidelines and validation studies
- Variation in responses indicates need to develop consensus statement & further research to guide clinical practice

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