1. Introduction and Who Guideline applies to

1.1. This document sets out the University Hospitals of Leicester (UHL) NHS Trust's guidance for screening and formal assessment of Oro-Pharyngeal (OP) dysphagia (swallowing difficulties) in patients on the Adult Intensive Care Units and forms part of the University Hospitals of Leicester (UHL) Policy for the care of Adult patients with a tracheostomy (B34/2017) and UHL policy Management of Inpatient Oro-pharyngeal dysphagia (B9/2014).

1.2. This document is applicable to anyone involved in making a decision to start a patient on oral intake.

1.3. OP dysphagia can occur due to multiple problems, commonly including head & neck surgery, neurological impairment, mechanical ventilation and critical care neuromyopathy, as well as less well known causes such as difficulty coordinating breathing and swallowing (Royal College of Speech and Language Therapists(RCSLT)), Position Paper, 2014.

1.4. Intubation and tracheostomy have long been associated with high risks of dysphagia and aspiration which is frequently silent. The prevalence of swallowing dysfunction after extubation has been reported in between 20-83% of patients intubated for longer than 48 hours. Swallowing problems may be undiagnosed in the Intensive Care population due to silent aspiration, yet they have a greater impact in this vulnerable group. Long duration of mechanical ventilation is independently associated with post-extubation dysphagia, which is independently associated with the need for tracheostomy, longer hospitalisation and poor patient outcomes (Guidelines for the Provision of Intensive Care Services (GPICS) 2022). Patients with a tracheostomy tube are at high risk of developing swallowing difficulties, although some patients can swallow normally. The patient's underlying medical condition may compound swallowing difficulties. (NTSP, 2013).

1.5. It is now a core standard of GPICS that all patients with a tracheostomy should have communication and swallowing needs assessed by a Speech and Language Therapist. (GPICS V2.1 2022 p47).

1.6. The need to identify patients at risk of OP dysphagia is vital, as prompt intervention can prevent costly and life threatening complications such as aspiration pneumonia and length of stay in hospital (RCSLT Position Paper 2014).

1.7. Speech and Language Therapists (SALT) have clinical expertise in the assessment and management of swallowing difficulties, whether they arise due to the nature of the underlying medical conditions (e.g. COPD), are due to concomitant conditions (e.g. neuromyopathy of the swallowing musculature) or are due to the presence of equipment/technologies used to support life (e.g. tracheostomy). SALT expertise is therefore integral to the Intensive Care Multi-Disciplinary Team (MDT) approach, providing specialist knowledge and skills which all people with complex swallowing needs should be entitled to access (Wallace & McGowan, NTSP 2013). SALT are positioned to offer expert assessment and advice once the decision to wean from the ventilator has been made and the sedation hold has started, irrespective of cuff status.

2. Guideline Standards and Procedures

1. Prior to starting a patient on oral intake, the checklist at the top of the 'Swallow screening tool to aid clinical decision making for starting oral intake 'Procedure for starting oral intake (Patients on the Adult Intensive Care and High Dependency Units)' (see Appendix 1) must be completed by a nurse or medic and filed in the Patient's medical notes.

2. If a patient is identified as being at risk of dysphagia (as in part 1), then they should be referred electronically to SALT immediately for formal assessment.

3. If a consultant chooses to commence the patient on oral intake, despite being identified as at risk of dysphagia, then the rationale must be documented on the form (See appendix 1).

3. Education and Training

3.1 Education sessions are available for nurses and medics to support the use of these clinical guidelines via the SALT service.

3.2 SALT will have evidence of achieved competence and this will be maintained via their own Continuous Developmental Practice in accordance with their Professional and regulatory bodies.

4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
The use of the 'Swallow screening tool to aid decision making for starting oral intake' for every patient on Intensive Care and High Dependency Units.	SALT will audit the use of the 'Swallow screening tool to aid decision making for starting oral intake'.	Intensive Care Specialist SALT	Annual	SALT will feedback results to lead nurses and lead clinicians for Intensive Care- Core group.

5. Supporting References (maximum of 3)

Guidelines for the Provision of Intensive Care Services, Version 2.1 2022
National Tracheostomy Safety Project, 2013
Royal College of Speech and Language Therapists, Position Paper for Critical care, 2014, (updated 2019)

Validation Information for the Yale 3 oz water screen

1. Three---ounce water swallow test validation first reported on 44 stroke patients by DePippo et al. (1992). Failure required referral for objective (VFSS) dysphagia test. #
2. A revised 3---ounce water swallow challenge administered to 3,000 hospitalized
   Patients with 14 distinct diagnoses and referenced with FEES as the standard correctly predicted aspiration 96.5% of the time, with a negative predictive value of 97.9%, and a false negative rate of ≤2.0%. (Suiter, D.B. & Leder, S.B. [2008]. Clinical utility of the 3 ounce water swallow test. *Dysphagia, 23*, 244---250).
3. Validation study of Yale Swallow Protocol was reported using 25 subjects with Categorical diagnoses of oesophageal surgery, head & neck cancer, neurosurgery, medical issues, or neurological (CAV, MS, TBI) and using VFSS as the standard reference. Seven participants passed and 18 failed the 3---ounce swallow challenge. Of the 18 who failed, 14 aspirated on VFSS (true positives) and 4 did not aspirate on VFSS (false positives). Sensitivity for the protocol = 100%, specificity = 64%, positive predictive value = 78%, and negative predictive value = 100%. All participants who passed the protocol, i.e., deemed to have no aspiration risk, also did not aspirate during VFSS. (Suiter, D.M., Sloggy, J., & Leder, S.B. [2014). Validation of the Yale Swallow Protocol: A prospective double-blinded video fluoroscopic study. *Dysphagia, 29,* 199---203.)

6. Key Words

Swallowing, Dysphagia, Tracheostomy, Swallow assessment.

CONTACT AND REVIEW DETAILS	
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Details of Changes made during review: **Updated to new template format, upated references including GPICS, new layout of Procedure for Starting Oral Intake**	