IASLT Position Statement on Swallow Screening.

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IRISH ASSOCIATION OF SPEECH & LANGUAGE THERAPISTS
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TABLE OF CONTENTS

Executive Summary

This paper has been written by the Irish Association of Speech and Language Therapists (IASLT) to outline its position on swallow screening. The position statement relates to the use of swallow screening in adult populations. There is much discussion in the Speech and Language Therapy (SLT) profession and beyond regarding swallow screening. This paper will serve as a reference for Speech and Language Therapy Services and other key stakeholders. IASLT is aware of the need to define and describe the use of swallow screening within the context of the growing body of research. The purpose of this paper is to outline the role of the Speech and Language Therapist in swallow screening and to provide recommendations regarding the use of swallow screening and future developments required.

A working group was formed to explore and address these issues on behalf of IASLT. A survey was developed by the working group, which helped to identify pertinent issues that required clarification. The working group also thoroughly reviewed the literature in the area of swallowing screening, the findings of which greatly informed this position paper.

The IASLT hold the position that SLTs play a primary role in the evaluation and treatment of feeding, eating, drinking and swallowing (FEDS) disorders. This will be referred to as 'FEDS' throughout the remainder of this document. For the purposes of this position paper, swallow screening is defined as a tool that recognises clinical signs of oropharyngeal dysphagia and identifies those at risk of dysphagia [1]. Clinical Assessment of FEDS, is "the process by which the SLT aims to identify the presence and nature of a FEDS (feeding, eating, drinking and/ or swallowing) disorder based on clinical signs" [2].

Our comprehensive literature review indicates that there is currently only evidence to support the use of swallow screening in stroke in acute care settings. Further research is needed to establish its use with other clinical populations and in other clinical settings.

There are many swallow screening tools available; however, no gold standard tool has been identified in the literature. It is the position of IASLT that swallow screening is an appropriate first step in a FEDS pathway in the managements of FEDS in patients with acute stroke. IASLT does not support the use of swallow screening in other clinical

populations or settings. A robust swallow screen should be guided by the evidence and that tools chosen should be valid, reliable, and feasible and have a clear pathway of action for all possible outcomes. It is also the position of IASLT that where swallow screening is implemented, it should be available 24 hours a day, seven days a week. SLT has a pivotal and lead role in the implementation of swallow screening and a responsibility to involve all relevant stakeholders to ensure successful implementation. Furthermore, SLT has responsibility to ensure that implementation of swallow screening benefits the clinical population with whom it is used.

Recommendations for future development include further research to explore the benefits of swallow screening and if its implementation enhances patient care. Further research is required both in stroke and other clinical populations. Further research into best models for training for swallow screening is also recommended to ensure that sufficient health professionals are trained to allow accessible and timely swallow screening. All SLTs using swallow screening in their service should contribute to the on-going development of the evidence base for its implementation.

1.0 Background

The IASLT is the recognised professional body for Speech and Language Therapists in the Republic of Ireland. One of the key functions of the IASLT is to represent the views of its members and to inform position statements in relation to the provision of speech and language therapy services for the best interests of service users.

Working groups are routinely convened to develop position papers in response to events relevant to SLTs, both within and outside the SLT profession. This working group was established in January 2015 to focus on the IASLT's position on the use of swallow screening tools.

Issues addressed in this position paper are as follows:

- Differences between swallow screening and clinical swallow evaluation
- Reasons for carrying out swallow screening
- The use of swallow screening in different client groups
- Components of a swallow screening tool
- Timing of swallow screening
- Roles in swallow screening

This position statement relates to the use of swallow screening in adult populations only.

2.0 Definitions

Speech and Language Therapist (SLT): For the purposes of this document a Speech and Language Therapist is a person who holds a professional qualification in SLT and who is eligible for membership of the Irish Association of Speech and Language Therapists (IASLT)

Feeding, Eating, Drinking and Swallowing (FEDS): This refers to the total process of feeding, eating, drinking and swallowing. When a single aspect of the swallowing process needs to be identified then the appropriate term will be employed e.g. feeding[2] .

Dysphagia: The term used to describe a swallowing disorder usually resulting from a neurological or physical impairment of the oral, pharyngeal or oesophageal mechanisms[3]

Client: Any individual who presents with difficulties in *FEDS*

Multidisciplinary Team (MDT): A group of professionals from a variety of disciplines who work collaboratively to provide a holistic and comprehensive assessment, treatment and management plan for individual service users

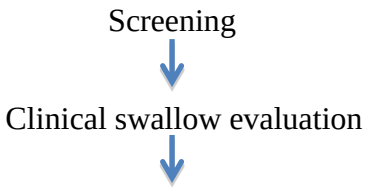
Clinical Assessment of FEDS: The process by which the SLT aims to identify the presence and nature of a FEDS disorder based on clinical signs. This is also commonly referred to in practice as a bedside swallow assessment

Swallow Screening: A process used to identify the possible presence of dysphagia and to indicate the need for further clinical swallow evaluation by a FEDS trained SLT

Instrumental Assessment: refers to further objective assessment e.g. videofluoroscopy or fiberoptic endoscopic evaluation of swallowing (FEES)

3.0 Differences between swallow screening and clinical assessment of FEDS

It is important to delineate the difference between swallow screening and clinical assessment of FEDS. The NHS report "The Road to Recovery: Taking a Multidisciplinary Approach to Dysphagia Following Acute Stroke" found confusion regarding terminology in swallow screening with a need to distinguish between swallow screening and a detailed clinical swallow evaluation [4]. Perry states that screening and assessment are two distinct procedures, carried out at different time points usually by different people seeking non-identical information [5]. Farrell & O'Neill propose a 3-tiered model, which describes the entire dysphagia evaluation pathway [6]. This model helps to clarify the distinction between screening and assessment.



Farrell & O'Neill [6]

The literature states that a swallow screening differs from a clinical assessment of FEDS in purpose and scope in the following ways:

- Swallow screening: Serves only to identify the presence of possible dysphagia and the need for onward referral to a FEDS trained SLT. It identifies those at risk of dysphagia and may be administered by a professional trained in the use of a swallow screening tool. It is not an assessment of the nature or severity of the dysphagia nor does it inform the treatment of the dysphagia.
- Clinical Assessment of FEDS: Identifies the site, severity and prognosis of dysphagia. It is conducted by a dysphagia trained SLT and directs appropriate dysphagia treatment/management [1, 7, 8].

It is the position of the IASLT that swallow screening and clinical assessment of FEDS are two different processes with different distinct objectives. Whilst swallow screening

may be part of the dysphagia evaluation pathway, clinical assessment of FEDS must be a core component of dysphagia management.

3.1 The use of swallow screening in different client groups

Much of the literature in relation to swallow screening pertains to patients post-stroke, in the acute care setting [9, 7, 8, 10, 11]. International literature and guidelines support the use of swallow screening within this population. There is discussion in the literature on whether swallow screening should be generic or disease-specific, however there is a paucity of evidence in relation to swallow screening in client groups other than stroke [12, 1].

As there is only evidence available for the use of swallow screening in the stroke population in the acute setting, the IASLT can only support its use with this population. However, the IASLT acknowledges the need for further research into the use of swallow screening in other client groups.

3.2 Components of a swallow screening tool

There is a general consensus in the literature that swallow screening should meet the following criteria:

- Be a true measure of the patient's degree of risk
- Be sensitive- able to detect "risk" when it is present
- Be specific- able to produce negative results where the patient is not "at risk"
- Give consistent results if used by different people
- Be easy to use and intelligible to those carrying out the screening
- Be acceptable to patients
- Be acceptable in terms of resources- in terms of staffing, training
- Include a clear pathway of actions for all possible outcomes [5, 13, 14, 7, 15]

Further suggestions across the literature regarding criteria to form part of a swallow screen include:

- Initial observations of the patient's consciousness level
- Observations of the degree of postural control

- Observations of oral hygiene and control of oral secretions
- Respiratory status
- Presence of laryngeal elevation/swallow trigger.
- Checking for signs of aspiration
- A water swallow test if appropriate [7, 16, 17, 18]

Currently, no single swallow screen has been identified through clinical trials as being the superior swallow screen [19]. Taking cognisance of this, the Joint Commission in the USA have retired swallow screening as a performance standard for acute stroke in 2010.

Therefore, it is the position of IASLT that a robust swallow screen should be guided by evidence, and that tools chosen must be valid, reliable, feasible and have a clear pathway of action for all possible outcomes, in conjunction with all relevant multidisciplinary team (MDT) members.

3.3 Timing of swallow screening

There is a general consensus in the literature that swallow screening should be conducted in a timely manner in line with admission to an acute hospital setting. However, it must be noted that the majority of the literature relates to acute stroke management and that there is a lack of evidence for swallow screening in acute areas outside of stroke and residential settings. In relation to stroke, international guidelines recommend:

- All stroke patients should be screened for dysphagia prior to any oral intake of food, fluids or medications [20].
- Timeframe for swallow screening ranges from within three to 24 hours of admission to hospital [20, 12, 5, 9, 7, 8, 21, 22].

In line with these recommendations, the IASLT's position is that where swallow screening is implemented, it should be available 24 hours a day, seven days a week to provide equitable and holistic care to patients. It is also imperative that swallow screening should not be used in the absence of an appropriate pathway to a Speech and Language Therapy FEDS service.

3.4 Roles in swallow screening

SLT's have been highlighted by a number of position papers, guidelines and studies as the profession that assumes the lead role in devising swallow screening programmes [23]. The SLT has a pivotal role in the training of other professionals to carry out swallow screening [8, 24, 16, 23]. An unpublished masters thesis within the Irish context suggests that in order to implement swallow screening at a local level, senior management must agree on the protocol and its implementation [25].

It is the position of IASLT that SLT has the following responsibilities in relation to swallow screening:

- Collaboratively evaluating the clinical need for swallow screening at a local level.
- Choosing a valid and reliable tool, specific to clinical need.
- Devise and administer training packages which are both theory-based and competency-based for identified swallow screening tools [26, 5, 12, 16, 27].
- Identify and collaborate with all relevant stakeholders, including senior management, regarding the implementation of swallow screening at a local level.
- Actively engage in developing policies and procedures to support swallow screening with clear delineation of roles, responsibilities and clinical governance.
- Audit the implementation of swallow screening in collaboration with relevant stakeholders [5].
- Keep up to date on current evidence in relation to swallow screening.
- Identification of the most suitable stakeholders to conduct the swallow screening [28, 12, 22, 5, 29, 30].

Research has clearly established that eating and drinking are central to well-being, Nursing staff (due to constant ward presence) and medical teams (due to early assessment of unwell patients) are often the first to identify swallowing difficulties. Medical and nursing [31,31] staff may therefore be the appropriate professions to administer swallow screening. Other professionals who are not specialists in FEDS may also carry out swallow screening once they have completed training in the use of the specified swallow screening tool [8, 24, 1].

It is the position of IASLT that SLT plays a lead role in the implementation of swallow screening. However successful implementation is not possible without the support of relevant stakeholders that are trained in the appropriate use of a validated swallow screening tool.

3.5 Reasons for carrying out swallow screening

The benefits of swallow screening are documented in the literature. They can be summarized as follows:

- Early detection of FEDS difficulties from screening reduces subsequent pulmonary complications, length of stay and overall health costs [31].
- Improved efficiency and timely decisions regarding further intervention e.g. enteral feeding or intravenous hydration [26].
- Cost-effectiveness - some authors have suggested that screening may have economic benefits [26].

Despite the benefits attributed to swallow screening, some recent literature has called into question a clear causal connection between the process of dysphagia screening and improved health outcomes [19,32]. Recent research found that swallow screening is confounded by the severity of stroke and that additional controlled trials are needed to determine the effectiveness of screening [33].

It is the position of IASLT that these benefits should be evaluated when considering the use of swallow screening. It is also imperative to ensure that the patient will benefit from the implementation of swallow screening. Swallow screening should only be considered where appropriate tools and local staff resources allow for its implementation. It is imperative that swallow screening should not be used in the absence of an appropriate pathway to a Speech and Language Therapy FEDS service.

4.0 Recommendations

- Swallow screening is an appropriate first step in a FEDS pathway in the management of FEDS in patients with acute stroke.
- It is appropriate for a trained health care professional to carry out swallow screening.
- Swallow screening should not occur in the absence of a SLT led FEDS service.
- Chosen swallowing screening tools should have established validity and reliability.
- Training for swallow screening should include theory and competency based training with clearly outlined competencies to be achieved and should be developed and delivered by SLT's.
- Swallow screening does not have the same objective, nor does it replace clinical assessment of FEDS.
- Clinical assessment of FEDS is only ever carried out by a FEDS trained SLT.
- Swallow screening, where established, should be carried out in a timely manner in order to benefit patients, organisations and professionals.
- Swallow screening should not occur in the absence of an SLT-led FEDS service, and where possible should be available 24 hours per day, seven days per week.
- The current available literature and research supports the use of swallow screening in stroke populations.
- The use of swallow screening in other clinical conditions warrants further research.
- The SLT has a pivotal and lead role in the development, implementation and training of a swallow screening programme, which is dependent on the support of other relevant stakeholders for it to be successful.
- The SLT also has a key role in auditing screenings being carried out by health professionals.

Recommendations for future development include:

- Further research into best models for training for swallow screening, to ensure sufficient health professionals are trained to allow accessible and timely swallow screening.

- Continued research, dedicated funding and resources to explore the benefits of swallow screening within the stroke population to determine whether swallow screening enhances patient care.
- Further research, dedicated funding, and resources to investigate the validity and reliability of swallow screening in other clinical conditions in the acute and residential settings.
- SLTs using swallow screening are encouraged to contribute to the evidence base for swallow screening.

References List

[1] European Society for Swallowing Disorders (ESSD,2012) ESSD Position Statements: Screening, Diagnosis and Treatment of Oropharyngeal Dysphagia in Stroke Patients

[2] Irish Association of Speech and Language Therapists (2012) Standards of Practice for Speech and Language Therapists on the Management of Feeding, Eating, Drinking and Swallowing Disorders.

[3]Royal College of Speech and Language Therapists (2009) Resource Manual for Commissioning and Planning Services for SLCN: Dysphagia – updated 2014

[4] NHS Quality Improvement Scotland. (2009). The road to recovery. Easier to Swallow. Taking a Multidisciplinary Approach to Dysphagia following Acute Stroke. A Programme of Practice Development Support. Retrieved May 15, 2015, from http://www.healthcareimprovementscotland.org/previous_resources/implementation_support/the_road_to_recovery_easier_t.aspx

[5] Perry, L. (2001) 'Screening swallowing function of patients with acute stroke. Part one: identification, implementation and initial evaluation of a screening tool for use by nurses', Journal of Clinical Nursing, 10(4), pp. 463–473. doi: 10.1046/j.1365-2702.2001.00501.x.

Perry, L. (2001) 'Screening swallowing function of patients with acute stroke. Part two: detailed evaluation of the tool used by nurses', Journal of Clinical Nursing, 10(4), pp. 474–481. doi: 10.1046/j.1365-2702.2001.00502.x.

[6] Farrell, Z., & O'Neill, D. (1999). Towards better screening and assessment of oropharyngeal swallow disorders in the general hospital. Lancet, 354, 355-356.

[7] Scottish Intercollegiate Guidelines Network (SIGN, 2010) SIGN 119: Management of patients with stroke: Identification and management of dysphagia: A national clinical guideline. Accessed at www.sign.ac.uk/pdf/sign119.pdf

[8] Royal College of Speech and Language Therapists (RCSLT, 2007) Policy Statement: The specialist contribution of speech and language therapists along the care pathway for stroke survivors

[9] National Institute for Health and Care Excellence (NICE, 2010) Quality Statement 4: Swallow Screening and Nutrition Management. Accessed at www.nice.org.uk/guidance/qs2/chapter/quality-statement-4-swallow- screening

[10] Guillén-Solà, Anna, Marco, Ester, Martínez-Orfila, Joan, Mejías, D., Fernanda, M., Passalacqua, D., Marina, Duarte, Esther, Escalada and Ferran (2013) Usefulness of the volume-viscosity swallow test for screening dysphagia in subacute stroke patients in rehabilitation income. Available at: http://dx.doi.org/10.3233/NRE-130997 (Accessed: 13 May 2015).

[11] Bravata, D. M., Daggett, V. S., Woodward-Hagg, H., Damush, T., Plue, L., Russell, S., Allen, G., Williams, L. S., Harezlak, J. and Chumbler, N. R. (2009) 'Comparison of two approaches to screen for dysphagia among acute ischemic stroke patients: Nursing

admission screening tool versus National Institutes of Health Stroke Scale', The Journal of Rehabilitation Research and Development, 46(9). doi: 10.1682/jrrd.2008.12.0169.

[12] Murray, J., Milich, A., and Ormerod, D. (2011) 'Screening for Dysphagia. Part two in a series on dysphagia', Australian Nursing Journal, 18(11), pp. 44-46.

[13] Vogels, B., Cartwright, J. and Cocks, N. (2014) 'The bedside assessment practices of speech-language pathologists in adult dysphagia', International Journal of Speech-Language Pathology, pp. 1–11. doi: 10.3109/17549507.2014.979877.

[14] McCullough, G. H. And Martino, R. (2013) 'Clinical Evaluation of Patients with Dysphagia: Importance of History Taking and Physical Exam', Manual of Diagnostic and Therapeutic Techniques for Disorders of Deglutition, pp. 11-30, doi: 10.1007/978-1-4614-3779-6_2

[15] Kertscher, B., Speyer, R., Palmieri, M. and Plant, C. (2014) 'Bedside Screening to Detect Oropharyngeal Dysphagia in Patients with Neurological Disorders: An Updated Systematic Review', Dysphagia. Springer, 29(2), pp. 204–212. doi: 10.1007/s00455-013-9490-9.

[16] NHS West Midlands Cardiac and Stroke Network. (2010). West midlands swallow screening training programme. Retrieved May 15, 2015, from http://improvementsystem.nhsiq.nhs.uk/ImprovementSystem/ViewDocument.aspx?path=Cardiac/National/Website/Stroke/Case+studies/SLT+Training+Programme+v2.pdf.

[17] Groves-Wright, K. J., Boyce, S. and Kelchner, L. (2010) 'Perception of Wet Vocal Quality in Identifying Penetration/Aspiration During Swallowing', Journal of Speech Language and Hearing Research, 53(3). doi: 10.1044/1092-4388(2009/08-0246).\\

[18] Bours, G. J. J. W., Speyer, R., Lemmens, J., Limburg, M. and de Wit, R. (2009) 'Bedside screening tests vs. videofluoroscopy or fibreoptic endoscopic evaluation of swallowing to detect dysphagia in patients with neurological disorders: systematic review', Journal of Advanced Nursing, 65(3), pp. 477–493. doi: 10.1111/j.1365-2648.2008.04915.x.

[19] Donovan, N. J., Daniels, S. K., Edmiaston, J., Weinhardt, J., Summers, D., Mitchell, D. S. (2012) 'Dysphagia Screening: State of the Art', Invitation Conference Proceeding from the State- of-the-Art Nursing Symposium, International Stroke Conference

[20] The Irish Heart Foundation: Council for Stroke (2010) National Clinical Guidelines and Recommendations for the Care of People with Stroke and Transient Ischaemic Attack

[21] *National Stroke Foundation. Clinical Guidelines for Stroke Management 2010. Melbourne Australia.*

[22] Edmiaston, J., Connor, L. T., Loehr, L. and Nassief, A. (2009) 'Validation of a Dysphagia Screening Tool in Acute Stroke Patients', American Journal of Critical Care, 19(4), pp. 357–364. doi: 10.4037/ajcc2009961.

[23] Alberta College of Speech-Language Pathologists and Audiologists. (2013). Swallowing (Dysphagia) and Feeding Guideline. Retrieved May 15, 2015, from

http://acslpa.ab.ca/download/college/Swallowing%20%28Dysphagia%29%20and%20Feeding.pdf

[24] Royal College of Speech and Language Therapists (2010) Policy Statement: Speech and Language Therapists' Clinical Responsibility around Delegation and the Provision of Training to the Wider Workforce.

[25] Healy, A. (2008). 'Swallow screening: Collaboration between Nursing and Speech and Language Therapy'. Unpublished Masters Thesis, Trinity College Dublin, Dublin.

[26] Cichero, J. A., Heaton, S. and Bassett, L. (2009) 'Triaging dysphagia: nurse screening for dysphagia in an acute hospital', Journal of Clinical Nursing, 18(11), pp. 1649–1659. doi: 10.1111/j.1365-2702.2009.02797.x.

[27] Boaden, E., and Davies, S. Inter Professional Dysphagia Framework. Retrieved 27th November 2015 http://www.rcslt.org/members/publications/publications2/Framework_pdf

[28] Martino, R., Silver, F., Teasell, R., Bayley, M., Nicholson, G., Streiner, D. L. and Diamant, N. E. (2008) 'The Toronto Bedside Swallowing Screening Test (TOR-BSST): Development and Validation of a Dysphagia Screening Tool for Patients With Stroke', Stroke, 40(2), pp. 555–561. doi: 10.1161/strokeaha.107.510370.

[29] Batty, S. (2009) 'Communication, swallowing and feeding in the intensive care unit patient', Nursing in Critical Care, 14(4), pp. 175–179. doi: 10.1111/j.1478-5153.2009.00332.x.

[30] Westergren, A. (2006) 'Detection of eating difficulties after stroke: a systematic review', International Nursing Review, 53(2), pp. 143–149. doi: 10.1111/j.1466-7657.2006.00460.x.

[31] Hinchey, J. A., Shephard, T., Furie, K., Smith, D., Wang, D., Tonn, S. (2005) 'Formal dysphagia screening protocols prevent pneumonia', Stroke, 36(9), pp. 1972–1976.

[32] Smith, E.E., Saver, J.L., Alexander, D.N., Furie, K.L., Hopkins, L.N., Katzan, I.L., Mackey, J.S., Miller, E.L., Schwamm, L.H. and Williams, L.S., 2014. 'Clinical Performance Measures for Adults Hospitalized With Acute Ischemic Stroke Performance Measures for Healthcare Professionals' From the American Heart Association/American Stroke Association. Stroke,45(11), pp.3472-3498.

[33] Masrur, S., Smith, E.E., Saver, J.L., Reeves, M.J., Bhatt, D.L., Zhao, X., Olson, D., Pan, W., Hernandez, A.F., Fonarow, G.C. and Schwamm, L.H., 2013. 'Dysphagia screening and hospital-acquired pneumonia in patients with acute ischemic stroke: findings from Get with the Guidelines–Stroke.' Journal of Stroke and Cerebrovascular Diseases, 22(8), pp.e301-e309.

APPENDIX 1.

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IASLT would like to thank the members of this working groups for the dedication and commitment shown in developing this position statement on behalf of the profession.

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