

Royal College of Speech and Language Therapy

Guidance on the Management of Dysphagia in Care Homes ¹

This paper has been developed to assist speech and language therapists who are finding that their services are stretched with increasing numbers of patients /clients /residents being referred for dysphagia assessment and management from community settings and care homes. It provides key strategic information, evidence and guidance to support discussions with senior clinicians, managers, service providers and funders aimed at supporting the identification of needs and developing and implementing local policies to meet these needs. This is particularly in the context of concerns regarding the mismatch between demand and capacity.

1. People at Risk of Dysphagia

The World Gastroenterology Global guidelines (World Gastroenterology Organisation, 2014) estimates that dysphagia affects 40–70% of patients with stroke, 60–80% of patients with neurodegenerative diseases, up to 13% of adults aged 65 and older and > 51% of institutionalized elderly patients, as well as 60–75% of patients who undergo radiotherapy for head and neck cancer (Ronkainen et al., 2007). Dysphagia is also identified as a key risk for people with learning disabilities (NPSA, 2004) and for 13-57% of people with dementia (Alagiakrishnan et al., 2013).

Furthermore a questionnaire-based survey of swallowing dysfunction in a large, otherwise 'healthy' community dwelling older population in the UK found that 11.4% of these healthy individuals reported symptoms indicative of significant dysphagia. Dysphagia severity was found to be directly correlated with subject age (r= 0.11, P= 0.007) (Holland et al., 2011). Presbyphagia refers to age-related changes in the swallowing mechanism in the elderly and sarcopenic dysphagia is difficulty swallowing due to loss of muscle mass and strength. Both are associated with increasing age. (Wakabayashi., 2014).

Dysphagia is associated with reduced quality-of-life of the individual and of carers, social isolation, depression, pneumonia, increased readmission, length of hospital stay and costs to health and social care.

2. Dysphagia is associated with increased morbidity and mortality

Increased morbidity and mortality is associated with dysphagia. It is, therefore, important that the needs of all patients (of any age) who have had a stroke (Royal College of Physicians Intercollegiate Stroke working party, 2016) or have a congenital, structural, neuromuscular disability, or a dementing condition along with those termed 'frail elderly' be identified and appropriately managed.

All staff should be aware of the possibility that any patient/client with the conditions specified above may have a swallowing problem. Being alert to identifying whether an individual has an eating, drinking or swallowing problem is the responsibility of all those involved in their care. Identification of any difficulty should be followed by a more structured screening approach to confirm the presence or absence of eating, drinking or swallowing difficulties. Screening is advocated particularly if there is a change in the condition or the person is in a new care setting. Identifying the signs and symptoms of

¹ care homes refers to both nursing and residential homes

dysphagia in an individual can be done by structured observation techniques as well as by using a specific 'screening' tool and does not have to be carried out by a speech and language therapist but should be carried out by a healthcare professional with specific training in dysphagia identification/screening (see section 3.1 below).

There is robust evidence that the identification of dysphagia, its type and severity is essential in reducing:

- the risk of pneumonia (Bray et al., 2016; Palli et al., 2017; Masrur et al., 2013; Titsworth et al., 2013; Finlayson et al., 2011; Westendorp et al., 2011; Lakshminarayan et al. 2010; Sellars et al., 2007; Hinchey et al., 2005; Martino et al., 2005)
- mortality (Ingeman et al., 2011; Koennecke et al., 2011; Katzan et al., 2003; Vernino et al., 2003)
- poor outcomes (Turner et al., 2015; Middleton et al., 2011; Bravata et al., 2010;)
- costs (Katzan et al., 2007; Odderson et al., 1995)
- reduced well-being (Ayres et al., 2016).

However, it is important to remember that some individuals, particularly the frail elderly and those with dementia may have difficulties in eating and drinking but may not have dysphagia.

Research indicates the importance of identifying dysphagia and managing it appropriately. However this condition cannot be managed by the speech and language therapy service alone and should be managed in collaboration with the individual care home/ community organisation. This guidance should be used to support discussions to inform local policy development which must be agreed with key stakeholders, clinicians, providers and funders/ commissioners of services.

3. Strategic Collaboration

The Royal College of Speech and Language Therapists recommend that the speech and language therapists should:

- bring the requirement for a local policy to manage dysphagia to the attention of the Care Home / community organisation Manager, SLT Service Manager, Clinical Director and Director of Nursing of the Trust/Service as well as the purchasers/ commissioners of the speech and language therapy service. (see Best Practice section 3.1 below)
- inform discussions by providing information on the evidence related to:
 - dysphagia being associated with increased mortality, increased morbidity, reduced wellbeing and increased costs
 - o the numbers of individuals being referred to the local SLT service and the settings (e.g. care homes) of these patients and putting this in the context of prevalence of the condition
 - local information on waiting times, existing approaches to assessment and access to video fluoroscopy and other instrumental assessments e.g. Fibreoptic endoscopic evaluation of swallowing (FEES)
 - o local information on approaches to dysphagia management
 - training needs and opportunities
 - evidence based practice (summarised at the end of this document)
 - All local policies, recommendations and responsibilities should be dated and documented.
 (See references attached)

3.1 Best Practice

Speech and language therapists need to identify the key stakeholders (service manager, care home/community organisation managers, clinical director, funders /commissioners) and with their

service leads should collaborate with those most appropriate in the locality to agree the best way of developing and implementing:

- 3.1.1 **Local policies concerning-** the identification, screening, onward referral, and management of dysphagia. These should include:
 - a. workforce plan e.g. numbers of staff who require knowledge and practical competence to identify the signs and symptoms of swallowing disorders. Use of the <u>Inter-professional</u> <u>Dysphagia Framework (IDF)</u> will enable care home managers to determine the levels of competency required in their individual settings
 - b. processes to support care home staff to optimise nutrition and hydration for their residents with dysphagia
 - c. referral criteria to SLT and related services
 - d. training requirements for staff (see below)

Local policies should be agreed with key individuals, documented, dated and be reviewed at least annually.

- 3.1.2 **Training** –It is the responsibility of the care home organisation to determine the levels of knowledge and practical competence which are required across their workforce including carers and catering staff. It is good practice for all healthcare staff (qualified and assistant practitioners) in all settings to be aware of dysphagia risk, signs and symptoms and practices identified in the 'Feeding Safely Routines' (section 6. Below). Processes for induction and ongoing training should be in place taking into consideration staff turnover. The IDF can aid clarity of levels required depending on the role of the healthcare worker.
- 3.1.3 **Key worker** -A named individual in each care home/community area should be identified as the individual who champions appropriate dysphagia assessment and management.
- 3.1.4 **Procedures-** must be in place in all settings for identifying persons at risk of dysphagia (there is evidence of the importance of this in reducing mortality and morbidity).

3.2 Identification, Screening and Assessment

Healthcare staff in all settings need to recognise that particular groups of people (see section 1) are at risk of having difficulty with swallowing. These individuals should be observed and monitored for any signs of dysphagia. If a problem is detected then the 'Feeding Safely Routines' (section 6. below) should be used. Carers of those with the above problems should be aware of the 'Feeding Safely Routines' (section 6. below). If the person is appropriately trained and/or is the key worker then they can recommend best management including modifications to food and fluid consistency as appropriate in line with local policy. (See flowchart in Appendix A).

Modifying the diet, for example, may resolve the difficulty but if this is not the case a more formal screening should be undertaken by an experienced member of staff who has knowledge of dysphagia. Information from this screening will allow more focused approaches to remediating the situation. If the difficulties persist then it is important to refer onto the speech and language therapy service. Detailed information from the observation and screening should be provided to enable the SLT to prioritise and advise appropriately. Referral procedures should be detailed in the local policy/management plan.

A nurse, speech and language therapist or other healthcare professional who is specifically trained in dysphagia management and identified as competent to practice in this area by their manager can initiate management (diet modification or positioning etcetera) in discussion with others involved in

the clinical care of the patient. Patient/resident needs may change over time thus monitoring is required on an on-going basis.

Particular attention should be given to those:

- who have a history of repeated chest infections
- cough when eating or drinking
- have a hoarse, gurgle like or wet voice
- do not clear food residue from their mouth
- are losing weight for no other reason
- have reduced urine output
- are unable to sit upright
- dribble saliva
- have a low level of awareness or consciousness

If swallowing difficulties are identified the individual should be managed using these 'feeding safely routines 'and referred to SLT for further evaluation. In the UK, a specialist speech and language therapist can undertake a detailed assessment of all functions related to swallowing and, if necessary and available, recommend referral for videofluoroscopy and/or FEES - to establish the risk of aspiration, if aspiration is considered to be hazardous and whether it is likely to have an impact on health. This information will inform the management plan which must be discussed with the responsible clinician and detailed in the care plan.

When there is a delay in responding to a referral from a care home then it is recommended that general guidance 'e.g. as outlined in section 6. 'Feeding Safely Routine' for dysphagia is given.

4 Summary of Findings from Recent Research Literature Related to Diet

- a. Texture modification is common in clinical practice. Softening the diet by adding something extra e.g. gravy or custard.
- b. Modifying the diet makes chewing easier for those who are frail or with reduced masticatory skills.
- c. Modifying taste and temperature has been found to improve swallowing with some older people who may have a reduced sense of taste. Increasing the intensity of taste (e.g. with spice) can stimulate a more effective swallowing reflex. Some individuals have been found to swallow more effectively when a hot meal is interspersed with a very cold drink and vice versa.
- d. It is important to recognise that it is not possible to predict, with confidence, which patients /clients/residents will benefit from changes in fluids using thickeners owing to complex conditions (e.g. in the immunocompromised individual- (impaired immune system)). Using thickeners to fluids can cause more difficulty with some individuals and therefore should be used with caution and only following recommendation by a dysphagia trained health care professional. The impact of modifying diet needs to be reviewed frequently.
- e. Dysphagia management needs a multidisciplinary approach and must include the relevant medical practitioner, nurses and therapists involved and responsible for the care of the patient/client/resident.
- f. There is a need for further research in the area of diet modification. Research is currently being undertaken in the UK and internationally.

- g. The above points confirm the need for a speech and language therapist as an important member of the team supporting people with dysphagia.
- h. The UK descriptors give a framework for discussion regarding texture modification and are in current practice. The IDDSI descriptors (globally recognised) provide a consistent method of describing textures to assist consistency in adapting a diet (see below).

The need to modify the consistency of fluids necessitates a dysphagia assessment to be undertaken by an appropriately dysphagia trained professional. There is some evidence that permanent modification of viscosity of fluids has its own risks and should be avoided unless absolutely necessary for safety. The need for texture modification should be reviewed regularly by an appropriately trained healthcare professional.

5 Training in Dysphagia

A key area of nursing and care staff responsibility is to promote safety whilst eating and drinking. It is the responsibility of the Care Home organisation to determine the training requirements of their workforce, although this may be determined in collaboration with the local SLT service.

Training can be provided via a number of methods and mediums including e-learning packages (many of which are freely available), on the job training by in-house trainers, or via company resources. Training may also be provided by local SLT services if resources are available.

Since dysphagia is often age- or disability related it is recommended that each health community ensures that staff (including care assistants) working in all settings including care homes are adequately trained to identify dysphagia, manage coughing and choking (including the Heimlich manoeuvre, also known as abdominal thrusts) and in the principles of good practice relating to 'Feeding Safely Routines'.

6 Feeding Safely Routines

Conscious Level – no-one should be given food or drink if unconscious or semiconscious. Alternative nutritional and hydration options should be discussed with the responsible clinician.

Distraction - reduce distractions at mealtimes to facilitate concentration and awareness. This should include reducing chat and the patient/client should not be encouraged to talk/respond when eating or drinking. The reason for this should be explained to the client.

Time - allow adequate time to support the individual to eat and drink. Consider the use of insulated containers to maintain the temperature of food for those people whose mealtimes may be prolonged.

Positioning – people should sit upright for all snacks, meals and drinks. People should remain sitting upright for at least 30 minutes after a meal to avoid reflux.

Oral Hygiene - it is of key importance to note that people with eating and drinking difficulty often have poor oral hygiene which can lead to a greater incidence of chest infections. Ensure the mouth is clean and free from residue at the end of the meal. Encourage a 'clearing swallow' or 'saliva swallow' to assist in clearing residue from the mouth. Cleaning teeth and the mouth at intervals during the day is advocated.

Position yourself – at eye level so that you may observe signs of aspiration as well as being able to provide verbal prompts and encouragement. Positioning yourself above eye level or sitting at the

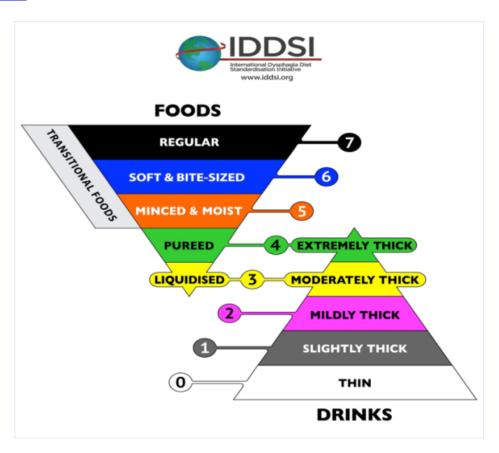
side of individuals to assist with eating and drinking may have a negative impact on the individual's ability to swallow safely as they may change their posture.

Utensils – ensure you have the correct utensils identified for the individual to facilitate a safer swallow and to improve sensory awareness.

Glasses and hearing aids – Swallowing requires multisensory stimulation. Food should be visually appetising in its presentation and smell appealing in order to stimulate the appetite (and thus salivary flow) as well as increasing the amount taken. Ensuring that the individual can hear the guidance and advice being given e.g. when prompted to slow down. Similarly an individual's swallowing will be affected by hearing the crackle and crunch of different food consistencies. Therefore, hearing aids and glasses need to be available and fit comfortably.

Dentition – dentures, if worn, should fit well. Be aware that some individuals prefer to eat without their dentures and softening the diet may help.

Modifying Diet – Ensure the correct consistencies of food and drink are prescribed for the individual with dysphagia. The International Dysphagia Diet Standardisation Initiative (IDDSI) (Cichero et al., 2012) has been adopted by the Royal College of Speech and Language Therapists. It recommends a hierarchy of eight textures according to need. These are defined by colour, number and name. Snacks as well as meals should be available in the appropriate consistency to assist in the provision of nutrition and hydration outside of mealtimes. (See point below relating to portion size). Resources and information on the implementation of IDDSI are available from the RCSLT website and the IDDSI website.



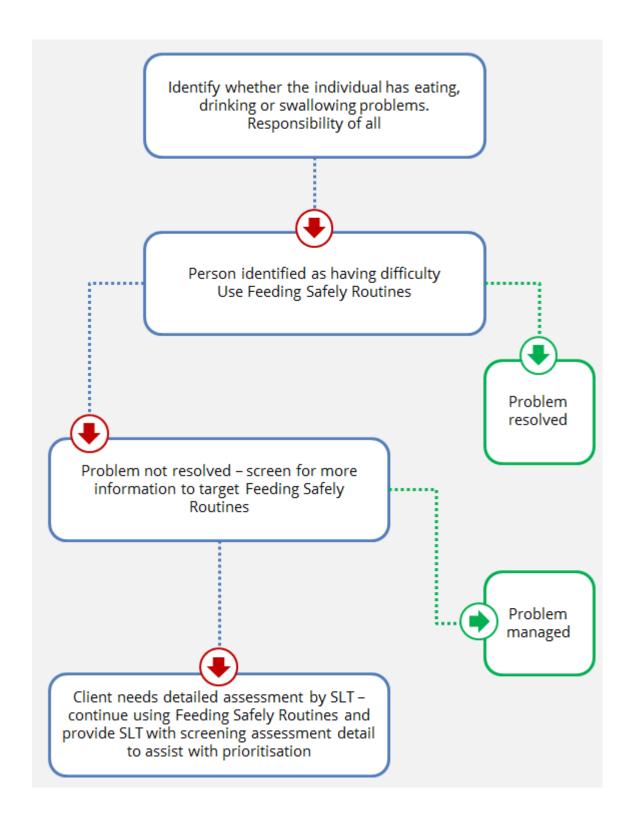
Independence – Individuals should be encouraged to feed and drink themselves to encourage and maintain functional independence. Vary the amount of assistance according to individual need (e.g. verbal prompts, loading spoon, hand over hand feeding etc).

Portion size - people who are frail or lack stamina should be given small portions which require less energy to eat (e.g. softer and/or more moist foods). These small portions of food or drink should be given at more frequent intervals in the day. Oral intake charts should be completed to ensure the person receives adequate nutrition and hydration. The Dietician should be asked to advise if a patient/client is losing weight.

Size of mouthful - experimenting with the preferred size of mouthful is important. It should be sufficient to stimulate chewing and swallowing but it is important to avoid overlarge mouthfuls.

Documentation –The amount of food and drink that has been consumed should be noted in order to monitor adequate nutrition and hydration. Advice on adequate nutrition and hydration can be sought from the dietician.

Other professionals - the roles of the **physiotherapist** in managing any associated respiratory condition, the **dietitian** in managing nutritional and hydration support, the **occupational therapist** in postural and feeding equipment, the **nurse** in overseeing safe feeding practice, the **dentist** in denture fitting, and the **medical staff** in monitoring and managing general health all need to be stipulated and agreed in local care plans for dysphagia management.



Summary of Key Research Related to Texture and Viscosity Modification

Clinicians have expressed concern which is reflected in the literature regarding the efficacy of thickening fluids. Research funded by the National Institute of Health Research (NIHR) is currently investigating the impact of viscosity modification on the physiology of the swallow. However at the current time it is generally accepted from both a clinical and research perspective that modification of fluids reduces and sometimes eliminates aspiration of food and fluid. See the following summary of published research.

Textured modified diets minimise risk of aspiration pneumonia (Garcia et al., 2005; Robbins et al., 2002; Perry & Love, 2001) Leonard et al. (2014) concluded that authors have found 'A clinically significant reduction in the incidence of penetration and aspiration was observed for gum-thickened barium compared with thin liquid barium' (p. 590). However, it is becoming increasingly recognised that aspiration does not always lead to poor health outcomes and frequently modifying the texture of food and drink can lead to major negative impact on the well-being of the patient/client/resident. Thus the professional body would recommend that anyone being placed on a significantly modified diet should be reviewed regularly and that their health status should be monitored and if not improving then such intervention should be reviewed.

Logemann et al. (2008) in a robust randomised controlled trial recruited 711 patients with dementia or Parkinson's disease of varying severity. They were randomised to one of 3 groups- (chin tuck/ honey or nectar thickening). The conclusion includes the following statement 'immediate elimination of aspiration on thin liquids occurred most often with honey thickened liquids'. (p. 174). Since these individuals were randomised the choice of the approach was not tailored to the specific presentation of the client-- and thus it is interesting that aspiration was more often eliminated with 'honey thickened liquids' overall. It must be noted that people least preferred that particular option. Persons with severe dementia showed greater variation in which they benefited from most with evidence of fatigue being obvious.

The paper by Robbins et al. (2008) reports a 3 month follow-up of the patients from their previous study and reviewed the onset of pneumonia by comparing the effectiveness of chin-down posture, nectar and honey consistencies in a randomised, controlled, parallel-design trial. They did not come to any definitive conclusion but noted that in all cases there was a lower incidence of pneumonia (11%) than reported in previous studies of patients with these conditions (up to 30%). Their conclusion - is no definitive conclusion about the superiority of the interventions can be made on the incidence of pneumonia but overall it was less than expected.

There are 2 points of interest in this paper:

- 1. Attending to dysphagia reduces the overall likelihood of getting pneumonia. (A finding supported by the more recent article Bray et al. (2016).
- 2. Adherence problems i.e. patients over the long term were not consistently given what had been designated as appropriate.

Following a systematic review, Andersen et al. (2013) concluded that "to improve nutritional status, specially made and nutritionally enriched texture modified foods (pureed and minced) and thickened fluids (nectar, honey and pudding consistency) are recommended for elderly persons with chronic dysphagia". (p. 127).

Steele et al. (2015) reported that "Texture modification has become one of the most common forms of intervention for dysphagia, and is widely considered important for promoting safe and efficient swallowing." (p. 2). Furthermore, the teams multi-engine search yielded 10,147 non-duplicate articles, which were screened for relevance. A team of ten international researchers collaborated to conduct full-text reviews for 488 of these articles, which met the study inclusion criteria. Of these, 36 articles were found to contain specific information comparing oral processing or swallowing behaviours for at least two liquid consistencies

or food textures. Qualitative synthesis revealed two key trends with respect to the impact of thickening liquids. They noted that whilst "thicker liquids reduce the risk of penetration – aspiration, but also increase the risk of post-swallow residue in the pharynx." (p. 2). Very thick liquids and solid food materials may require greater strength in terms of the tongue propulsive forces that are used to drive material through the oropharynx and there is an increasing number of authors that acknowledge that there is a propensity of thicker fluids to remain in the pharynx post swallow (Clave et al., 2012; Steele & Huckabee, 2007; Clave et al., 2006).

Similarly, solid foods that require chewing may prove challenging for people with dental issues or weakness in the masticatory muscles. Alteration of the properties of solid foods (by dicing, chopping, mincing or pureeing) is a common approach to making these materials easier for oral processing and swallowing.

Bray et al. (2016) interrogated the Sentinel stroke audit data and found that of 63 650 patients admitted with acute stroke, 55 838 (88%) had a dysphagia screen, and 24 542 (39%) a comprehensive dysphagia assessment. Patients with the longest delays in dysphagia screening and SALT dysphagia assessment had a higher risk of stroke associated pneumonia (SAP). The risk of SAP increased in a dose-response manner with delays in SALT dysphagia assessment, with an absolute increase of pneumonia incidence of 1% per day of delay.

The RCSLT and NIHR have recently carried out a research priority setting project for dysphagia. Please see the RCSLT website for up to date information about the progress with this project.

Resources: guidelines

Scottish Intercollegiate Guidelines Network (SIGN). <u>Management of patients with stroke: dysphagia guideline</u> <u>119</u>

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