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# Supporting safe swallowing of care home residents with dysphagia: How does the care delivered compare with guidance from speech and language therapists? 

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#### Abstract

Introduction: Dysphagia affects up to 70\% of care home residents, increasing morbidity and hospital admissions. Speech and language therapists make recommendations to support safe nutrition but have limited capacity to offer ongoing guidance. This study aimed to understand if recommendations made to support safe and effective care are implemented and how these relate to the actual care delivered.

Methods: Eleven mealtimes with residents with dysphagia were observed during 2020 using a tool capturing 12 elements of expected practice. Staff actions during mealtimes were compared with adherence to residents' care plans and speech and language therapist recommendations. Results: Written recommendations predominantly focused on food and fluid modification. Observations ( $n=66$ ) revealed food texture, posture, and alertness were adhered to on $90 \%$ of occasions, but alternating food and drink, prompting and ensuring swallow completed adherence was less than $60 \%$. Thickened fluids frequently did not align with required International Dysphagia Diet Standardisation Initiative levels. Nutrition care provided in the dining room was less safe due to a lack of designated supervision. Conclusion: Care homes need to be supported to establish a safe swallowing culture to improve residents' safety and care experience.


## KEYWORDS

adherence, care home, care plans, dysphagia, recommendations, speech and language therapist, swallowing difficulties

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## What this paper adds

What is already known on this subject?

- Dysphagia is associated with considerable morbidity and mortality and has been identified as an independent risk factor for mortality in nursing home residents.
- There is evidence that compensatory swallowing strategies, safe feeding advice and dietary modifications can reduce the risk of aspiration pneumonia.
- Care for nursing home residents at mealtimes is often task-centred and delegated to those with limited training and who lack knowledge of useful strategies to support the nutrition and hydration needs of residents with dysphagia.


## What this study adds?

- Written advice from speech and language therapists on safe nutrition and hydration for residents with dysphagia is focused mainly on food and fluid modification.
- Nurses and healthcare assistants have limited understanding of International Dysphagia Diet Standardisation Initiative levels or safe swallowing strategies and recommended practices to support safe nutrition care for residents with dysphagia are inconsistently applied especially when residents are eating in dining areas.
- Care homes are not aware of Royal College of Speech and Language Therapists guidance on how safe nutrition care of residents with dysphagia should be supported.

What are the clinical implications of this work?

- Care homes need to prioritise a safe swallowing culture that ensures that residents with swallowing difficulties are assisted to eat and drink in a way that enhances their mealtime experience and minimises adverse events that may result in hospital admission.
- Speech and language therapists could play an important role in training and supporting care home staff to understand and use safe swallowing strategies with residents with dysphagia.
- The Royal College of Speech and Language Therapists could provide more assistance to care homes to support and guide them in how to implement safe feeding routines.
- Care home staff have limited knowledge about how to implement safe feeding routines and need more guidance from speech and language specialists on how they can support residents with dysphagia to eat safely.
- Creating a safe swallowing culture within care homes could help to improve nutrition care and enhance patient safety.


## INTRODUCTION

Difficulty swallowing foods and fluids adversely affects quality of life and increases the risk of choking, dehydration, frailty, malnutrition and aspiration pneumonia (Hollaar et al., 2017; Ortega et al., 2017; Van der MaarelWierink et al., 2011). There is limited evidence on the prevalence of dysphagia in care home settings, although a recent systematic review and meta-analysis suggested an overall estimated pooled prevalence for oropharyngeal dysphagia of $52.2 \%$ ( $95 \%$ confidence interval 33.3-67.2) based on three studies in nursing homes located in Europe and Asia (Rivelsrud et al., 2022). Between 2014 and 2017, 194 people over the age of 70 died from choking in the residential care home sector (Office of National Statistics, 2018). The Care Quality Commission mentioned unsafe practice in relation to the care of people with dysphagia in 12 care home inspection reports from 2015-2018 (The Care Quality Commision, 2018).

In care homes in England, $81 \%$ of direct care is delivered by healthcare assistants (HCAs) (Griffiths, 2018). Staff new to caring roles are required to complete the Care Certificate (Skills For Care, 2022) which is part of a structured induction; however, it does not contain any specific training on managing nutrition and hydration of residents with swallowing difficulties. Previous research has recommended the need for specific dysphagia training to aid in the implementation of dysphagia management strategies (Engh \& Speyer, 2022; Noë et al., 2021).

Managing dysphagia requires a multidisciplinary approach where speech and language therapists (SLTs) play an integral role providing specialist knowledge and strategies to support safe and effective nutrition and hydration care. Typically, in the United Kingdom, a community-based SLT team provides input to care homes which involves collaboration with the care home staff, assessment, advice and implementation of both dysphagia and communication support plans for vulnerable elderly adults (RCSLT, 2022). However, the resources available to support this activity are limited.

No specific strategy fits all older residents with dysphagia; currently recommended compensatory and behavioural strategies include food and fluid modification, swallow postures, swallow manoeuvres and oral hygiene (Rosenvinge \& Starke, 2005; Sura et al., 2012). The Royal College of Speech and Language Therapists (RCSLT, 2022) developed guidance, 'Feeding Safely Routines', to assist SLTs dealing with increasing referrals for dysphagia assessment and management from community and care home settings. It identified that care homes should ensure that staff are adequately trained to identify dysphagia,
manage coughing and choking and are trained in the principles of good practice.

Keeping care records for residents is a crucial part of the care planning process (Ashurst, 2019). Care home staff document recommendations and strategies in a resident's care plan although evidence suggests that these are not frequently read by HCAs (Wilson 2018; Wilson et al., 2019). Greene et al. (2018) reported senior staff were unaware whether SLT recommendations were applied in everyday practice. Poor adherence with recommendations can be detrimental to resident well-being, with clinical outcomes, including aspiration pneumonia, linked to the level of consistency and appropriateness of implementing dysphagia management strategies (Low et al., 2001).

The RCSLT in conjunction with the National Institute of Health and Care Research (NIHR) has recently developed 10 research priorities for dysphagia research which include the impact of thickened fluids, caregiver's awareness of the difficulties associated with dysphagia and improving adherence to recommendations. There is a dearth of evidence as to whether guidance, as provided by SLTs, is translated into practice during mealtimes for residents with dysphagia (Pagnamenta et al., 2022). Observation of the nutrition and hydration care of residents with dysphagia is therefore needed to understand if recommendations made to support safe and effective mealtime plans are implemented and how these relate to the actual daily care delivered. Collecting such data from observations can then be used to support care staff in the delivery of care for people with dysphagia, reduce adverse events and improve resident experience.

This report focused on an element of a larger mixed method research study exploring the potential role of link practitioners in supporting the case of residents with dysphagia. It aimed to explore current practice in the care home setting in relation to dysphagia management and to determine how recommendations devised by SLTs to enable safe and effective care related to the actual implementation of the day-to-day care delivered. The key aim of the study was to investigate how the nutrition and hydration care delivered to individual residents with dysphagia meets the recommendations specified in their nursing care/SLT plan.

## RESEARCH QUESTION

How do the recommendations made to support safe and effective swallowing for care home residents with dysphagia compare to actual care delivered in care homes?

## METHODS

## Design

The study was an observational design where data were captured on nutrition and hydration care delivered by care staff for residents with dysphagia. Observed practice was compared with the recommendations made in the residents' care plan by the SLT and adherence determined.

## Setting

The research was conducted in two nursing care homes in London. One (A) was privately run, with accommodation for up to 146 people. The other (B) was managed by a not-for-profit organisation, with accommodation for up to 95 people. Both homes cared for residents with physical frailty and/ or dementia.

## Data collection

A project advisory group comprising of an academic SLT, a clinical SLT, a geriatrician and two patient representatives met periodically throughout the course of the research project. The group provided the research team with expert knowledge and guided the conduct of the research, including the development of data collection tools.

A framework for observing nutrition care of resident with dysphagia was developed, based on recommended strategies of safe swallowing from available published evidence and in collaboration with the project advisory group. The framework grouped 21 elements of care for supporting safe swallowing into three categories based on the methods described by Rosenvinge and Starke (2005): food and fluid modification, swallowing strategies and swallowing safety. The written guidance on managing nutrition and hydration for each participating resident was collated from their care plan and SLT recommendations. Care plans are internal documents that provide individualised advice for each resident within the care home and often include specific SLT guidance.

Piloting of the data collection form (See Supplementary file 1) found that verbal, visual and tactile prompting could not be easily aligned to the recommendations or differentiated during observations and was therefore combined into a single generic 'prompting' element of care (Table 1). Similarly, supervision, assistance and monitoring could not be distinguished and so were combined into a single element of care. Six elements were not included
in the analysis as they were not referred to in SLT recommendations or advice was not relevant to observations, for example, specific food recommendations, specialist equipment to support independent eating such as a plate guard of adapted cutlery and advice on oral care/coughing. Of the 21 original elements this left a total of 12 elements of care for supporting safe swallowing in the final data collection form.

Observation data were collected between February 2020 and September 2020, and originally 23 residents (Home $\mathrm{A}=12$; Home $\mathrm{B}=11$ ) were recruited to participate in the study. The aim was to capture data on at least five mealtimes per included resident; however, shortly after data collection commenced, the SARS-CoV-2 pandemic resulted in care home closures ceasing data collection for six months, during which time 12 residents died. Once data collection resumed additional mealtimes observations were conducted on available residents. A total of 66 observations were captured on 11 of the 23 residents (Home A, $n=4$; Home $B, n=7$ ). The number of completed observations per resident ranged from one mealtime observation to 11 .

At each mealtime observed the researchers captured data on the actual care delivered compared to the recommended elements of care for each resident. Elements of care for supporting safe swallowing could be mentioned in the SLT recommendations, care plan, both documents or neither. If recommendations differed, the SLT was assumed to be correct; if the element was not included in either the SLT recommendations or care plans, adherence was assessed against 'expected practice' which was derived from RCSLT 'Guidance on the Management of Dysphagia in the Care Homes' (RCSLT, 2022), for example, if there were no recommendations about texture, a normal diet would be considered expected practice. Adherence was calculated as a percentage of occasions when the practice observed matched the practice recommended for that element of care.

## Data analysis

The care given to each resident at mealtimes was observed and adherence with the recommended practice was documented by the researcher. Data on the location and type of meal, the role and number of staff assisting the resident were also documented along with contextual data for each element of care and field notes. Following the mealtime, the HCA who assisted the resident was asked a few questions about their experience and knowledge of managing residents with dysphagia (see data collection form in Supplementary file 1). Observations were conducted between February and September 2020.

TABLE 1 Original, amended \& expected practice for elements of care for supporting safe swallowing.

| Safe swallowing category | Original 21 elements of care for supporting safe swallowing (Rosenvinge \& Starke, 2005) | Amendments for mealtime observations | Expected practice |
| :---: | :---: | :---: | :---: |
| Food and fluid modification | Food recommendations | Not possible to observe |  |
|  | Serving size |  | Small not heaped spoonsfull |
|  | Food texture |  | Normal (IDDSI Level 0) |
|  | Fluid thickness |  | Normal (IDDSI Level 0) |
|  | Drinking vessel to support |  | Open cup |
| Swallowing strategies | Specialist equipment | Not possible to observe |  |
|  | Verbal prompting | Not possible to distinguish separate elements | To prompt |
|  | Visual prompting |  |  |
|  | Tactile prompting |  |  |
|  | Wait for throat clearing |  | Pausing between mouthfuls |
|  | Guide utensil/cup | Not possible to observe |  |
|  | Alternate food \& drink |  | Alternate |
| Swallowing safety | Posture |  | Upright as possible |
|  | Alertness |  | Alert during mealtime |
|  | Complete swallow | Not possible to observe |  |
|  | Supervision | Not possible to distinguish separate elements | Supervise, assist and monitor |
|  | Assistance |  |  |
|  | Monitoring |  |  |
|  | Ensure mouth clear at end of meal |  | Mouth cleat at end of meal |
|  | Advice on managing coughing | Not possible to observe |  |
|  | Advice on oral care | Not possible to observe |  |

Abbreviation: IDDSI, International Dysphagia Diet Standardisation Initiative.

Data were analysed using Statistical Package for the Social Sciences version 25 (SPSSv25). Adherence was reported as frequencies against each category and element of safe nutrition care. Chi-square tests were used to determine if adherence with the element of care was more likely to occur when recommended in written documentation (SLT recommendations and/or care plans) and delivered by single or multiple HCAs. A descriptive analysis of the responses to the questions about staff knowledge/ experience was used to provide context to the care observed.

## Ethics

Ethical approval was gained from the Social Care Research Ethics Committee and Health Research Authority via the Integrated Research Application System. Approval number 0699 - UWL CNMH; REC reference 19/LO/1382; IRAS Project ID 265784. Permission to access the care homes was obtained from the home managers and owners. Informed consent was obtained directly from the
resident or, if lacking capacity, from their nominated representative which in most cases was their general practitioner.

## RESULTS

## Participant characteristics

Eleven residents (Home A, $n=4$; Home $B, n=7$ ) with a diagnosis of dysphagia and an SLT management plan and who consented to participate were included in the study. Residents ages ranged from 71-97 (Mean 81.54; $S D$ 8.47), four residents were male and seven were female. Additional resident demographics are shown in Table 2.

## Adherence with written guidance

The SLT recommendations were incorporated into the residents' care plan for four residents (Home A, $n=3$; Home

TABLE 2 Summary table of residents' demographics.

|  |  | Care home A $(n=4)$ | Care home B $(n=7)$ | Overall $(n=11)$ | Overall \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age (years) | Range | 71-97 | 72-90 | 71-97 |  |
|  | Mean | 81.25 | 81.70 | 81.55 |  |
|  | SD | 11.95 | 6.92 | 8.47 |  |
| Gender | Male | 2 | 2 | 4 | 36\% |
|  | Female | 2 | 5 | 7 | 64\% |
| Medical diagnosis | CVA | 0 | 2 | 2 | 18\% |
|  | Dementia | 4 | 4 | 8 | 73\% |
|  | NND | 0 | 1 | 1 | 9\% |
| Barthel index | Mean | 1.75 | 2.15 | 2.00 |  |
|  | SD | 1.50 | 2.54 | 2.14 |  |
| SLT location | None | 0 | 0 | 0 | 0\% |
|  | Within care plan | 3 | 1 | 4 | 36\% |
|  | Separate document | 1 | 6 | 7 | 64\% |
|  | Could not be located | 0 | 0 | 0 | 0\% |
| Adverse outcomes (last 12 months) | Choking instances | 2 | 1 | 3 | 27\% |
|  | LRTI | 2 | 4 | 6 | 55\% |
|  | Hospital admissions | 0 | 4* | 4 | 36\% |
|  | Deceased as of August 2020 | 3 | 1 | 4 | 36\% |

*Two instances of hospital admissions for one resident.
Abbreviations: CVA, cerebrovascular accident; LRTI, lower respiratory tract infection; NND, neurodegenerative disease; SLT, speech and language therapist.
$\mathrm{B}, n=1$ ) and in a separate document for seven residents (Home $\mathrm{A}, n=1$; Home $\mathrm{B}, n=6$ ). In the written guidance there were a total of 132 possible elements of care of which $58 \% ~(n=76)$ were referenced in the residents' written notes. The frequency with which different elements of supporting safe swallowing were located in written guidance is shown in Table 3.

Written recommendations predominantly focused on 'food and fluid modification' ( $64 \%, n=49 / 76$ ) and less often on 'swallowing strategies' ( $18 \%, n=14$ ). Of the 76 elements of care for supporting safe swallowing referenced in written guidance, $32 \%$ ( $n=24 / 76$ ) were the same in both the care plan and the SLT recommendations, $17 \%$ ( $n=13 / 76$ ) were in the SLT recommendations but not the care plan, $42 \%(n=32 / 76)$ were in the care plan but not the SLT recommendations and $9 \%$ ( $n$ $=7 / 76$ ) were referenced in both the care plan and the SLT recommendations but did not match (Supplementary file 2).

## Mealtime observations

The observed adherence with elements of safe swallowing care is shown in Table 4 (Supplementary file 3).

## Adherence with recommendations for food and fluid modification

Observed adherence with recommendations for food texture and the positioning and alertness of the resident was $>90 \%$ and these elements were mentioned in nearly all care plans/SLT recommendations. Factors contributing to adherence with guidance (or best practice) were:

Serving Size: This was seldom specified by SLT recommendations/care plan but feeding residents using large spoonsful of food on a big spoon was observed and associated with resident coughing and/or vomiting.

Food Texture \& Fluid Thickness: The International Dysphagia Diet Standardisation Initiative (IDDSI, 2019) framework aims to standardise the terminology used for modified food texture and fluid thickness through eight levels (levels 0-7) displayed via a twinpyramid design. Levels 0-4 apply to fluids and levels 3-7 apply to food. Meals were generally supplied by the kitchen at the correct texture as per IDDSI Framework. However, if a 5 7

TABLE 3 Frequency of elements of care for supporting safe swallowing referenced in residents written guidance.

| Safe-swallowing category | Element of care | In SLT recommendations $(n=11)$ |  | In care plan ( $n=11$ ) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $N$ | \% | $\boldsymbol{N}$ | \% |
| Food and fluid modification | Serving size | 1 | 9\% | 6 | 55\% |
|  | Food texture | 8 | 73\% | 11 | 100\% |
|  | Thickened fluids | 9 | 82\% | 10 | 91\% |
|  | Drinking vessel to support | 3 | 27\% | 1 | 9\% |
|  | Category total |  | 21 |  | 28 |
| Swallowing strategies | Prompting | 4 | 36\% | 5 | 45\% |
|  | Wait for throat clearing | 1 | 9\% | 2 | 18\% |
|  | Alternate food and drink | 1 | 9\% | 1 | 9\% |
|  | Category total |  | 6 |  | 8 |
| Swallowing safety | Posture | 4 | 36\% | 7 | 64\% |
|  | Alertness | 4 | 36\% | 4 | 36\% |
|  | Complete swallow | 4 | 36\% | 5 | 45\% |
|  | Supervision, assistance, monitoring | 4 | 36\% | 11 | 100\% |
|  | Ensure mouth clear at end of meal | 1 | 9\% | 0 | 0.0\% |
|  | Category total |  | 17 |  | 27 |
|  | Overall |  | 44 |  | 63 |

Abbreviation: SLT, speech and language therapist.

TABLE 4 Observed compliance with elements of care for supporting safe swallowing recommended in resident's written guidance.

| Safe-swallowing category | Element of care | Overall observed ( $n=66$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | In guidance |  | Observed compliance |  | Observed non-compliance |  |
|  |  | $N$ | \% | $N$ | \% | $N$ | \% |
| Food and fluid modification | Serving size | 54 | 81.8\% | 50 | 75.8\% | 16 | 24.2\% |
|  | Food texture | 66 | 100\% | 63 | 95.5\% | 3 | 4.5\% |
|  | Thickened fluids | 60 | 90.9\% | 45 | 68.2\% | 21 | 31.8\% |
|  | Drinking vessel to support | 35 | 53\% | 56 | 84.8\% | 10 | 15.2\% |
| Swallowing strategies | Prompting | 44 | 66.7\% | 34 | 51.5\% | 32 | 48.5\% |
|  | Wait for throat clearing | 29 | 43.9\% | 39 | 59.1\% | 27 | 40.9\% |
|  | Alternate food and drink | 28 | 42.4\% | 38 | 57.6\% | 28 | 42.4\% |
| Swallowing safety | Posture | 59 | 89.4\% | 64 | 97.0\% | 2 | 3.0\% |
|  | Alertness | 42 | 63.6\% | 62 | 93.9\% | 4 | 6.1\% |
|  | Complete swallow | 51 | 77.3\% | 39 | 59.1\% | 27 | 40.9\% |
|  | Supervision, assistance, monitoring | 66 | 100\% | 44 | 66.7\% | 22 | 33.3\% |
|  | Ensure mouth clear at end of meal ${ }^{\dagger}$ | 10 | 15.6\% | 34 | 53.1\% | 30 | 46.9\% |

resident was recommended pureed food but normal fluids, HCAs altered the meal consistency by mixing soup with the main course as they considered the soup was too runny. Three residents who were recommended IDDSI Level 0 (no thickening required) were given thickened fluids. Where IDDSI Levels 1 or 2 were recommended, the method of thickening would be based on an imprecise estimate of the required thick-
ness and the number of 'scoops' required to achieve it, resulting in some residents receiving fluids thickened above the recommended consistency.

Drinking Vessel: The importance of avoiding spouted cups or straws for residents with dysphagia was mentioned in less than $30 \%$ of written guidance. Whilst most residents were given drinks in open cups, spouted beakers
were used on 10 occasions and twice this contributed to an episode of coughing.

## Adherence with recommendations on swallowing strategies and safety

Care observed with lower adherence related to swallowing strategies and safety elements, in particular prompting (adherence $=51 \%$ ), waiting for throat clearing (adherence $=59 \%$ ), alternating food and drink (adherence $=58 \%$ ) and ensuring mouth clear (adherence $=53 \%$ ). These elements were also less likely to be included in the care plan/SLT recommendations (see Table 2). Factors observed to contribute to lower adherence were:

Wait for throat clearing: Although many of the HCAs fed the residents at a slow pace and were attentive to their swallowing, others appeared to feel pressure to get the meal completed quickly.

Supervision, Assistance and Monitoring: In a third of observations, the resident was not supervised or assisted throughout the meal. This mostly occurred when residents were receiving their meal in communal dining areas where HCAs moved around the room rather than giving residents one-to-one support. Some residents were observed to take in more food whilst their mouth was full and start coughing. This would not always be noticed by the staff in the room.

## Ensure Mouth Clear at End of Meal: Some

 residents would fall asleep whilst eating and, rather than waking them, the HCA would end the feeding support and leave the resident.
## Variation in adherence

Adherence was associated with the number of HCAs present during a mealtime (single HCA present $n=49$, $74.2 \%$; multiple HCA present $n=17,25.8 \%$ ). When multiple HCAs were present, adherence was significantly lower for 'prompting' ( $p<0.001$ ), 'waiting for throat to clear' ( $p<0.001$ ), 'completing swallow' $(p<0.001$ ), 'supervision, assisting \& monitoring' ( $p<0.001$ ) and 'ensuring the mouth is clear' at the end of the meal $(p=0.022)$.

The only element where there was a positive association between it being included in written guidance and observed practice was 'ensuring the resident was alert' dur-
ing feeding $(p=0.01)$. In two other elements, 'ensuring the resident's throat was clear' and 'alternating food and drink,' there was a negative association between observed practice and inclusion in written guidance. (Supplementary file 4).

A total of 18 HCAs (Home A, $n=7$; Home B, $n=11$ ) were asked about their experience of managing residents with dysphagia at the time of the observation. All at Home A all reported receiving some workplace training on IDDSI levels and feeding, although not specific training on supporting residents with dysphagia. At Home B, two reported receiving formal training on dysphagia. Experience and knowledge of the residents were seen to be important; staff described drawing on common sense, previous experience and environmental cues, that is, the presence of thickener or special equipment such as adapted cutlery or plate guard in the room.

All staff said guidance on how to help specific residents to eat and drink safely came from verbal instructions from senior staff during shift handovers, from senior HCAs or peers and the residents' family. Most staff had not seen the SLT guidelines; in care home A all the staff reported seeing the residents' care plan but in care home B, where the care plans were held electronically, most staff said they had not seen it. Verbal handovers were preferred as the care plan was considered to be out of date.

All staff said that they thought their knowledge of the resident and experience of caring for them enabled them to provide the resident with adequate care. However, some expressed a need for more training and lack of certainty on how to help a resident who coughed or choked.

## DISCUSSION

The referral of residents with dysphagia to the SLT team for assessment and advice is required to ensure these vulnerable residents are assisted to eat and drink safely. Our study has found variability in both how SLTs provide written advice for residents with dysphagia and adherence with best practice in the care staff responsible for delivering their nutrition care.

Although SLT recommendations were mostly incorporated into the residents' care plans, their scope was limited and mostly focused on food and fluid modification, with some additional guidance on posture and supervision added by the nursing staff in the care plan. Care staff had often not consulted the care plan and relied on advice from other staff and their own experience of feeding residents when deciding how to deliver care. Adherence with food texture was generally determined by the kitchen and therefore higher than for fluid modification, a pattern which was also observed in a study by Rosenvinge and Starke
(2005). Similar findings were reported by Noë et al. (2021) in a quality improvement study who found thickness of fluids was mentioned in $90 \%$ of written guidance but not adhered to in $36 \%$ of mealtime observations.

The IDDSI framework is important for supporting a consistent approach to fluid and food management in people with dysphagia (Cichero et al., 2017, RCSLT Report). However, in the care home setting, where there is limited access to specialist advice, it can be misinterpreted as suggesting that for residents on levels 3 or 4 food consistency must automatically require thickened fluids. Although the RCSLT guidance on managing dysphagia in care homes (RCSLT, 2022) suggests that appropriately trained staff can recommend modifications to food and fluid consistency, this study suggests that care home staff do not have the required knowledge to make these decisions and they need more support to understand and apply the IDDSI framework.

The time required to support the nutrition and hydration of frail residents, and the pressure to get the work done when many residents may need assistance, shaped how care was delivered by HCAs. Lack of training and supervision in nutrition and hydration care and insufficient time spent helping residents who needed assistance have been identified as a problem in assuring residents' safety in care homes (Wilson et al., 2019). In this study, time pressures on staff contributed to the practice of using large spoons to feed residents and it was probably a factor in not encouraging residents to feed independently as this would take longer. Although the communal experience of the dining room is often seen as a better environment for residents to take meals, the diffused responsibility for supporting individual residents resulted in significantly less direct assistance and supervision to eat and drink safely in the dining room for residents with dysphagia.

Responsibilities of HCAs are often task centred and the task of assisting residents to eat is generally delegated to those without specific training in supporting residents with dysphagia to eat and drink safely (Greene et al., 2018; Lea et al., 2017; Payne \& Morley, 2018; Wilson et al., 2019). In addition, we found that key elements of care such as prompting swallowing, pacing the rate at which food is offered and avoiding the use of spouted beakers, which are important to enhance the safety and experience of nutrition and hydration care for residents with dysphagia (Hansjee, 2019; RCSLT, 2022), were generally not mentioned in care plans or SLT recommendations. In the absence of either training or guidance it is unsurprising that the observed adherence with these elements of care was relatively low. Improving staff understanding of the swallowing process, how this is impaired in res-
idents with dysphagia and how to minimise the risk of coughing and choking would improve residents’ experience and safety and both increase confidence and reduce anxiety of the staff caring for them (Austbø Holteng et al., 2017).

Care home staff do not know about strategies recomemnded in RCSLT guidance to support safe nutrition care of residents with dysphagia. The RCSLT recommend that all staff should be trained in how to apply 'Feeding Safely Routines' but our data indicate that they are neither trained nor given guidance on the principles of feeding safely. Care home staff reported the main training they had received was focused on food and fluid modification. Despite the poor evidence for its efficacy and concerns about long-term harms (Rosenvinge \& Starke., 2005; Robbins et al., 2008; Swan, Speyer, Heijnen, Wagg \& Cordier, 2015) food and fluid modification is therefore perceived by staff as the main strategy for managing residents with dysphagia.

The RCSLT (2022) guidance expects care homes to be responsible for managing the training of their workforce. However, for care homes to determine what training is required and identify appropriate resources, they need support from the local SLT service. The quality of such training is of paramount importance if care home staff are to be able to manage residents with dysphagia safely. Care homes therefore need to be more proactive in seeking SLT input into such training and the RCSLT needs to do more to disseminate and embed the best practice it describes.

This research has also shown that SLT recommendations for care home residents do not contain sufficient detail for care home staff to deliver safe and effective swallowing care to residents with dysphagia. SLTs must ensure that information about feeding safety routines is made available to care home staff and reflected in the care plans of residents with dysphagia. Better resourced SLT services could also provide active support and guidance to care staff during mealtimes to help them develop a better understanding of dysphagia and the skills in managing it more effectively.

Our findings provide a snapshot of the nutrition and hydration care of residents with dysphagia at two care homes. The number of residents and mealtime observations that could be included in the study was limited by access restrictions due to COVID-19, and it is possible that the mealtime experience of these residents may not be an accurate reflection of care in all homes. However, a recently published research-priority setting partnership between the RCSLT and NIHR identified adherence to recommendations as being the most important priority for further research (Pagmanenta et al., 2022).

## CONCLUSIONS

This study has highlighted problems with how recommendations for safe swallowing practice for residents with dysphagia are communicated and delivered in care homes. SLTs need to provide more detailed, tailored guidance for care home staff on managing residents with dysphagia. Care home staff need specific training to help them ensure that residents with swallowing difficulties are assisted to eat and drink in a way that enhances their mealtime experience, reflects the evidence base and minimises adverse events such as choking and aspiration pneumonia that may result in hospital admission.

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## CONFLICT OF INTEREST STATEMENT

 The authors declare no conflict of interest.
## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author [H.G.], upon reasonable request.

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## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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