



**TITLE: Choking and Swallowing Assessments in Long Term Care: Clinical Indications and Guidelines**

**DATE:** 6 July 2010

**RESEARCH QUESTIONS:**

1. What are the clinical indications for a change in solid food diet in otherwise healthy residents in long term care who are having difficulties with choking or swallowing?
2. What are the evidence-based guidelines for the use of choking or swallowing assessments for residents in long term care?

**METHODS:**

A limited literature search was conducted on key health technology assessment resources, including PubMed, Ebscohost CINAHL, the Cochrane Library (Issue 6, 2010), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI (Health Devices Gold), EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between January 1, 2005 and June 25, 2010. For the first question, filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, and non-randomized studies. For the second question, filters were applied to limit the retrieval to guidelines. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

**RESULTS:**

HTIS reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented

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first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

One systematic review and four evidence-based guidelines were identified pertaining to food intake and choking and swallowing assessments in long-term care residents. No relevant health technology assessment reports, randomized controlled trials, or non-randomized studies were identified.

#### **OVERALL SUMMARY OF FINDINGS:**

According to the identified guidelines, choking and swallowing assessments should be carried out by healthcare professionals with relevant skills and training<sup>5</sup> such as speech-language pathologists.<sup>1-4</sup> The guidelines and recommendations state that a screening tool for dysphagia (difficulty swallowing) should contain: observations or assessments of a patient's consciousness or ability to participate in a screening assessment,<sup>1,2</sup> observation of swallowing difficulties,<sup>1</sup> evaluation or observation of oral control (e.g. oral secretions,<sup>2</sup> oromotor function,<sup>1</sup> oral sensation,<sup>1</sup> ability to cough<sup>1</sup>), and a water swallowing test if appropriate.<sup>1,2</sup>

The Ontario Heart and Stroke Foundation identified five bedside screening tools that contain the appropriate procedural elements and of the five, the TOR-BESST was rated the highest.<sup>1</sup> According to the Scottish Intercollegiate Guidelines Network, the modified barium swallow test is the "gold standard" and the fibre optic endoscopic evaluation of swallowing is a reliable portable alternative for the assessment of dysphagia.<sup>2</sup>

Information pertaining to a change in diet in long term care residents having difficulties with choking and swallowing was limited to one recommendation that residents with dementia should be encouraged to eat and drink orally for as long as possible.<sup>4</sup> Additional information that may be relevant has been included in the appendix.

**REFERENCES SUMMARIZED:**

**Health technology assessments**

No literature identified.

**Systematic reviews and meta-analyses**

1. The Dysphagia Screening Tool Working Group. Dysphagia screening tools: a review [Internet]. Toronto: Heart and Stroke Foundation of Ontario; 2008. [cited 2010 Jun 25]. Available from: [http://www.cesnstroke.ca/documents/Dysphagia\\_FINAL\\_2008.pdf](http://www.cesnstroke.ca/documents/Dysphagia_FINAL_2008.pdf)

**Randomized controlled trials**

No literature identified.

**Non-randomized studies**

No literature identified.

**Guidelines and recommendations**

2. Scottish Intercollegiate Guidelines Network. Management of patients with stroke: identification and management of dysphagia [Internet]. Edinburgh: Scottish Intercollegiate Guidelines Network; 2010. [cited 2010 Jun 25]. Available from: <http://www.sign.ac.uk/pdf/sign119.pdf>  
*See Swallow screening p. 5, Nutrition screening p. 6, Assessment p. 8*
3. Lindsay P, Bayley M, Hellings C, Hill M, Woodbury E, Phillips S. Canadian best practice recommendations for stroke care. CMAJ [Internet]. 2008 Dec 2 [cited 2010 Jun 24];179(12 Suppl):E1-E93. Available from: <http://www.cmaj.ca/cgi/data/179/12/S1/DC1/1>  
*Notes: See Best practice recommendation 6.1: Dysphagia assessment p. E63*  
Summary available from: [http://www.guideline.gov/summary/summary.aspx?ss=15&doc\\_id=14195&nbr=7102&string](http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=14195&nbr=7102&string)
4. National Collaborating Centre for Mental Health. Dementia: supporting people with dementia and their carers in health and social care [Internet]. London: National Institute for Health and Clinical Excellence; 2006. [cited 2010 Jun 24]. Available from: <http://www.nice.org.uk/nicemedia/pdf/CG042NICEGuideline.pdf>  
*See p. 42, item 1.10.1.4*
5. National Collaborating Centre for Acute Care. Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition [Internet]. London: National Institute for Health and Clinical Excellence; 2006. [cited 2010 Jun 24]. Available from: <http://www.nice.org.uk/nicemedia/pdf/CG032NICEguideline.pdf>  
*See page 26-28 People with dysphagia*

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**APPENDIX – FURTHER INFORMATION:**

**Randomized controlled trials**

6. Dennis M, Lewis S, Cranswick G, Forbes J. FOOD: a multicentre randomised trial evaluating feeding policies in patients admitted to hospital with a recent stroke. *Health Technol Assess* [Internet]. 2006 Jan [cited 2010 Jun 21];10(2). Available from: <http://www.hta.ac.uk/fullmono/mon1002.pdf> (Copy and paste into URL bar)  
*See Implications for practice pp. 81-84*

**Non-randomized studies**

7. Boczko F. Patients' awareness of symptoms of dysphagia. *J Am Med Dir Assoc*. 2006 Nov;7(9):587-90. [PubMed: PM17095424](#)
8. Germain I, Dufresne T, Gray-Donald K. A novel dysphagia diet improves the nutrient intake of institutionalized elders. *J Am Diet Assoc*. 2006 Oct;106(10):1614-23. [PubMed: PM17000194](#)

**Clinical practice guidelines**

9. Hill K, Moore K, LoGiudice D, Klaic M, Hunt S, Hempton C, et al. Chapter 9: quality of care – overview [Internet]. In: *Dementia resource guide*. Canberra: Government of Australia Department of Health and Ageing; 2009. [cited 2010 Jun 25]. Available from: [http://www.health.gov.au/internet/main/publishing.nsf/Content/35DF1D4D4EBD8747CA257693001DEFFC/\\$File/9.%20Quality%20care.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/35DF1D4D4EBD8747CA257693001DEFFC/$File/9.%20Quality%20care.pdf)  
*See Quality care Nutrition and hydration pp.9.29-9.30*
10. NHS National Patient Safety Agency. Ensuring safer practice for adults with learning disabilities who have dysphagia [Internet]. London: NHS National Patient Safety Agency; 2007. [cited 2010 Jun 25]. Available from: <http://www.nrls.npsa.nhs.uk/EasySiteWeb/getresource.axd?AssetID=60131&type=full&serVICETYPE=Attachment>
11. The Royal Australian College of General Practitioners. Medical care of older persons in residential aged care facilities [Internet]. 4<sup>th</sup> ed. Melbourne: Government of Australia Department of Health and Ageing; 2006. [cited 2010 Jun 25]. Available from: <http://www.racgp.org.au/Content/NavigationMenu/ClinicalResources/RACGPGuidelines/TheSilverBook/RACGPsilverbook2006.pdf>  
*See Dysphagia and aspiration pp.35-36*

**Additional references**

12. Boczko F, Feightner K. Dysphagia in the older adult: the roles of speech-language pathologists and occupational therapists. *Top Geriatr Rehabil*. 2007 Jul;23(3):220-7.

13. College of Dietitians of Ontario. Scope of practice for registered dietitians caring for clients with dysphagia in Ontario [Internet]. Toronto: College of Dietitians of Ontario; 2007 [cited 2010 Jun 25]. Available from:  
<http://www.cdo.on.ca/en/pdf/publications/guidelines/Dysphagia%20Policy.pdf>
14. Davis LA, Spicer MT. Nutrition and dysphagia in older adults. *Top Geriatr Rehabil.* 2007 Jul;23(3):211-9.