

Supplementary material 5: Long list of research questions by theme (final prioritisation survey)

Assessment and identification

1. What is the clinical effectiveness and cost-effectiveness of existing tools for the assessment of dysphagia in terms of improving the identification and health and well-being outcomes for children and adults with dysphagia?
2. What is the role of Talking Mats in the assessment and management of adults with dysphagia?
3. Does cervical auscultation (listening to the sounds that accompany swallowing using a stethoscope placed on the neck) improve (a) identification of swallowing difficulties in children, and (b) carer's understanding of children's swallowing when they listen to the auditory feedback whilst their child is swallowing?
4. What is the feasibility of predicting aspiration pneumonia (pneumonia associated with food or liquid going into the lungs rather than the digestive system) in adults with dysphagia who have capacity to consent and are at risk of aspiration on all food consistencies?
5. Does the use of (a) Fibreoptic endoscopic evaluation of swallowing (FEES) and (b) videofluoroscopy improve health and wellbeing outcomes for children and adults with dysphagia?
6. What is the cost-effectiveness of using Fibreoptic endoscopic evaluation of swallowing (FEES) and videofluoroscopy for the assessment of dysphagia?
7. Does the use of pulse oximetry improve health and wellbeing outcomes for children and adults with dysphagia?
8. What is the clinical effectiveness and cost effectiveness of using telehealth (providing healthcare remotely using telecommunications technology) in the assessment and treatment of dysphagia in terms of health and wellbeing outcomes of adults with dysphagia?
9. What is the most effective way for SLTs to present information about dysphagia to people receiving a diagnosis of dysphagia for a) people with language, communication and/or cognitive difficulties and b) people with no language or cognitive difficulties?

10. Is cough reflex testing more reliable than cervical auscultation or pulse oximetry for accurately diagnosing dysphagia in adults with acquired brain injury?

Neonates

11. What is the typical pattern of development of breastfeeding in premature babies?
12. What is effectiveness of the Neonatal Oral-Motor Assessment Scale (NOMAS) in identifying and managing sucking difficulties in infants?
13. What is the most effective way to manage the transition from tube feeding to oral feeding in terms of health and wellbeing outcomes in premature infants?
14. What is the psychosocial impact of tube feeding on (a) the carers of premature infants and (b) the bond between carers and premature infants who are tube fed?
15. Is cutting tongue tie effective and cost-effective in terms of feeding outcomes in infants with tongue tie?

Cleft lip and palate

16. What is the role of the speech and language therapist in improving outcomes for children with cleft palate and eating and drinking difficulties?
17. To improve outcomes for children with cleft palate and eating and drinking difficulties, what is the knowledge required by speech and language therapists?

Learning Disabilities

18. What is the prevalence and nature of dysphagia in adults with learning disabilities and how is this related to the aetiology (e.g. Down syndrome)?
19. Are oro-motor therapy techniques effective and cost-effective in improving eating and drinking and health outcomes for children and young people with non-progressive neurological conditions?
20. What are the beliefs, attitudes and practices relating to mealtimes of (a) adults with learning disabilities and (b) their carers and how do they impact on patient care?

Stroke

21. Is the use of biofeedback (auditory and visual information associated with swallowing) by a speech and language therapist effective in measuring the outcomes of interventions for dysphagia in adults with dysphagia following a stroke?

22. Can expiratory muscle strengthening (training exercises to increase the strength of respiratory muscles for improving cough and swallow functions) reduce chest infections in stroke patients with dysphagia?
23. What is the clinical effectiveness and cost-effectiveness of non-invasive brain stimulation in improving health and wellbeing outcomes in adults with dysphagia as a result of a stroke?
24. Are swallowing manoeuvres effective in improving swallowing and wellbeing outcomes in adults with acquired non-progressive dysphagia? What factors improve their effectiveness (e.g. how often exercises are carried out/ how soon after the stroke)?
25. What is the effectiveness of the McNeill intervention for improving swallowing and wellbeing outcomes for adults with acquired non-progressive dysphagia?
26. What is the existing evidence for the effectiveness of positional swallowing interventions (e.g. using a 'chin tuck' position) in the treatment of dysphagia in adults post-stroke?
27. What is the impact of nil-by-mouth following a stroke in adults with dysphagia on health and wellbeing outcomes, including swallowing function?
28. Do interventions to promote oral hygiene improve health and wellbeing outcomes in adults with dysphagia following a stroke?
29. What is the role of (a) Fiberoptic endoscopic evaluation of swallowing (FEES) and (b) videofluoroscopy in the assessment and management of adults with dysphagia as a result of brain injury e.g. stroke?
30. Is thermal tactile stimulation effective in reducing the delay in the initiation of a swallow for adults with post-stroke dysphagia?

Head and neck cancer

31. What is the prevalence of late-onset changes in swallowing function in adults with dysphagia due to head and neck cancer?
32. Can expiratory muscle strengthening (training exercises to increase the strength of respiratory muscles for improving cough and swallow functions) reduce chest infections in head and neck cancer?
33. What is the effectiveness of swallowing exercises before radiotherapy on health and wellbeing outcomes in adults with head and neck cancer?

34. What is the effectiveness of the McNeill intervention for improving swallowing and wellbeing outcomes for adults with dysphagia due to head and neck cancer?
35. What is the effectiveness of swallowing exercises following treatment (e.g. surgery and/or radiotherapy) in improving swallowing and wellbeing outcomes in adults with dysphagia due to head and neck cancer?

Progressive neurological disease

36. Does the use of swallowing screening at neurology clinic appointments effectively identify (a) need for referral to speech and language therapy and (b) changes in swallowing function in adults with Parkinson's disease?
37. Does the use of swallowing screening at neurology clinic appointments effectively identify (a) need for referral to speech and language therapy and (b) changes in swallowing function in adults with Multiple Sclerosis?
38. Are interventions for swallowing effective to improve/maintain safety of swallowing and quality of life in adults with Parkinson's disease?
39. Are interventions for swallowing effective to improve/maintain safety of swallowing and quality of life in adults with motor neurone disease?
40. Are interventions for swallowing effective to improve/maintain safety of swallowing and quality of life in adults with multiple sclerosis?
41. What is the effectiveness of early intervention (at point of diagnosis) versus late intervention (when symptoms of dysphagia are confirmed) on swallowing and wellbeing outcomes in adults with Parkinson's disease?

Dementia

42. What is the prevalence and nature of dysphagia in different types and stages of dementia when compared with normal ageing?
43. Are training programmes for carers/staff in eating, drinking and dysphagia in dementia effective in (a) improving referrals to speech and language therapy, (b) reducing hospital admissions for dysphagia-related illness and (c) improving health and wellbeing outcomes for people with dementia and dysphagia?

Mental health

44. What is the prevalence of dysphagia in children and adults with mental health conditions?
45. What are the causes of dysphagia in adults with mental health conditions?
46. What is the role of speech and language therapists in the assessment and management of dysphagia in adults with mental health conditions?

Elderly

47. What risk factors are associated with the development of dysphagia in elderly adults?
48. What are the early signs of changes in swallowing function in elderly adults?
49. What is the impact of modified diets and/or thickened fluids on the health and wellbeing of elderly adults with dysphagia?
50. What are the roles of speech and language therapists and care staff in the assessment and management of dysphagia in care homes?
51. Are the menus offered in hospitals, nursing homes and day centres effective in meeting the individual needs of elderly adults with dysphagia (e.g. presentation of food, nutritional needs, different textures)?

Respiratory/Tract

52. What is the prevalence and nature of dysphagia in adults with respiratory conditions over time?
53. Does the use of specialised cups reduce aspiration pneumonia and/or improve hydration and/or quality of life in children and adults with dysphagia?
54. What is the impact of reflux on swallowing function and health outcomes (including pneumonia) for children and adults who have dysphagia?
55. Can expiratory muscle strengthening (training exercises to increase the strength of respiratory muscles for improving cough and swallow functions) reduce chest infections for patients with a tracheostomy and dysphagia?

Cervical spine injury

56. Does the use of swallowing screening effectively identify dysphagia in patients undergoing elective cervical spine surgery?

57. Does surface electromyography (EMG) improve swallowing outcomes and quality of life for people with cervical spinal injury and dysphagia?

Specialist care

58. What is the role of the speech and language therapist in end of life care for people with dysphagia?
59. What is the role of the speech and language therapist in Intensive Care Units?
60. What is the role of the speech and language therapist in connective tissue and autoimmune conditions?

Tube feeding

61. How does the use of nasogastric feeding impact on the swallowing and wellbeing outcomes of (a) children and (b) adults with dysphagia?
62. What is the clinical effectiveness and cost-effectiveness of bolus feeding as compared with continuous feeding in (a) children and (b) adults who are tube fed?
63. What are the costs, benefits and risks of adults with dysphagia 'self-weaning' (gradually resuming oral feeding) from tube feeding
64. What are the reported psychosocial effects of (a) nasogastric and (b) gastrostomy feeding in children and adults who are tube fed?
65. Is feeding via a gastrostomy tube effective in improving health and wellbeing outcomes of (a) children with neurological conditions and dysphagia and (b) parents of children with neurodisability and dysphagia?
66. What is the impact of delays caused by waiting for a decision to tube feed and/or delays for the first feed on health and wellbeing outcomes for people with dysphagia?

Tracheostomy

67. Which outcome measures are reliable in the clinical assessment of patients with tracheostomy and dysphagia?
68. What is the impact of using a (a) cuff, or (b) speaking valve on swallowing outcomes for children and adults with a tracheostomy who have dysphagia?
69. Which factors increase the risk of dysphagia in patients who have been (a) intubated or (b) use a tracheostomy?

Care givers

70. Do people with dysphagia and/or their families/carers carry out recommendations to improve the safety/effectiveness of swallowing at meal-times? What strategies are effective to improve compliance with recommendations for postural changes?
71. Are caregivers aware of how to identify eating/drinking difficulties and the potential risks and consequences of dysphagia?

Modified diets

72. Does the use of thickener in fluids reduce aspiration pneumonia and/or improve hydration and/or quality of life in adults with dysphagia?
73. What is the impact of thickening fluids on the physiology and wellbeing of (a) children and (b) adults with dysphagia?
74. What are the experiences of adults with dysphagia and their caregivers who have been on a modified diet over a long period of time?
75. Would the development of a shared decision-making model for the modification of textures improve the health and wellbeing outcomes of children and adults with dysphagia?
76. How does modifying the texture, flavour and temperature of food improve health and wellbeing outcomes and patient experience in adults with dysphagia?
77. What is the impact of shared decision-making (patient, carer and health professionals) for the modification of food textures and fluids on health and wellbeing outcomes when compared with decisions made by health professionals alone?
78. Is graded exposure effective and cost-effective in improving health and wellbeing outcomes for children with behavioural and/or sensory feeding difficulties?
79. Does oral sensory stimulation improve health and wellbeing outcomes of children and adults with dysphagia?

Postural changes

80. What is the current practice of health professionals in using postural changes (e.g. different positions) to support the management of dysphagia?
81. Are postural changes (e.g. different positions) effective in improving swallowing function and safety in (a) adults and (b) children with dysphagia?

82. Does a reclined eating/drinking position improve health and wellbeing outcomes in adults with dysphagia who are known to aspirate when eating and/or drinking?
83. What is the impact of taping of the hyoid muscles on laryngeal elevation and swallowing function in adults with dysphagia?

Neuromuscular Stimulation

84. Does Neuromuscular Electrical Stimulation improve health and wellbeing outcomes when compared with usual treatment in adults with dysphagia?
85. What factors (such as amount of stimulation and timing of stimulation) improve the effectiveness of Neuromuscular Electrical Stimulation in improving health and wellbeing outcomes when compared to usual treatment in adults with dysphagia?
86. What is the effectiveness of Facial Oral Tract Therapy in improving hypersensitivity and reducing bite reflex in adults with severe neurological impairment?