

Dysphagia research priorities mapped against REPRISSE framework**A) Context & scope**

Item	Descriptor and/or example	Text in write-up	Section
Define geographical scope	Global, regional, national, city, local area, institutional/organizational level, health service	'a UK-wide research priority setting partnership'	Introduction
Define health area, field, focus	Disease or condition specific, interventions, healthcare delivery, health system	'to identify crucial unanswered questions in dysphagia'	Introduction
Define the intended beneficiaries	This may include the general population or a specific population based on demographic (age, gender), clinical (disease, condition), or other characteristics who may benefit from the research	'make the case for future research that will impact patients/carers and health professionals working in this field'	Introduction
Define the target audience of the priorities	Policy makers, funders, researchers, industry or others who have the potential to implement the priorities identified	'The Top 10 priorities have identified key gaps in the current evidence base for the assessment and management of this highly prevalent, debilitating and under-researched condition, thereby providing funders, researchers, policy-makers and industry with an important resource that will help to inform the direction and clinical relevance of future research'	Conclusion
Identify the research area	Public health, health services research, clinical research, basic science	'The scope of the PSP encompassed children and adults with dysphagia, all health conditions associated with dysphagia and included identification, assessment, intervention, outcomes and service delivery'	Introduction
Identify the type of research questions	Etiology, diagnosis, prevention, treatment (interventions), prognosis, health services, psychosocial, behavioral and social science, economic evaluation, implementation; this may not be pre-defined		
Define the time frame	Interim, short-term, long-term priorities, plans to revise and update	The top 10 lists will be reviewed on an annual basis, for three years post-publication, including a review of recent research that has addressed or partially-addressed the	Future work

		<p>research priorities and a call for summaries of work that is unpublished or of a clinical nature (including service evaluations, audits or quality improvement projects). Evidence collected through these methods will be mapped against the top 10 lists to provide a high-level overview of the attention and allocation of resources given to answering the priorities, year on year.</p>	
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B) Governance and team

Item	Descriptor and/or example	Text in write-up	Section
Describe the selection and structure of the leadership and management team	Those responsible for initiating, developing, and guiding the process for priority setting, and examples of structures include; Steering Committee, Advisory Group, Technical Experts	<p>'A steering group with strategic oversight of the project and a dysphagia reference group (to provide expert opinion and evidence checking) were set up'</p> <p>'As outlined in the JLA Handbook, a steering group was established to approve the scope, aims, objectives and methodology.[36] This group comprised experts from a range of clinical areas as the dysphagia PSP was one of five concurrent PSPs relevant to the speech and language therapy profession. A separate dysphagia reference group was established to provide expert opinion and evidence checking on an ad-hoc basis'</p> <p>'Members of the steering group and dysphagia reference group were recruited via an application process advertised to members of the Royal College of Speech and Language Therapists (RCSLT) through member publications and</p>	<p>Methods</p> <p>Methods (Setting up the partnership)</p>

		<p>networks and were selected to ensure representation from from diverse client groups and employers from across the UK'.</p> <p>'The group was chaired by the RCSLT trustee for research and development'</p>	
Describe the characteristics of the team	Stakeholder group or role, institutional affiliations, country or region, demographics (e.g. age sex), discipline, experience, expertise	<p>'The steering group comprised an NIHR adviser, project leaders, 5 clinical SLTs, which included representatives working with dysphagia specific caseloads: neonates, paediatrics and adults, and 6 clinical SLTs working more broadly. This ensured representation from across the scope of practice of speech and language therapy. The group was chaired by the RCSLT trustee for research and development'</p> <p>'The dysphagia reference group comprised 18 SLTs (4 of whom also sat on the steering group) representing different clinical settings, employers, UK nations and client groups and thus the broad range of conditions and widespread impact of dysphagia'</p> <p>'Both groups contained people with expertise in research priority setting; inclusive communication; patient and public involvement; research; commissioning services, and service management. Members of both groups had links with service user organisations, professional networks, and research funders'</p> <p>Table 1</p>	Methods (Setting up the partnership)
Describe any training or experience relevant to conducting priority setting	Consultants or advisors, members with experience or skills relevant to the conducting priority-setting e.g. qualitative methods, surveys, facilitation	'No formal training was provided'.	Methods (Setting up the partnership)

C) Framework for priority setting

Item	Descriptor and/or example	Text in write-up	Section
State the framework used (if any)	James Lind Alliance, COHRED, CHNRI, Dialogue Model, no framework (general research priority setting)	'Methods were developed in consultation with the NIHR and JLA following JLA principles'	Methods

D) Stakeholders or participants

Item	Descriptor and/or example	Text in write-up	Section
Define the inclusion criteria for stakeholders involved in priority-setting	Patients, caregivers, general community, health professionals, researchers, policy makers, non-governmental organizations, government, industry; specific groups including vulnerable and marginalized populations	'As well as input from SLTs across the UK, service user organisations, charities, professional bodies and special interest groups'	Methods (Wider engagement)
State the strategy or method for identifying and engaging stakeholders	Partnership with organizations, social media, recruitment through hospitals	'Organisations were contacted directly via the RCSLT, through personal contacts of steering and dysphagia reference group members, via email and social media'	
Indicate the number of participants and/or organizations involved	Number of individuals and organizations, include number by stakeholder group	Table 2	Methods
Describe the characteristics of stakeholders	Stakeholder group, demographic characteristics, areas of interest and expertise, discipline, affiliations		
State if reimbursement for participation was provided	Cash, vouchers, certificates, acknowledgement; what purpose e.g. travel, accommodation, honorarium	'The workshop was held out of peak travel time and travel tickets were booked for participants in advance. Additional funds were available for travel/accommodation to accommodate physical needs. For participants with dysphagia, a separate room was made available for alternative forms of feeding e.g. via gastrostomy tube'	Methods (Process)

E) Identification and collection of research priorities

Item	Descriptor and/or example	Text in write-up	Section
Describe methods for collecting initial priorities	Methods e.g. Delphi survey, surveys, nominal group technique, interviews, focus groups, meetings, workshops; prioritization e.g. voting, ranking; mode e.g. face-to-face, online; may be informed by evidence e.g. systematic reviews, reviews of guidelines/other documents, health technology assessment	<p>‘two questions were included as part of a broader online questionnaire on evidence-based practice and research in speech and language therapy targeted at SLTs between September 2015 and January 2016:</p> <ol style="list-style-type: none"> 1) In your specialist area, what would you say are the significant gaps in the evidence base that challenge you in delivering evidence-based care? Please list up to three priorities for research. 2) If you were a research funder and you could only fund one piece of research, what would it be? Please list up to three priorities for research.’ <p>‘SLTs in the UK were notified of the questionnaire via the RCSLT monthly professional magazine (<i>The Bulletin</i>), direct email, the RCSLT website, social media channels, member forums and practice networks’</p>	Methods (Process)
Describe methods for collating and categorizing priorities	Taxonomy or other framework used to organize, summarise, and aggregate topics or questions	‘Each research suggestion was manually coded independently by two raters with 93.7% agreement as: (1) related to dysphagia (inclusive of at least one keyword – see Box 1), (2) not related to dysphagia or, (3) invalid response	
Describe methods and reasons for modifying (removing, adding, reframing) priorities	Based on scope, clarity, definition, duplication, other criteria	<p>‘Duplicates were removed’</p> <p>‘Research recommendations were gathered from Cochrane reviews and systematic reviews and were aggregated with</p>	

		survey responses to form 'uncertainties' (knowledge gaps that can be defined by a research question, for which no up-to-date reliable systematic reviews of evidence exist) [36] using the JLA PSP data management template.[40] Each uncertainty was checked by the NIHR team and the dysphagia reference group to modify wording and reach consensus that they were related to dysphagia and unanswered by previous research. Similar uncertainties were grouped together and formulated into broad 'uncertainty topics' written in plain English'	
Describe methods for refining or translating priorities into research topics or questions	Reviewed by Steering Committee or project team	'Patients and carers, healthcare professionals, and other stakeholders were invited to attend a workshop in January 2017 to gather uncertainties and develop research questions' 'Participants received training on formulating research questions using the Population, Intervention, Comparison, Outcome (PICO) format by the NIHR representative. Groups (each including at least one patient/carer or patient organisation representative and one non-SLT healthcare professional) reviewed four uncertainty topics per group. Research questions were developed from each topic. Participants were asked to contribute additional research questions and independently review all of the research questions generated from the workshop'	
Describe methods for checking whether research questions or topics have been answered	Systematic reviews, evidence mapping, consultation with experts	'Following the workshop, research questions were checked and refined by the research team to confirm they were unanswered by previous research'	
Describe number of research questions or topics	Number of priorities at each stage of the process	See results	See following sub-sections: SLT survey;

			Data processing; Formulation of research questions; Interim prioritisation; Final prioritisation.
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F) Prioritisation of research topics/questions

Item	Descriptor and/or example	Text in write-up	Section
Describe methods and criteria for prioritizing research topics or questions	Methods e.g. Delphi survey, surveys, nominal group technique, interviews, focus groups, meetings, workshops; Prioritization e.g. voting, ranking; Mode e.g. face-to-face, online; Criteria e.g. need, feasibility, novelty, equity	'The long list of 77 research questions was formatted into an online prioritisation survey targeted at patients, carers and healthcare professionals via SurveyMonkey (SurveyMonkey Inc.). Respondents were asked to select their top 10 priorities from all 77 questions and rank them in order with 1 being the highest priority'	Methods (Process)
State the method or threshold for excluding research topics/questions	Thresholds for ranking scores, proportions, votes; other criteria	'Mean rank and total number of votes were calculated for each research question' 'All questions received some votes (range: 10-126). The steering group and dysphagia reference group reached consensus on the following strategy for final prioritisation. Questions were ranked by total number of votes, rather than average rankings (which were very similar for many of the questions)'	Results (Final prioritisation)

G) Output

Item	Descriptor and/or example	Text in write-up	Section
State the approach to formulating the research priorities	Area, topic, questions, PICO (population, intervention, comparator, outcome)	<p>'... all questions were in PICO format'</p> <p>'As questions related to adults received more votes than those related specifically to neonates and children each question was coded as relevant to adults, children or all ages. The 10 questions related to adults, children and all ages with the most votes formed three separate top 10 lists to ensure all client groups were represented - see Table 3'</p>	Methods (Process) Results

H) Evaluation and feedback

Item	Descriptor and/or example	Text in write-up	Done?
Describe how the process of prioritization was evaluated	Survey, workshop	<p>'Participants were asked to and independently review all of the research questions generated from the workshop'</p> <p>'Workshop attendees had the opportunity to ... provide feedback on all aspects of the event to inform the next stage of priority setting and future PSPs'</p> <p>'PPI representatives ... provided feedback about the accessibility of the workshop format to inform future PSPs'</p> <p>'Following a recent evaluation of the overall project by the steering group, many of these and other ideas will be incorporated into future iterations of the RCSLT's research</p>	Methods (Process) Methods (PPI) Discussion (Strengths & limitations)

<p>Describe how priorities were fed back to stakeholders and/or to the public; and how feedback (if received) was addressed and integrated</p>	<p>Public meetings or workshop, newsletters, website, email, online presentations</p>	<p>PSPs.'</p> <p>'The top 10 lists were launched on International Swallowing Awareness Day in March 2018 as part of a wider RCSLT awareness-raising campaign. The priorities were shared via social media (Twitter and Facebook) and directly emailed to those involved with the project and previously identified partner organisations, with a request to share the findings with their networks. A range of infographics were created and shared on social media. The priorities (and process) were later shared in the RCSLT <i>Bulletin</i> magazine and RCSLT newsletters. Presentations about the project and process were delivered at network meetings, RCSLT events and conferences. The Top 10 lists are available on the RCSLT website'</p> <p>'Research questions were developed from each topic. Participants were asked to contribute additional research questions and independently review all of the research questions generated from the workshop'</p> <p>'Workshop attendees had the opportunity to review the questions again ...'</p> <p>'Feedback on the research questions from survey participants was collated and reviewed and final top 10 lists were agreed by the steering and dysphagia reference groups.'</p> <p>'Feedback from survey participants suggested 9 further questions. As these had not been included in the interim prioritisation survey they were not voted on but were added to the final long list, resulting in a total of 86 questions'</p>	<p>Discussion (Dissemination)</p> <p>Methods (Process)</p> <p>Results (Final Prioritisation)</p>
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I) Implementation

Item	Descriptor and/or example	Text in write-up	Section
Outline the strategy or action plans for implementing priorities	Communication with target audience, via policies and funding	'The top 10 lists were launched on International Swallowing Awareness Day in March 2018 as part of a wider RCSLT awareness-raising campaign. The priorities were shared via social media (Twitter and Facebook) and directly emailed to those involved with the project and previously identified partner organisations, with a request to share the findings with their networks. A range of infographics were created and shared on social media. The priorities (and process) were later shared in the RCSLT <i>Bulletin</i> magazine and RCSLT newsletters. Presentations about the project and process were delivered at network meetings, RCSLT events and conferences. The Top 10 lists are available on the RCSLT website	Discussion (Dissemination)
Describe plans, strategies, or suggestions to evaluate impact	Integration in decision-making, funding allocation, review of relevant documents	'The top 10 lists will be reviewed on an annual basis, for three years post-publication, including a review of recent research that has addressed or partially-addressed the research priorities and a call for summaries of related work that is unpublished or of a clinical nature (including service evaluations, audits or quality improvement projects). Evidence collected through these methods will be mapped against the top 10 lists to provide a high-level overview of the attention and allocation of resources given to answering the priorities, year on year. Since 2019, 16 research and quality improvement project summaries that have directly addressed one or more priority questions have been submitted. It is also intended that the dysphagia reference group will be reconvened by the RCSLT to explore the research priorities in greater detail and tease out more specific, researchable questions to resubmit to specific funding streams.'	Discussion (Future work)

J) Funding and conflict of interest

Item	Descriptor and/or example	Text in write-up	Section
State sources of funding	Name sources of funding for the priority-setting exercise; if relevant include the budget and/or cost	'This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors'	Funding statement
Declare any conflicts or competing interests	State any conflicts of interest that may be at an individual level and/or at a contextual level (e.g. political issues, controversies) that may affect the process, output or implementation	See competing interests statement	