Bristol Speech and Language Therapy Research Unit

Newcastle University

University of Strathclyde Glasgow

MISLToe Speech Sound Disorder

Maximising the Impact of Speech and Language Therapy services for children with Speech Sound Disorder (The MISLToe_SSD Study)

Dr Yvonne Wren, Director of the Bristol Speech and Language Therapy Research Unit (BSLTRU), Dr Sam Harding, BSLTRU; Dr Joanne Cleland, University of Strathclyde; Dr Helen Stringer, University of Newcastle; Dr Sam Burr, BSLTRU

BACKGROUND

76,000 children with Speech Sound Disorder (SSD) are referred to speech and language therapy (SLT) in the UK every year.

Untreated, SSD leads to poor outcomes in education, employment, and mental health. SLT intervention in the UK is delivered via care pathways and these are often resource rather than evidence driven and there is significant national variation.

There is a pressing need to identify which care pathways are most effective and efficient within NHS service constraints to improve outcomes and maximise cost-effectiveness.

AIMS & OBJECTIVES

Before we can determine which care pathways are most effective and efficient, we must establish a **Core Outcomes Set (COS) and minimum dataset.**

1. Develop a protocol for collection of a COS and minimum dataset for children with SSD;
2. Agree a standard diagnostic process for identifying subtypes of SSD;
3. Determine the range and specification of interventions for SSD in UK NHS SLT services;
4. Identify the process for future health economic analysis

WHAT ARE WE GOING TO DO?

Workstream 1

Aim: To identify preliminary content for the COS and minimum dataset from existing evidence (Obj. 1).

Method: Umbrella review of current evidence.

Analysis: The following data will be extracted from included reviews: study design, demographic items, SSD subtypes, intervention type, service delivery framework, therapeutic content, outcomes, measurement instruments used and analyses performed.

Workstream 2

Aim: To refine the COS and minimum dataset (Obj. 1) and to agree the diagnostic process of SSD subtypes (Obj. 2) and to establish a list of interventions for SSD in current use with agreed labels and a clear mapping to subtype of SSD (Obj. 3).

Method: Virtual participatory workshop, online survey and card sorting activity will be conducted with participants from 5 NHS sites.

Analysis: Similarities and differences in the diagnostic criteria from the 5 NHS sites will be identified and discussed with a focus on the impact differences may have on the data collected for a COS and minimum dataset and potential impact on service users. A full list of SSD interventions will be determined.

Workstream 3

Aim: To finalise content for the COS and minimum dataset (Obj. 1).

Method: Two-rounded modified Delphi exercise and expert panel meeting *(n*=40).

Analysis: (Round 1) Ratings of outcome measures and analysis instruments from WS1 will be analysed using descriptive statistics. Comments will be categorised and used to inform changes to items to take forward to the next round. Feedback to participants will be given on their individual response in relation to the whole group and anonymised version of all comments.

(Round 2) Outcome measures and analysis instruments with an 'agree' rating from ≥50% of panel members will be presented for rating. Consensus will be defined a priori as a rating of 'agree' by ≥75% of panel members. Feedback will be given as in Round 1.

PATIENT & PUBLIC INVOLVEMENT (PPI)

The activities in this study and the follow-on study will be informed by:

- Three virtual meetings with parents of children with SSD in the online group 'Speech and Language Therapy Parents'.
- Engagement with the Young People's Advisory Group for SLT using a closed group messaging app more likely to appeal to this age group.
- We will engage with children receiving SLT intervention for SSD.

FOLLOW-ON STUDY

A follow-on study will work with ten NHS SLT teams to begin collection of the COS and minimum dataset.

We will determine what barriers may exist to collection of data and how these may be overcome in order to establish a process for collection of a large dataset which, subject to consent, can be used to address a wide range of questions relevant to this population.

These data will be used to compare outcomes across different care pathways.

ANTICIPATED IMPACT

This research will facilitate the **consistent collection of data within clinical SLT services** that can then be used to address clinically relevant research questions.

The data will be used to determine the most effective and cost-effective care pathways for children with SSD, leading **to improved outcomes** and **a reduction in negative sequalae** (e.g., impact on education) and **cost savings for the NHS**.

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Sam.burr@nbt.nhs.uk