



Bristol Speech and
Language Therapy
Research Unit

North Bristol 
NHS Trust

**A preliminary investigation into the effectiveness
and cost-effectiveness of speech & language
therapist led interventions for children with speech
sound disorder versus programmes delivered by
assistants**

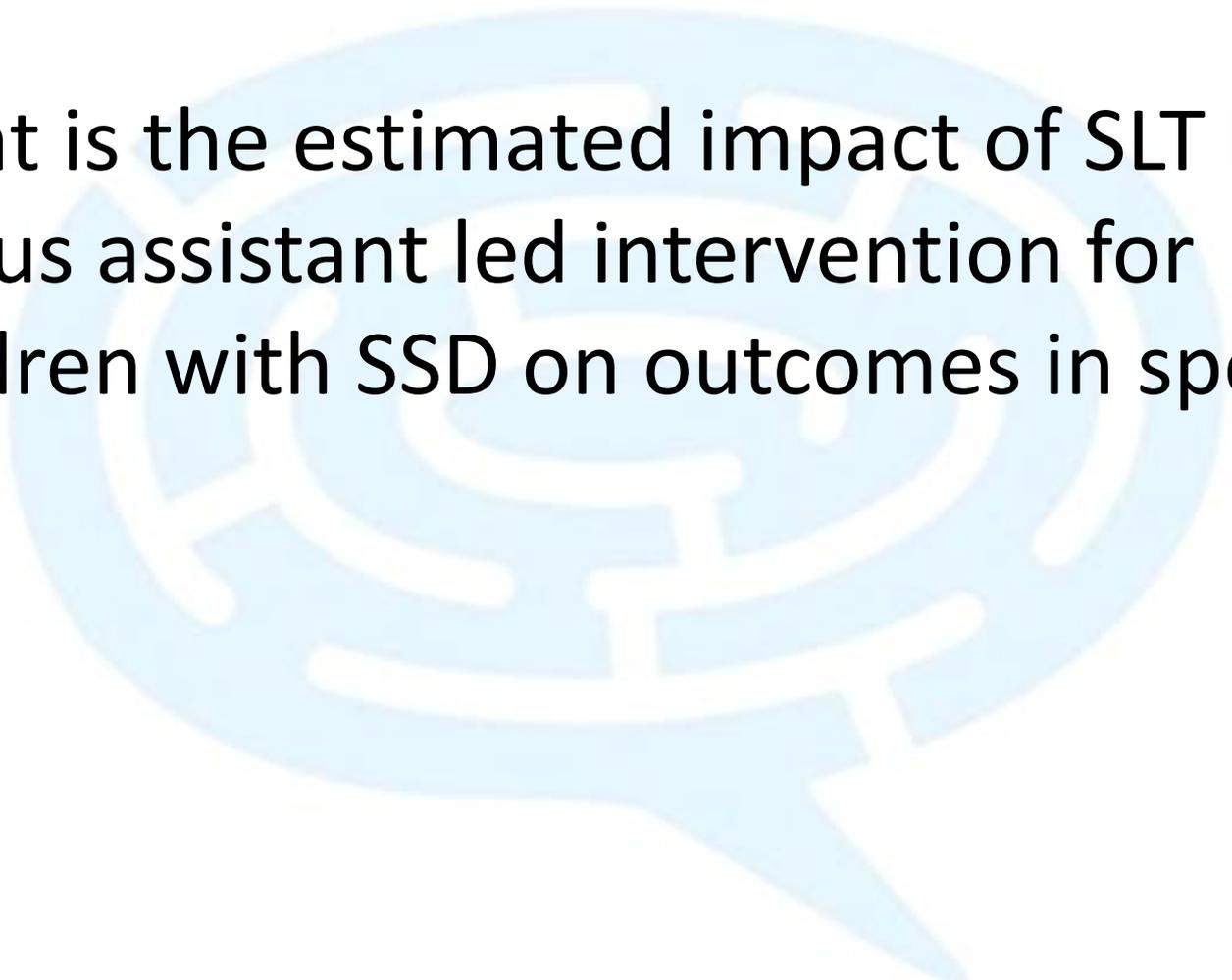
Lydia Morgan and Yvonne Wren

Children with speech sound disorder (SSD)

- Largest group referred to NHS speech and language therapy
- At risk for poor life outcomes in terms of education (*Anthony et al, 2011*) and employment (*Felsenfeld et al, 1992,1994*)
- Therapy for SSD sometimes delivered by SLTAs or TA's
- Unclear evidence for these approaches

Aim

What is the estimated impact of SLT led versus assistant led intervention for children with SSD on outcomes in speech?



Case note audit

- Children aged 4;0-8;11
- SSD; who meet the threshold for requiring speech and language therapy
- Children with no known neurological deficit, sensori-neural hearing loss, structural anomaly
- Who had received at least one block of SLT

Case notes reviewed

	Site A (%)	Site B (%)
Case notes	12	41
Blocks of SLT	31	109
Blocks delivered by SLT	11 (35)	107 (98)
Blocks delivered by SLTA	15(48)	0 (0)
Blocks delivered by TA	5 (16)	2 (1.8)

Data collection

		Site A (%)	Site B (%)
Baseline and outcome Ax:	- within one month	1 (3.2)	16 (15)
	- within three months	5 (16)	30 (28)

Findings

- SITE A The majority of the therapy blocks used 'targets met' as outcomes, rather than formal assessments.
- SITE B When a child was discharged from SLT services, they were seen for review, but rarely for formal assessment.

SITE A

Baseline	Episode Aim[s]	SMART Objectives	Intervention	Achieved?	Actual Outcome
<p>Tod can copy 's' and 'f' words but is not yet consistent. He uses 'h' instead of these sounds in his speech.</p> <p>Todd omits many final sounds in his speech</p>	To develop speech sound production	<ol style="list-style-type: none"> Todd will copy 's' initial words in sentences Todd will copy 'f' initial words in sentences Todd will say 'sh', 's', 'f', 'k' sounds after vowel sounds 	<p>1:1 therapy sessions x1 weekly in clinic with the Speech Therapist May-June</p> <p>Naming 's' vs 'h' picture pairs.</p> <p>Naming 's' words and building these into sentences</p> <p>Naming 'f' words and building these into sentences</p> <p>naming 'f' vs 'h' picture pairs</p> <p>Vowels – ar, ee, ai, ie, ou, oo, er, oi Consonants – sh, s, f, k</p>	<p>✓</p> <p>✓</p> <p>✓</p>	<p>Todd has benefitted hugely from the 1:1 therapy block. He has met all of his targets and more!</p> <p>Todd can generate his own sentences using up to 4 's' words!</p> <p>Todd can generate his own sentences using up to 4 'f' words!</p> <p>Todd is also beginning to use the sound 'k' at the beginning of words and will benefit from more practise with this – see new programme plan.</p>

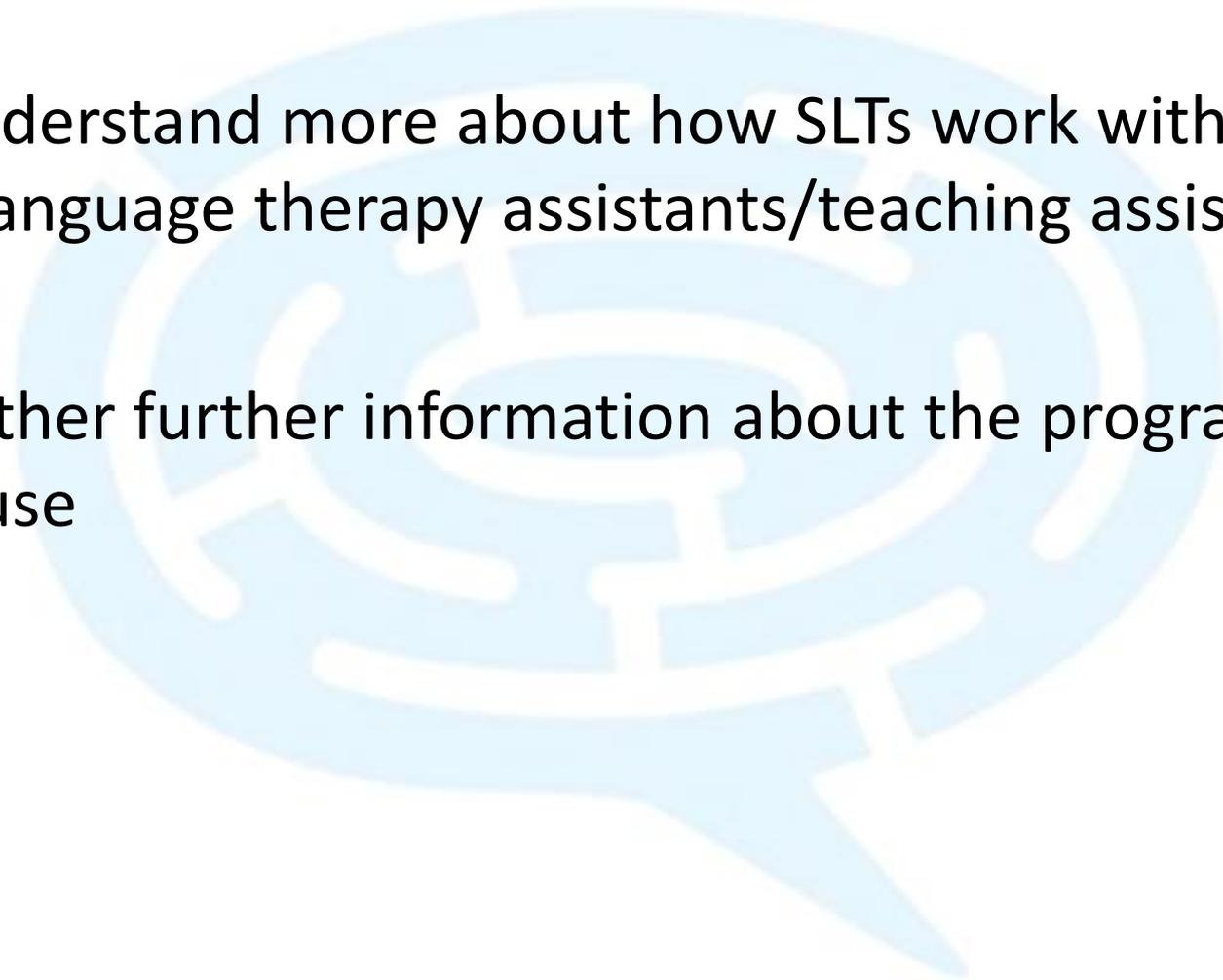
Findings

- Phonetic and Phonological Systems Analysis (PPSA)
- PCC as primary outcome measure
- 7 case notes analysed, all except one saw an increase in PCC
- Mean change was 16 (SD 27.7)
- Different assessments used pre and post
- Impossible to compare SLT vs SLTA/TA from this data

Survey

To understand more about how SLTs work with speech and language therapy assistants/teaching assistants

To gather further information about the programmes SLTs use



Survey

- One hundred and ninety three SLTs responded
- All working in the UK, with SSD population
- 97.9% reported that they worked with TAs or SLTAs
- SLTs frequently reported multiple ways in which they delivered their service, i.e. seeing some children frequently, others infrequently or for assessment only.

	Category	n	%
I see children frequently (once a fortnight or more often) and demonstrate activities for the SLTA or teaching assistant to carry out in between my visits.	1	128	66.3
I see children infrequently for intervention (less than once a fortnight) but provide a written programme for the SLTA or teaching assistant to use until my next visit	2	85	44
I see children for assessment only and SLTAs and teaching assistants provide intervention using a programme	3	46	23.8
I provide a different type of service but also use programmes for SLTAs or teaching assistants to follow	4	29	15
I provide a different type of service and do not use programmes for SLTAs and teaching assistants to follow	5	4	2

Summary

- Assistants play an important role in SLT
- We are still not sure how effective they are in practice
- The case note audit indicates we are not as a profession routinely keeping enough data
- Scope for further study

Questions

With thanks to...

The two sites

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