Evaluating disruption

Kathryn Moyse *and* **Katie Chadd** *compare speech and language therapy outcomes data from before and after the pandemic*

Over the course of the COVID-19 pandemic, speech and language therapy services have been required to make substantial changes. There is no denying that routine clinical data is, and will continue to be, critical to monitor these impacts and inform decision-making. Thus, reviewing data when there is an unexpected change is valuable in demonstrating both the positive and negative consequences (Chadd, Moyse and Enderby, 2021).

Our profession is in a privileged position to compare data on speech and language therapy outcomes collected in 'usual times' with that during 'pandemic times' by using the RCSLT online outcome tool (ROOT), which contains therapy outcome measure (TOM) data (Enderby and John, 2015; 2019). We can use this data to draw comparisons and explore variations.

Many services have started to utilise telehealth during the pandemic (RCSLT, 2020). Yet SLTs have expressed concern regarding the suitability of telehealth for some interventions. Here, we look at therapy outcomes before and after the pandemic, for patient groups which may be disadvantaged by telehealth: dysphonia and phonological disorder. While we cannot say for sure that all therapy after the pandemic was via telehealth (and so not directly assessing whether it is disadvantageous or not), it is interesting to draw comparisons with pre-pandemic

TABLE 1 shows the proportion of patients improving (in one or more of the TOM domains) in each intervention group, for episodes of care ending between 23 March 2019 and 22 January 2020, compared with the same period in 2020-21.

Primary TOMs scale	Year	Total number of episodes of care	Proportion of episodes demonstrating a clinically significant[1] improvement in one or more TOM domain
Dysphonia	2019-2020	343	75.2%
	2020-2021	59	96.6%
Phonological disorder	2019-2020	184	88.6%
	2020-2021	125	89.6%
Total[2]	2019-2020	5551	68.3%
	2020-2021	3201	80.4%

[1] An increase of 0.5 or more on the TOM is a clinically significant change (Enderby and John, 2015) [2] Total ROOT data excluding sets using the AAC TOM scale which deviates from the typical TOM structure, with multiple impairment ratings therefore that has not been provided here.

practices, nonetheless.

Overall, outcomes appear to be slightly better in the 2020-2021 cohorts than in 2019-2020 (tables 1 and 2). This appears especially true for the dysphonia group, where there is a considerable increase in the number of episodes of care resulting in an improvement in 2020-2021, compared with 2019-2020 (+21.4%) (table 1). Outcomes for phonological disorder appear similar in both cohorts (table 1) but there is some evidence that the gains made are less in 2020-2021 (+0.5 across all domains), than in 2019-2020 (+1.0 in four domains) (table 2).

We can speculate on the reasons for these differences. For example, it is likely that only a subset of patients received speech and language therapy in the last year, compared with usual times. These individuals could be a 'less impaired'

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subset, ie those without comorbidities (who may have been shielding), or those who are more readily able to access telehealth. This latter group may potentially be younger, more cognitively able, or more socio-economically advantaged – all characteristics which may facilitate better engagement with speech and language therapy. It would appear reasonable to speculate that therapy for phonological disorder would be difficult in the 'pandemic year' even if

held face-to-face, due to the acoustic distortion arising from face masks. This could explain the reduced progress seen. Clearly, there is much to consider, and we would need to drill down further into this dataset to look at which factors influence this variation.

For services where these factors are known and recorded, outcomes data can assist with evaluating the positive and negative consequences of the pandemic. It is just as valuable to use this to identify what is not working well (traditionally and in the 'new' ways) and use this to plan services going forward. For example, it may become evident that a client group has worse outcomes via telehealth, which could be used to argue the case against taking a digital first approach for these individuals.

Get involved

We hope this has highlighted that data is an asset, particularly in times of disruption. We would encourage services to prioritise the collection and evaluation of data as much as possible.

The RCSLT provides a number of tools and resources to support gathering and analysis of outcomes data, including the RCSLT online outcomes tool and the COVID-19 data collection tool. For more information and to get involved with our work exploring health inequalities, please contact **root@rcslt.org**. Ⓑ

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TABLE 2 shows the average change in each TOM domain for different intervention groups, for episodes of care ending between 23 March 2019 and 22 January 2020, compared with the same period in 2020-21.

Average change from start-end TOM score						
Primary TOMs scale	Year	Impairment	Activity	Participation	Wellbeing	Carer wellbeing
Dysphonia	2019-2020	+1.0	+1.0	+1.0	+1.0	0
	2020-2021	+1.0	+1.0	+0.75	+1.0	0
Phonological disorder	2019-2020	+1.0	+1.0	+1.0	+1.0	0
	2020-2021	+0.5	+0.5	+0.5	+0.5	+0.5
Total1	2019-2020	+0.5	+0.5	+0.5	+0.5	+0.5
	2020-2021	+0.5	+0.5	+0.5	+0.5	+1.0

²Total ROOT data excluding sets using the AAC TOM scale which deviates from the typical TOM structure, with multiple impairment ratings therefore that has not been provided here.

ILLUSTRATION: IKON