The value of evaluation in advancing speech and language therapy practice after the pandemic

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This session

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This session

- What is a service evaluation?
- What is the ROOT and how did we use this to undertake a service evaluation?
- What were the findings?
- What are the implications?
Research

- involves finding the answers to questions about what should be done

Audit

- examines whether what should be done, is being done (and if not, why not)

Service evaluation

- Asks about the effect of care on patient experiences and outcomes

Twycross & Shorten (2014)
Measuring patient outcomes

Therapy Outcome Measures (TOM) scales (Enderby & John, 2015\(^2\); 2019\(^3\)):

- Cross-disciplinary – broad spectrum of issues requiring rehabilitation
- Uses 11 point scale (6 defined, 5 half-points), clinician-rated clinician
- Administered at the beginning and at end of episode of care

<table>
<thead>
<tr>
<th>Severe</th>
<th>0</th>
<th>0.5</th>
<th>1.0</th>
<th>1.5</th>
<th>2.0</th>
<th>2.5</th>
<th>3.0</th>
<th>3.5</th>
<th>4.0</th>
<th>4.5</th>
<th>5.0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘Normal’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>
Therapy Outcome Measures (TOM)

- Ratings on 4 (/5) domains, which align with ICF (WHO, 2007⁴)
- Builds holistic picture of an individual
- Can measure change across episode of care (ie before and after therapy)
RCSLT Online Outcome Tool

Therapy Outcome Measures

<table>
<thead>
<tr>
<th>Impairment (Cerebral Palsy)</th>
<th>N/A</th>
<th>0</th>
<th>0.5</th>
<th>1</th>
<th>1.5</th>
<th>2</th>
<th>2.5</th>
<th>3</th>
<th>3.5</th>
<th>4</th>
<th>4.5</th>
<th>5</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Profound. Severe abnormality of tone with total body involvement. Fixed or at risk of severe contractures and deformities. No voluntary movement. Severe sensory impairment.</td>
</tr>
<tr>
<td>1</td>
<td>Severe abnormality of tone with total body involvement. At risk of severe contractures and deformities. Minimal voluntary movement. Severe sensory impairment.</td>
</tr>
<tr>
<td>2</td>
<td>Moderate abnormality of tone with total body involvement or severe involvement of two limbs. At risk of contractures and deformities. Some voluntary movement. Moderate sensory impairment.</td>
</tr>
<tr>
<td>3</td>
<td>Moderate abnormality of tone with partial involvement or severe single limb involvement. Little risk of contractures or deformities. Impaired voluntary movement. Mild sensory impairment.</td>
</tr>
<tr>
<td>4</td>
<td>Mild abnormality of tone with no contractures and deformities. Mild impairment in voluntary movement. Minimal sensory impairment.</td>
</tr>
<tr>
<td>5</td>
<td>No impairment</td>
</tr>
</tbody>
</table>

- 61 SLT services across the UK
- More than 57,000 episodes of care
Research questions

Through interrogating the ROOT database, we hoped to find out how the COVID-19 pandemic affected:

- services’ ability to provide therapy
- who received therapy
- who completed therapy
- their therapy outcomes
Method

Data identification

• 1 year before UK lockdown (23/3/19 - 22/3/20)
• 1 year after UK lockdown (23/03/20 - 22/3/21)

Data extraction

• Pulled all data from ROOT in 2 periods
• Cleansed data to include only complete sets

Data analysis 1

• Total number of EoC for each year
• Most common TOM scale in each year

Data analysis 2

• Number of EoC started each year of most common TOM
• Patient profile in each cohort

Data analysis 3

• Sub-group of patients who completed therapy in each year
• TOM impairment change over time
Results

- Total **number of EoC** for each year
- Most common TOM scale in each year

**Data analysis 1**

**Total episodes of care started**

<table>
<thead>
<tr>
<th></th>
<th>Pre-pandemic</th>
<th>Pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2020</strong></td>
<td>23660</td>
<td>8371</td>
</tr>
</tbody>
</table>

(RCSLT logo)
Results

- **Total number of EoC for each year**
- **Most common TOM scale in each year**

**Data analysis 1**

- Dysphagia was the most commonly used TOM scale in both time periods
- More diverse in the pandemic year

**Pre-pandemic year:**
TOM scales used (by proportion of total)

- Dysphagia: 65%
- Other: 35%

**Pandemic year:**
TOM scales used (by proportion of total)

- Dysphagia: 46%
- Other: 54%
Results

- Number of EoC started each year of most common TOM
- Patient profile in each cohort

Data analysis

2

Dysphagia episodes of care started

Pre-pandemic: 3791
Pandemic: 1328
Results

- Number of EoC started each year
- Patient profile in each cohort

Data analysis 2

Pre-pandemic

- 49.6% female
- Mean age 77 years
- Median initial impairment score 3.0

Pandemic

- 49.1% female
- Mean age 77 years
- Median initial impairment score 3.0
Results

- Sub-group analysis of patients who completed therapy in each year
- TOM impairment change over time in each year

Data analysis

3

**Pre-pandemic**

- Median initial 'impairment' score: 0.0
- Median 'impairment' change: 3.5

**Pandemic**

- Median initial 'impairment' score: 3.0
- Median 'impairment' change: 1.0
Conclusions

In answer to our initial questions:

- SLT provision was reduced during the pandemic.
- A similar profile of patients accessed therapy in both periods, most commonly this was for dysphagia.
- But, those who completed therapy in the pandemic year were much less severely impaired.
- They still improved in outcomes, but the gain was much smaller.
Implications

• We have looked at the **effect of the pandemic on care**, and the effect of this care on **patient outcomes**

• It has shown that **service evaluation** has a **vital role** in exploring these changes

• Services can **only improve and advance practice** if they are aware of the **specific impacts** of the pandemic, and **priorities for improvement**

• It has also highlighted **key areas** for further **interrogation** of the **ROOT data**.
PLUS
See our related work on the impact of COVID on SLT in the journal *Frontiers in Neurology*[^5]:

[^5]: [SCAN ME](#)


Thanks and close