Introduction
Numerous studies have identified barriers preventing clinicians from utilizing discourse in clinical practice. Lack of time and training and difficulty identifying appropriate tools are frequently reported. Few studies have investigated methods to reduce these barriers and help clinicians to score discourse. Currently, there is limited information available regarding clinicians’ accuracy in implementing discourse measures. Main clinical analysis (MCA) checklists show promise as a non-transcription-based tool to measure discourse. Clinicians’ ability to accurately implement MCA is unknown, limiting its clinical implementation.

Specific Aims
In this study we aimed to determine the accuracy of MCA coding by practicing speech-language pathologists (SLPs).

Methods – Participants and Procedures
Table 1. Demographic data for SLP participants.

<table>
<thead>
<tr>
<th>Years experience with neurogenic clients</th>
<th>Work setting</th>
<th>Percent caseload neurogenic clients</th>
<th>Currently using discourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>M = 11.4 years +/- 10.9</td>
<td>1 Home Health</td>
<td>81.6% +/- 20.8%</td>
<td>Range: 50% - 100%</td>
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<tr>
<td>Range: 6 months – 38 years</td>
<td>3 Inpatient</td>
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<tr>
<td></td>
<td>3 Multiple</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Nursing Home</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1 Outpatient</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Private Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 University Clinic</td>
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</table>

Participants were provided an MCA training manual, transcripts, and a standardized excel scoresheet.

All data were collected virtually.

Methods – Data Analysis
We compared the MC codes identified by participants to a lab-generated “gold standard” code for each main concept to determine overall scoring accuracy.

Percent agreement was calculated for control transcripts and each aphasia severity separately.

ANOVA was conducted to examine differences in scoring accuracy across severity levels (healthy control, mild, moderate, and severe/profound).

Results

<table>
<thead>
<tr>
<th>Description (Figure 2) for coding accuracy for each group were:</th>
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<tbody>
<tr>
<td>• Control: M = 76.5%; SD = 10.8; Range = 62.5 – 91.7</td>
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<tr>
<td>• Mild: M = 68.6%; SD = 12.3; Range = 50 – 93.8</td>
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<tr>
<td>• Moderate: M = 57.6%; SD = 12.6; Range = 45.8 – 70.8</td>
</tr>
<tr>
<td>• Severe/Profound: M = 74.9%; SD = 14.3; Range = 56.3 – 93.8</td>
</tr>
</tbody>
</table>

Discussion
MCA coding accuracy was highest for control transcripts and transcripts of individuals with severe/profound aphasia.

Reasons for this may include:
• Transcripts from healthy controls and mild aphasia may use more conventional syntax and vocabulary, making it easier to match utterances to scoring examples.
• Transcripts from individuals with severe/profound aphasia may contain limited utterances, making it easier to determine that a main concept was not expressed.
• Transcripts from individuals with moderate aphasia likely contain greater ambiguity with unique expressions and more errors.

Future research should examine:
• Whether specific linguistic features contribute to accuracy with current guidelines.
• Whether years of experience affects accuracy.
• Whether a live component to virtual training (including Q&A) improves accuracy.
• Whether individuals with previous experience analyzing discourse are more accurate.
• Reliability of MCA coding for progress monitoring and/or treatment outcome measurement.
• Analysis of specific codes/concepts
• Analysis of coding rules/guidelines

Conclusions
To our knowledge, this is the first study to examine the accuracy of discourse analysis completed by practicing clinicians.

MCA coding accuracy was variable and depended in part upon aphasia severity.

While training materials were provided, they were not sufficient to engender an overall high level of accuracy.

Moving forward, researchers should proactively consider clinical implementation, including developing training materials, when developing discourse analysis measures.

References