INVENTORY

• **Sound & Syllable**: take an inventory of sounds and syllables child is able to say spontaneously as well as elicited

• **Core & Power Words**: make a list of core words the child has in his/her repertoire as well as words that are powerful.
  - Core Word – word child already has
  - Power Word- words that are important for the child to learn (interview the family)
Assessment Results

- May result in diagnosis of CAS or suspected CAS - sCAS
- May result in a diagnosis of another speech sound disorder or expressive/receptive language disorder
- May result in recommending literacy treatment
- May result in further exploration of AAC to support speech and language development
- Refer to other professionals if needed

**Response To Treatment** - Disorders with similar symptoms may not be distinguishable from one another without intervention. During intervention, Before making a differential diagnosis, the therapist us able to assess the treatment outcomes over time to help with distinguishing the difference. (Davis & Velleman, 2000; Strand, Shriberg, & Campbell, 2003).
Family & Support Education

• Refer to www.apraxia-kids.org
• Apraxia Kids has an SLP directory – educate yourself about apraxia and get on this list!
• Involve families as much as possible
• Educate Teachers and Peers about apraxia
Target Selection
Why is Target Selection sooo Important?

Target selection for children with CAS can mean the difference between success or little success, leaving the child feeling frustrated and you as a therapist feeling defeated.

- Choose Fewer Targets
- Think Functional & Natural
- Go for the BULLSEYE
Choosing Targets Depend on…..

- Sound Inventory
- Syllable Shape
- Core & Power Words
- Functional & Natural
COARTICULATION: Natural Speech

I do it
I don't know
Water mitten
I do wi_
I do
no
sdop
mi_in
wader
What is Our GOAL?

• The goal is written differently than traditional speech goals targeting a particular sound or process. Instead the goal targets movement over syllable shapes incorporating sounds within the child’s repertoire. This helps to focus on the movement and shaping of movement gestures rather than sounds in particular positions of words.

• Therapy goals should be written to increase the flexibility and reliability of the child’s motor speech system with an emphasis on coarticulatory transitions between sounds and syllables.
Target Selection Practice

• Child has the following sounds in his repertoire
  Consonants: /p/ /b/ /m/ /t/ /d/ /n/ /h/ /w/ /s/ /g/
  Vowels: long a, e, i, o, u   short: a, o, u
• Child is at the CV, VC, VCV, CVCV and CVC
• Core Words: go, no, bye
• Power Words: mama, dada - on parents list to learn
• Come up with 10 FUNCTIONAL targets
• You should be able to answer, “WHY did you choose that target?”
Great choices may have been...

- mama
- dada
- me
- I see
- wawa
- go away
- Abby (sister’s name)
- Bo (dog’s name)
- bite
- no way
- Bubo (bubble)
- hi
- mine
- Uh-oh
- up
- home
- bus (loves buses)
- moo (loves cows)
Data Collection

• Take data when it is convenient for you.
• Take data the same every time and in the same time intervals
  • take data at the beginning of the session – 1st production 1x per month.
  • take data at the end of the session – every other week

<table>
<thead>
<tr>
<th>Target</th>
<th>5/18</th>
<th>5/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>me</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>no</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>I see</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>up</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
## 8-Point Scale Scoring Rubric

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Able to correctly produce target spontaneously.</td>
</tr>
<tr>
<td>7</td>
<td>Able to produce the target spontaneously with multi-sensory cueing.</td>
</tr>
<tr>
<td>6</td>
<td>Able to produce the target in direct imitation with multi-sensory cueing.</td>
</tr>
<tr>
<td>5</td>
<td>Able to produce the target in direct imitation without cueing, correct stress and prosody.</td>
</tr>
<tr>
<td>4</td>
<td>Able to produce the target in delayed imitation without cueing.</td>
</tr>
<tr>
<td>3</td>
<td>Able to produce the target in delayed imitation with multi-sensory cueing.</td>
</tr>
<tr>
<td>2</td>
<td>Unable to produce target word.</td>
</tr>
<tr>
<td>1</td>
<td>Unable to produce in simultaneous production, vary prosody and appropriate transitions.</td>
</tr>
</tbody>
</table>

Rubric based on DTTC Hierarchy and created by Bjorem Speech Publications

Bjorem Speech Publications, LLC
www.bjorem.com
Sample Goals

• **Sample GOAL:** Junie will use correct planning and programming of movement sequences for CV, VC, VCV, CVC and CVCV targets using sounds in her phonemic repertoire scoring a 1 for each target word or phrase as judged by the scoring rubric.

• **Sample GOAL:** Junie will use correct planning and programming of movement sequences for multisyllabic words and phrases using sounds in her phonemic repertoire scoring a 1 for each target word or phrase as judged by the scoring rubric.

• **Sample GOAL:** Junie will use correct planning and programming of movement sequences for pivot phrases using sounds in her phonemic repertoire scoring a 1 for each target phrase as judged by the scoring rubric.
HOMEWORK

- When a child can spontaneously produce the target with minimal cueing – Rubric Score of 2
- When parent training has occurred.
- The target stays within therapy in random/varied practice for twice the number of sessions it took the child to get the target with minimal cueing
TREATMENT APPROACHES

DTTC: Dynamic Temporal and Tactile Cueing - Method that uses a cueing hierarchy (auditory, tactile and visual). Developed with principles of motor learning as a key component. Ages 2 and up.

ReST: Rapid Syllable Transition Training - An evidence-based treatment developed for improving prosody and speech accuracy in children ages 4-12 with CAS.

Nuffield (3 – 7yrs) - NDP3 is a therapy approach used to treat severe speech sound disorders, including CAS. Although it is designed primarily for children age 3-7, it can be adapted to younger or older children. NDP3 is based on a motor learning approach that builds skills from single speech sounds to connected speech. (Williams & Stephens, 2004)
Dynamic Temporal and Tactile Cueing Integral Stimulation Method Adapted for Children

Hierarchy Flow Chart download at www.bjoremspeech.com

Take DTTC course for FREE https://calliercenter.utdallas.edu/about-callier/upcoming-events/

Simultaneous Production

- Provides the most support with auditory and visual attention
- Slowed rate, elongating vowels
- Move toward normal rate, correct movement gestures and no groping
- Vary prosody
- Slowly fade volume to a simultaneous mime only
- When accuracy is achieved move to Direct Imitation
• Provides the most support for the child
• Child must understand expectation – this takes practice.
• Working on all the aspects of the target together
  • Movement sequences
  • Correct vowels
  • Prosody
Direct Imitation

- Therapist provides an auditory model of target, while child watches
- Child repeats target
- If support is needed the therapist can go back to simultaneous production
- OR mouth the movement gesture as child repeats
- Fade miming, vary prosody
- Add or Fade cues as needed for success
Delayed Imitation

- When the child is producing the utterance in direct imitation, with normal rate, accurate movement gestures, and is able to vary prosody...
- Clinician adds a 1-2 second delay before child imitates
- Miming the movement gesture as child repeats can be very helpful at this point.
- If more support is needed the therapist can go back to direct imitation.
- Fade miming, vary prosody
**CHILDHOOD APRAXIA OF SPEECH**

**SERVICE MODEL**

**INDIVIDUAL SESSIONS**
Individual therapy is recommended because it offers more opportunities for intensive practice. Group therapy is a complex learning environment with more potential distractions and fewer opportunities for practice of speech targets with individualized cueing and feedback.

**FREQUENT SESSIONS**
There is emerging research support for the need to provide three to five individual sessions per week for children with apraxia as compared to the traditional, less intensive, one to two sessions per week. Although home practice is critical for optimal progress, it cannot take the place of individual treatment provided by a speech-language pathologist who has expertise in motor speech skill facilitation.

**SHORTER SESSIONS**
"there appears to be emerging consensus within the literature that therapy should be conducted at least three to five times weekly, in sessions lasting between 30 and 60 minutes each, and that the intervention should be conducted on an individual basis."
CHILDHOOD APRAXIA OF SPEECH

SERVICE MODEL - References

**INDIVIDUAL SESSIONS**


**FREQUENT SESSIONS**

(Hall et al., 1993; Skinder-Meredith, 2001; Strand & Skinder, 1999).


**SHORTER SESSIONS**

Thank You!!!!

- jen


