#### AUGMENTATIVE COMMUNICATION EVALUATION

#### **DIAGNOSIS**:

#### NAME: DATE OF BIRTH: DATE OF EVALUATION:

#### History and Background:

John is 10-year, 2-month old male brought to the clinic today by his mother and grandmother. Dr. John referred John for an evaluation to assess his current speech/language skills and recommend augmentative and alternative communication (AAC) strategies and devices. Previous relevant diagnoses include autism spectrum disorder, intellectual disabilities, and Down syndrome. John attends a 3rd grade life skills classroom through the IU, where he currently receives speech, occupational, and physical therapies. John also receives TSS, BSC and nursing services. Results of previous evaluation indicated that John would benefit from the use of a speech generating device (SGD), but a device has not yet been obtained for him. His mother brought him in for a re-evaluation prior to initiating device trials.

#### **Description of Present Levels of Functioning:**

- <u>Hearing</u> John has a history of recurrent ear infections which have been treated with medication and placement of tubes. His most recent infection occurred last month. ABR testing performed in May (year) was consistent with a mild conductive hearing loss.
- <u>Vision</u> John's mother reports that he needs glasses, but she has not been able to obtain them at this time. He was observed holding his tablet close to his face while interacting with it. John was able to locate a picture of a preferred object as small as approximately 3/4" in size in a field of as large as 38.
- <u>Motor</u> Gross and fine motor skills have been delayed. PT is addressing skills including ascending and descending stairs; OT is addressing fine motor skills in contexts such as setting and clearing a table and use of a fork.
- <u>Cognition</u> John has a history of intellectual disability.
- <u>Social/Emotional</u> John will watch peers, but does not play interactively with them. He prefers adults, particularly males. His mother describes him as affectionate. During today's evaluation, John showed poor reciprocal interaction with the clinician.
- <u>Behavior</u> His mother reports concern regarding aggressive behaviors, including biting, hitting, and pushing others. John was observed throwing objects when frustrated during today's evaluation.

#### Speech and Language Skills:

The following summary of communication skills is based on observation, direct elicitation, and parent report.

#### Receptive Language:

John has difficulty following novel directions, but does well with routines. He was noncompliant for many of the directions presented to him during the evaluation. John does not identify body parts on himself and was unable to identify named body parts in a picture during his evaluation. He responded to his name inconsistently. John was asked to complete a nonstandardized assessment on the iPad to assess his visual identification and visual discrimination skills. John became increasingly agitated during administration and refused participation in the task through completion. John completed 40% of the identification tasks correctly, with the smallest picture size of 2" and the largest field of 15. Data from the discrimination task is not judged to be a valid representation of his skills due to interfering behaviors. Standardized testing was completed as a component of the evaluation. The Peabody Picture Vocabulary Test-IV (PPVT-IV - Form) is an individually administered, norm-referenced test in two parallel forms (Form A and B). It is designed to measure a subject's receptive vocabulary for the spoken word in Standard American English. John was asked to identify a picture from a set of four which best represents the spoken word given by the examiner. The responses then generate a standard score. The mean standard score is 100 and the standard deviation is 15; therefore, performances between 85 and 115 are within the average range. John completed Form A and his performance is as follows:

Peabody Picture Vocabulary Test - 4th Edition:

- Raw Score: 11
- Standard Score: 20
- Percentile; < 0.1
- Age Equivalent: < 2 years, 0 months

Based on the results of this evaluation, John presents a severe receptive language disorder.

## Expressive Language:

John has a history of use of PECS in the school environment, but not in the home. It is unclear to what extent he still utilizes PECS. He knows some signs, but because his family does not know signs, they cannot support this mode of communication within the home. He uses some gestures, including waving in greeting or responding to a fist bump. He communicates wants and needs by leading an adult to the desired item and displeasure by pushing items away. John gains attention by approaching or touching others. He is unable to communicate pain and illness. John was not observed to produce words or signs spontaneously during the evaluation. The following was noted during his evaluation with the CCC-SLP on February 7, 2014:

He seems to previously have used PECS through Phase IV. The Examiner reports that John could discriminate between 4-6 pictures to make requests using a sentence strip. However, she reports that the PECS binder was quite bulky and cumbersome. It took John a lot of time to find the correct picture, pull it out, and attach it with Velcro. The major downside to PECS is that the user's vocabulary is limited by what can fit into a book. John must take the time to page through the book and scan pages to find the desired picture. The more vocabulary he has access to the more cumbersome the binder and the longer it will take John to find the correct photo. Lastly, PECS does not typically support complex language growth and does not have voice output. For these reasons, the Dedicated ACCI Choice Communicator may be a better fit for John in most situations. A PECS binder would be a good back-up strategy, however. John presents with a severe expressive language disorder.

## Literacy:

John is learning to identify letters as a component of his educational curriculum. He does not yet read words. Strategies that rely on a traditional orthographic/word prediction approach would not be appropriate at this time.

## **Current Communication Needs:**

John lives with both parents and often sees his grandmother and cousin. John is in a life skills class that consists of other children who require specially designed instruction. He interacts with a variety of peers, therapists, and teachers at school. He also interacts with a variety of therapists, doctors, and healthcare personnel during private therapy and health appointments outside of the home. He enjoys participating in the Special Olympics, and his family hopes to initiate hippo therapy soon. Therefore, John needs to communicate regularly with his family, peers, doctors, teachers, therapists, aides, healthcare personnel, and other members of the community. He must be able to communicate around the home, in the classroom, during lunch and other unstructured peer time, outside on the playground, in doctors' and therapists' offices, in stores, and at athletic events. He needs to be able to consistently and effectively make requests, ask and answer questions, comment, provide important information upon request, and socialize with children his age. John needs to be able to communicate during an emergency situation, gain attention, and relay medical information. Without this ability, John is at a higher risk for inaccurate or insufficient medical care due to the inability to convey accurate medical information.

## Ability to Meet Communication Needs:

John's ability to make requests is severely limited due to his current expressive language skills. He is unable to communicate events or emotions. If John is feeling sick, hurt, or upset, he has no effective way to communicate what is wrong. This is a significant need that is not being met with the current augmentative communication system. Any future AAC strategy/system must include vocabulary for feelings, injury, sickness, and asking for help. John will need to be taught how to communicate these concepts explicitly.

In addition, John's current photo system does not have voice output and does not easily allow for word combinations or language growth. Voice output is particularly helpful when the communication partner is not in direct proximity. It is also helpful when communicating with peers, who may not understand what it means to be handed a photograph of an object. Photos of concrete objects may enable John to request single words, but they do not lend themselves to more complex concepts or word combinations. John needs an effective way to communicate in an emergency or to obtain attention from someone in a different room. He needs to convey personal wants, needs, ideas, and medical needs across all settings. Without a speech generating device, his ability to gain assistance or attention from others is severely limited and highly unsafe.

At this time, John is unable to convey medical information to healthcare providers or family members without the use of augmentative equipment. He is unable to gain the attention of an adult who is not in view or access emergency care when he does not have a speech generating device readily available.

# **Brief Trials of Augmentative Communication Strategies:**

John had hands-on experience using a speech generating device running IOS. His performance with these strategies is summarized as follows:

<u>GoTalk NOW</u> - This is a highly customizable dynamic display, speech-generating app. It offers grid displays, with pages containing as few as 1 and as many as 36 pictures, as well as vocabulary arranged in a visual scene display, in which words are embedded into a familiar photographed scene. John was presented with a 5x5 grid display of photographs of toys, with buttons hidden down to six visible. John immediately recognized and activated the symbol for

Elmo and was reinforced with a short Elmo video. Pictures were revealed to a field of 25. John was able to locate the symbol to request continuation of the video with minimal cues. Using a backwards chaining technique, he was shown how to select the correct category from a choice of four before locating the symbol to request continuation. After an initial model, John navigated from the home page to select the correct symbol across all remaining trials. The setting was then changed to a core vocabulary display with a row of fringe vocabulary. John was shown how to request a preferred activity using a two-word combination (e.g., "want Elmo"). John was unable to follow a model for a two-word combination and after repeated trials with maximum cues, level of cues could not be withdrawn. When presented with a visual scene display of Elmo, John demonstrated interest in interacting with it, but could not identify body parts when named by the clinician.

<u>Proloquo2Go</u> - This app is a grid-based, dynamic display app. John was presented with the "Core Word" setting in which 45 buttons were available per page with a message bar for word combination. The clinician navigated to the toy page and presented it to John. With no additional prompts, he located and activated the symbol for Elmo to request additional videos. Upon further trials, John was shown how to locate the correct category folder to navigate to this preferred symbol. Although he was able to follow a model, he did not gain independence. John became increasingly agitated as trials progressed due to the frequent pausing of his videos, and poor performance with this program may be influenced by compliance. Additional trials will be necessary to determine if this symbol set is appropriate for John.

# Additional Trials Conducted 3/17/2017:

TouchChat MultiChat 15 Adolescent was trialed during today's session. When initially presented with the device, John activated some buttons randomly, then pushed the device away. John imitated a model to label items in pictures and to request items necessary to complete an activity in 50% of trials. He did not label or request when level of cues was withdrawn. Watching a video was then identified as a preferred activity. John was able to find the icon to request continuation of this activity with 90% accuracy, although verbal prompting and redirection were often required. John was able to follow a model to navigate from the previous page to the necessary page, but did not gain independence as cues were withdrawn across multiple trials. When his mother and grandmother returned to the therapy room, photographs of them and John were added to his device. His interest in the device increased significantly following the addition of photographs of familiar individuals. He accurately identified 2/3 of individuals with only verbal prompts and was able to locate all pictures correctly with moderate cues.

John was not successful using TouchChat during trials today. He showed poor interest in the program, often pushing the device away when asked to use it to request a preferred activity. He did not gain independence in locating non-preferred vocabulary or in navigating to preferred vocabulary. Based on performance during today's trials, the default symbol set is not appropriate for John, as he showed increased interest and accuracy when symbols were replaced with photographs.

## Additional Trials Conducted 4/7/2017:

John trialed Proloquo2Go on a core setting in a grid display of 4x8 with message bar disabled. It was difficult to direct his attention to the device, and he initially pushed it away. John was unable to locate the symbol to request a preferred activity, but was able to imitate a model. After repeated trials, he learned how to navigate through one category folder to request continuation,

but not to navigate from the home page. John was not able to combine two words to make requests. He showed decreased accuracy using the SymbolStyx symbol set as compared to more iconic photographs. John showed minimal interest in using this program. His mother reports that they have been trialing GoTalk NOW using a device on short-term loan. He has used it to request preferred activities and to label familiar adults. John has demonstrated the ability to use the navigational arrows in this program to move through and scan pages to locate necessary vocabulary.

John was not successful using Proloquo2Go during trials today. He showed poor interest in the program, often pushing the device away when asked to use it to request a preferred activity. He did not gain independence in locating non-preferred vocabulary or in navigating to preferred vocabulary from the home page. Based on parent report and previous trials, GoTalk NOW is the most appropriate program to meet John's communication needs.

## Summary and Recommendations:

This assessment indicates that John's current expressive communication skills are not sufficient to meet his needs. His family is left guessing as to what he wants much of the time. It is recommended that communication be supported with augmentative and alternative communication (AAC) strategies in order for John to communicate effectively at this time. Research indicates that using AAC strategies does not hinder the development of verbal speech; in fact, some studies suggest that it may increase speech. Furthermore, using AAC strategies may decrease frustration and disruptive behaviors that arise due to a child's inability to express his wants and needs.

It is recommended that a variety of AAC techniques are explored and used. One tool that may be particularly helpful is a speech-generating device (SGD). This assessment indicates that John would be most successful when the hardware and software include the following features:

- Dynamic display with extensive, customizable vocabulary
- Visual scene display
- Vocabulary that is represented by photos
- Grid display; John accurately identified a preferred item in fields of 25-45
- Voice output that can be easily understood by adults and peers can be synthesized or digitized
- Extended battery life that lasts at least the entire school day (6-7 hours minimum)
- Protective case and screen protector to improve durability
- Room for language growth over time

Dedicated ACCI Choice Communicator with GoTalk NOW in Gumdrop Hideaway Cast (Red). This is a dedicated SGD by Augmentative Communication Consultants, Inc. that runs on the Apple IOS platform, meaning the user can have access to the SGD application GoTalk Now. Based on the above recommendations, this SGD is the most appropriate to meet John's current needs.

The use of this dedicated device is imperative to John's independence, decision making, and participation in daily activities. John will be better able to inform medical professionals about his health and needs with the use of this device, as well as initiate medical care by informing his

mother when he is in pain or ill. Without the use of an SGD, John is unsafe in a medical emergency - being unable to convey important personal and medical information.

I am available at the number listed below to address any questions or provide additional information.

Name of SLP and Signature: Title: Credentials: Address:

Phone No.: