

# AAC Evaluation for a SGD

Date of Evaluation:

Date of Report:

## Client Information

Name:	Medicaid ID #:
Address:	Medicare ID #:
Phone:	Insurance Policy #:
Place of Residence: Home	Licensed SLP:
Date of Birth:	Medical Diagnosis: Down Syndrome
Age:	Medical Diagnosis Onset:
Gender: Male	Speech Diagnosis: Expressive Speech/Language
Physician Referral:	Speech Diagnosis Onset:

## Background Information

### Introduction

XXXXX is a curious, fun, 8-year old boy with Down Syndrome. He has 3 siblings of similar age, and spends a lot of time with his family. XXXXX has made progress with his verbal speech, but at 8-years old, he cannot use speech as a primary communication mode.

Summary of XXXXX's pertinent medical history, speech language skills, speech intelligibility and current communication system:

XXXXX has a history of acid reflux and feeding issues. XXXXX has an expressive and receptive language disorder. XXXXX can produce bilabial sounds in isolation or in 1-2 syllable words with verbal and visual cues with about 80% accuracy. Final consonant deletion is observed at the word level and velar fronting is also present. XXXXX can repeat a 2-3 word simple sentence (I see ..., I want .....) with a verbal and visual prompt. However, in spontaneous, continuous speech, XXXXX's intelligibility drops dramatically (judged to be about 30% intelligible). XXXXX has difficulty verbally communicating wants and needs to his family. He points to items to request. XXXXX babbles often, but in strings of unintelligible words. Receptively, XXXXX can follow 1-step commands and can identify basic vocabulary with a picture cue. XXXXX's verbal speech skills are limited. Traditional therapy has focused on picture communication cards, sign language, and articulation of sounds. XXXXX has slowly progressed over a 2-3 year period, but progress with independent, verbal speaking abilities is slow and inconsistent. XXXXX needs alternative methods to communicate his wants and needs.

Speech intelligibility in spontaneous communication is judged to be 20-30%% intelligible to the unfamiliar listener.

XXXXX's condition is chronic and stable and independent communication is expected to remain stable at the present level. Therefore, it is anticipated that XXXXX's natural speech will not be sufficient to meet daily communication needs for the client's lifespan. The prognosis for speech production to meet XXXXX's communication needs is guarded.

Given the severity of the communication impairment as described above, XXXXX's speech does not meet his daily communication needs.

## **Language Skills and Abilities**

Speech and language abilities have been determined by:

- formal testing
- informal assessment
- observation
- trial therapy

Summary of the diagnostic assessments used, test results.

1. The Arizona Articulation Proficiency Scale, Third Revision was used to evaluate XXXXX's current articulation skills. XXXXX was only able to produce one word correctly, /baby/. He had multiple errors and phonological processes evident, including: fronting, frontal lisp, gliding, stopping, final consonant deletion, cluster reduction. A. Arizona-3 Total Score= 53.5 B. Standard Score= < 55 2. Test of Language Development- Primary, Fourth Edition: XXXXX was unable to meet basal on any of the subtests on the TOLD-P:4. The Core subtests (Picture Vocabulary, Relational Vocabulary, Oral Vocabulary, Syntactic Understanding, Sentence Imitation, Morphological Completion) all had a Scaled Score of 1. Core Composite Scores are as follows: A. Listening= 48 organizing= 48 Speaking= 48 Grammar= 50 Semantics= 45 Spoken Language= 42 XXXXX's scores on the TOLD-P:4 fall within the "Very Poor" range for his age level.

XXXXX presents with Severe impairment in language functioning and he possesses the following Language skills and abilities:

### **Receptive Language**

XXXXX demonstrates the following receptive language skills:

- attends when spoken to
- appears to recognize name
- understands references to items that are out of sight
- understands frequently used words
- understands one or two part directions

- understands simple questions

Individuals familiar with XXXXX report he understands most of what is said to him.

Additional receptive language information:

## **Expressive Language**

XXXXX communicates expressively using the following skills:

- facial expression
- points
- gestures
- Vocalizes/approximates words (1 word utterances)

When XXXXX's receptive and expressive language skills are compared, he appears to understand significantly more than he is able to communicate, indicating the need to focus on expanding his ability to communicate.

Additional expressive language information:

XXXXX does vocalize, but most of his verbal speech is jargon and unintelligible to listeners. He may produce a "sentence" of jargon, but the words are not clear. He can imitate speech much better than spontaneous production.

## **Pragmatics**

XXXXX demonstrates the following pragmatic language skills:

- Uses language for these purposes
  - greetings
  - feelings
  - protesting

XXXXX follows these basic conversation rules:

- uses facial expression
- makes eye contact

Although he uses non-symbolic strategies such as facial expressions for a few of the different purposes of communication, XXXXX is unable to communicate this information using language.

## **Reading**

Educational status: n/a.

XXXXXX's functional reading skill is: non-reader

Additional reading comprehension information:

XXXXXX is able to identify some letters and letter sounds.

## **Writing**

XXXXXX is unable to produce written language.

An SGD must use this method of message production to enable XXXXXX to generate written language:

not applicable

## **Language Skills and Abilities Summary**

Additional details that support XXXXXX's ability to use an SGD for functional communication in activities of daily living (ADL's):

XXXXXX's linguistic performance with the SGD's presented during the evaluation indicate he has the necessary language skills or the potential to develop the necessary language skills to communicate using an SGD.

## **Cognitive Abilities**

XXXXXX demonstrates moderate impairment in cognitive functioning.

Length of assessment and/or training trials: one hour.

### **Cognitive Abilities**

XXXXXX demonstrates the following cognitive abilities:

- Ability to learn new tasks, including device operation
- Attends to the display
- Attends to tasks
- Remembers locations of symbols
- Recognizes the device can be used to communicate needs and wants
- Locates items on a page

Additional details that support XXXXXX's cognitive ability to use or learn to use an SGD for functional communication in activities of daily living:

XXXXXX easily caught on to where vocabulary was located and was able to request items using Accent 1000 with 84 locations.

XXXXXX demonstrates the necessary cognitive abilities (attention, memory and problem solving skills) to learn to use an SGD to achieve functional communication goals.

## **Physical Abilities**

XXXXXX was able to successfully access SGDs presented at the evaluation with the following selection technique(s): Direct Selection

Direct Selection Input

- manual, one hand

The SGD will be used by XXXXXX in these positions: sitting, standing. Positioning will not affect access of the SGD and XXXXXX will not require multiple access methods.

Description of XXXXXX's ability to use the access method(s) above, modifications needed for success and accommodations that may be required over time to deal with changes in physical access:

XXXXXX will need a keyguard to help with accessing vocabulary on the 84 location screen size.

## **Mobility**

XXXXXX is ambulatory and uses no assistive devices for mobility.

A wheelchair mounting system will not be required.

XXXXXX will transport the SGD by carry strap.

The SGD must not exceed 4 lbs. in weight.

The physical size of the SGD must not exceed these dimensions. (HxWxD) 12x8x2.

A carry case is required to transport the SGD.

Additional mobility information:

XXXXXX is able to walk on his own and can perform daily physical activities with no assistance (walking around home, getting on and off furniture, etc.).

Given the above modifications/considerations, XXXXXX possesses the physical abilities to effectively use an SGD with the required accessories to communicate.

# Hearing and Visual Status

## Hearing Status

XXXXXX has no history of a hearing impairment.

## Visual Status

XXXXXX has no history of a visual impairment.

## Daily Communication Needs

The results of a communication needs interview conducted with XXXXXX, relevant family members and caregivers revealed the following communication needs.

Communication Partners:

- immediate family
- extended family
- healthcare provider
- stranger
- community member

Communication Environments:

- home
- medical facility
- community
- school
- telephone

Communication Activities, Abilities and Participation:

- express physical needs/wants
- express needs/wants in emergencies
- express feelings and frustrations appropriately
- protest using appropriate behavior
- generate novel utterances
- ask questions
- make requests
- initiate interactions
- greet others
- participate in decision making
- participate in conversation
- tell stories and anecdotes

- access to medical care
- ability to report symptoms
- share information

Limitations of the current communication methods:

XXXXX initiates communication, but his verbal speech is very difficult to understand. He shows that he is interested in communicating, but even with many years of work on his articulation, it is not working as a primary mode of communication. XXXXX has attempted sign language and picture exchange, but these programs were not successful.

### **Ability to Meet Communication Needs using non-SGD Treatment Approach**

Speech therapy to improve/increase functional speech is not a viable option to meet XXXXX's communication needs because:

- it resulted in insufficient progress in functional speech production.

The results of the communication needs assessment as documented in this section indicate the majority of XXXXX's daily functional communication needs cannot be met with natural speech and/or low-tech communication devices. Therefore, he requires an SGD to achieve and/or maintain functional communication abilities in activities of daily living.

## **Rationale for Device Selection**

### **Input/Output Features**

The input features listed below are required to enable XXXXX to successfully use the SGD.

- touchscreen
- dynamic display

Justification of multiple input methods:

The output features listed below are required to enable XXXXX to successfully use the SGD.

- digitized speech
- synthesized speech

Justification of selected output features:

XXXXX needs to be able to communicate with his peers, using a voice that matches his age and gender. Synthesized speech would be a more natural and functional way for XXXX to use his device, without relying on others to make voice recordings (digitized speech) for him that aren't consistent from person to person and may not match his gender and age.

Additionally, without synthesized speech, generative spelling is not possible nor is the use of Word Prediction or the addition of grammatical morpheme markers such as plural /s/ and verb tense markers.

## **Language Characteristics**

The language characteristics listed below are required to enable XXXXX to use the SGD for functional communication

- generate messages using single meaning pictures
- generate messages using multi-meaning pictures
- generate messages using spelling/word prediction
- generate messages using all 3 language representation strategies, spelling, single meaning pictures, multi-meaning pictures
- store/retrieve whole messages for rapid communication of routine items
- provide word-based core vocabulary to support generation of novel utterances

Justification of language characteristics

XXXXX needs access to a program that will allow him to expand his utterances and expand his vocabulary knowledge so that he can more easily communicate with peers, family, and community members.

## **Device Features**

The device features listed below are required to enable XXXXX to use the SGD for functional communication

- vocabulary organization based on core rows for high frequency vocabulary and an activity row for extended vocabulary to avoid navigation among pages and develop motor planning
- provide word/symbol prediction rate acceleration techniques
- software toolset features: icon tutor, icon prediction, contextual scenes
- length of use after battery charged
- portable device

Justification of device features:

This child would benefit from a device that has the capability of using various language representation methods. Those methods include: single meaning pictures (i.e. the word choices that pop up in the top activity row such as foods, names, etc), and spelling with word prediction (i.e. even though spelling is still emerging and isn't considered a primary method of expression, he is expected to become literate and will benefit from this representation method especially for lower frequency words and academic topics). XXXXX would benefit from a combination of pre-programmed and programmable message generation. Some personalization can be done by the SLP and family with the programmable option. XXXXX was trialed on the 42 and 80 location levels and could easily do both, especially with the hide/show feature which allows words to gradually be unmasked as he learns them.

Using the 80 location word power vocabulary he would be able to access nearly 5000 vocabulary



words.

### **Additional Features and Accessories**

The additional features and accessories listed below are required to enable XXXXX to use the SGD for functional communication

- keyguard

#### Justification of Additional Features and Accessories

XXXXX needs a keyguard to help with accurately selecting icons, and a carrying case and shoulder strap will help with keeping the device safe and close to XXXXX at all times.

### **SGD Assessment or Trial and CPT Codes**

#### **Recommended Speech Generating Device CPT Code**

Based on XXXXX's communication needs and considering his visual, hearing, physical, language and cognitive status as well as the specified features in this report, SGDs in this Medicare/CPT code category were considered:

<b>Speech Generating Device</b>	<b>Manufacturer</b>	<b>Accessories</b>
NovaChat 10	Saltillo	Keyguard
NovaChat 8	Saltillo	Keyguard
ProSlate	Forbes Rehab	Keyguard

#### **Procedures Used for Evaluating the SGDs**

When assessing XXXXX's ability to use the selected SGDs, the following procedures were used:

Multiple devices were considered (NovaChat 8/10 from Saltillo and the Forbes ProSlate). The NovaChat 10 was judged to be most successful. Traditional therapy has also taken place over the course of 3 years, and progress in verbal communication is not keeping up with XXXXX's demand to communicate.

### **Pictures or Symbols used**

- Number per page: 80
- Size: 1/2-1"
- Type: Symbolstix & PCS
- Number of pages: 0

### **Language formulating messages**

- single hit for one phrase or message
- combines 2-3 pictures to produce phrase or short sentence
- combines pictures/symbols to construct complete messages
- uses spelling and word prediction to construct messages
- uses pictures and spelling to construct messages

### **Words**

- Spelling
- Word Prediction

Using the recommended SGD, XXXXX was able to generate these types of messages: single word/symbol

XXXXX demonstrated this level of proficiency with message generation: developing.

### **Outcome of the SGD Evaluation**

The NovaChat 10 was selected as the most appropriate SGD for XXXXX for the following reasons:

The NovaChat 10 is the recommended device for XXXXX. It can expand from 4-108 location core screen options, as needed, and can grow to a vocabulary set of nearly 5000 words as XXXXX develops more vocabulary and language abilities. It is lightweight enough for XXXXX to transport around his environments. Also, this is a dedicated SGD, so this will ONLY be used for XXXXX and will not be shared amongst other users or for other purposes such as recreational games or internet access.

The NovaChat 8 and the Forbes ProSlate were ruled out for the following reasons:

The NovaChat 8 was smaller in size, and with the 80 location levels, it was more difficult for XXXXX to accurately access vocabulary (smaller screen size).

The Forbes ProSlate did not have alternative word power options such as WordPower 45, 60 or 108. Only one “app” could be selected. Additionally the level of onsite and regional training and support options provided by the Forbes Company is not commensurate with what Saltillo offers. Saltillo provides Master’s level SLPs to support with set up, training and ongoing implementation support as needed. Regional classes are offered on a regular basis, free of charge, for all team members. Online training and monthly special interest courses are also provided. Durability was also of concern with the ProSlate tablet long term.

### **Impact of recommended SGD on Client's Communication**

XXXXX will have the ability to communicate his wants, needs, and feelings with his family and community members, as well as medical providers. Currently, he relies on his verbal skills and cannot spontaneously produce utterances that would be intelligible to unfamiliar listeners. He will feel empowered by being able to clearly communicate to unfamiliar listeners without the frustration of not being understood. He will be able to share thoughts and ideas that he has, but is not currently able to produce due to severe articulation difficulties.

### **Recommended Speech Generating Device and Accessories**

XXXXX's ability to achieve functional communication goals requires the acquisition and use of the SGD, mounting/carrying devices and accessories listed below. This SGD represents the clinically most appropriate device for XXXXX, as it best meets the requirements for:

Input/Selection Technique:

- touchscreen
- dynamic display

Output:

- digitized speech
- synthesized speech

Language Characteristics:

- generate messages using single meaning pictures
- generate messages using multi-meaning pictures
- generate messages using spelling/word prediction
- generate messages using various language representation strategies, spelling, single meaning pictures
- store/retrieve whole messages for rapid communication of routine items
- provide word-based core vocabulary to support generation of novel utterances

Device Features:

- vocabulary organization based on core rows for high frequency vocabulary and an activity row for extended vocabulary to avoid navigation among pages and develop motor planning
- provide word/symbol prediction rate acceleration techniques
- software toolset features: icon tutor, icon prediction, vocabulary builder, contextual scenes
- length of use after battery charged
- portable device

Additional Features and Accessories:

- keyguard

This SGD best offers the combination of characteristics and features needed by XXXXX for functional communication, thus empowering him to participate actively in a variety of situations, including social interaction, self-care and medical needs.

<b>SGD, Mounting System or Accessory</b>	<b>Medicare CPT Code</b>	<b>Vendor Name, Address and Phone</b>
NovaChat 10	E2510: Synthesized, multi access, multi message	Saltillo Corporation 2143 Township Road 112 Millersburg, OH 44654
80 location touch guide	E2599: Accessories	Saltillo Corporation 2143 Township Road 112 Millersburg, OH 44654

## Functional Communication Goals

XXXXX's short term and long term goals and estimated times for completion following receipt of the recommended SGD are listed below:

<b>Functional Communication Goal</b>	<b>Estimated Completion Time</b>	<b>Short Term</b>	<b>Long Term</b>
express feelings or state of being	1 month	Yes	No

<b>Functional Communication Goal</b>	<b>Estimated Completion Time</b>	<b>Short Term</b>	<b>Long Term</b>
make requests and provide information to familiar listeners	2 months	Yes	No
Make requests and provide information to unfamiliar listeners.	> 3 months	No	Yes
communication physical needs and emotional status to family member/support person on a daily basis	2 months	Yes	No
describe physical symptoms and ask questions when interacting with health care professionals.	> 3 months	No	Yes
Engages in social communication exchanges with immediate family members in person.	3 weeks	Yes	No
engages in social communication exchanges with extended family members, friends, classmates, colleagues in various environments.	2 months	No	Yes
asks questions and provides responses in community based transactions (order a meal, ask directions)	> 3 months	No	Yes
tells personal stories or anecdotes	> 3 months	Yes	No

## **Support, Treatment Plan and Signature**

### **Client/Family Support of the Speech Generating Device**

XXXXX's mother was present and is quite supportive of the necessity of the SGD for meeting his communication needs.

### **Physician Involvement Statement**

This report was forwarded to the treating physician (INSERT NAME AND ADDRESS OF MD HERE) on (INSERT DATE HERE). The physician was asked to write a prescription for the recommended equipment.

## **Treatment Plan**

Upon receipt of the equipment, it is recommended XXXXX receive 48 treatment sessions to address the functional communication goals described earlier in this report. XXXXX's treatment goals will best be met in an individual setting.

## **SLP Assurance of Financial Independence and Signature**

The Speech-Language Pathologist performing this evaluation is not an employee of and does not have a financial relationship with the supplier of any SGD.

Evaluating SLP:

ASHA Certification:

State License Number:

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Speech Language Pathologist (SLP) Signature

Date