

## **AAC Report Structure for Funding of Speech Generating Devices**

Request for Speech Generating Device (SGD) Funding: Rett Syndrome

### **Section 1: Demographic Information**

- Name:
- Address:
- Phone Number:
- Date of Birth:
- Medical Diagnosis: Rett Syndrome
- Date of Onset:
- Speech Diagnosis: Apraxia
- Date of Onset:
- Medicare Number:
- Medicaid Number:
- Insurance Policy Number:
  
- Place of Residence:
- Primary Contact Name:
- Address:
- Phone Number:
- Relationship to Patient:
  
- Physician Name:
- Physician Phone Number:
- SLP Name:
- SLP Phone Number:
- Date of SLP Evaluation: (when the pt. tried devices)
- Date of Report:

### **Section 2: Current Communication Impairment**

#### **A. General Statements**

Client is a X year old girl with a medical diagnosis of Rett Syndrome and has severe speech apraxia. She is currently unable to communicate verbally or via any other effective non-verbal means. Rett Syndrome is a neurological condition that involves early regression in communication and motor abilities, followed by a period of stability. It is associated with severe motor planning difficulties and apraxia, which impacts both speech production and motor movements. She began exhibiting early symptoms of language regression between 18-24 months. She no longer has any functional speech for communication and relies on general vocalizations, i.e. laughing and crying, facial expression, and eye gaze to communicate with familiar listeners. Her fine motor skills

have also declined, as she now demonstrates limited ability to manipulate objects with the use of her hands.

**B. Comprehensive Assessment** (*Comment on each of the following areas as they pertain to using the device*)

**1. Language Skills: Receptive, Expressive, Pragmatic**

- Describe the level of linguistic impairment (no impairment to severe language impairment) as it relates to the person's ability to use a SGD.
- **Consider describing:**
  - performance on any language assessments completed
  - reading level – unable to read, reads at the word level, reads short sentences, functional reading
  - auditory comprehension - follows everyday conversation, follows (1,2,3)-step commands, understands questions
  - Responds to Name
  - **Expressive Skills**
  - type and level of symbol use by the individual. Does person require pictographic symbols, words, letters, and/or a combination of symbols?
  - linguistic capacity to formulate language/messages – can use pictures to put words together; spelling ability
  - level of independence in formulating messages using language
  - **Pragmatics**
  - Able to take turns with conversational partner
  - Remains on topic

**Example:** Patient's receptive and expressive language skills were assessed based on informal testing, clinical observations, and parental reports.

She demonstrates receptive skills when someone is speaking to her, she appears to recognize her name. She also understands references to items that are out of sight, understands frequently used words in conversation and can understand basic questions, like 'how are you?' 'what is your name?' 'what do you want for lunch?' She currently communicates expressively through facial expression and eye gaze. Her understanding of language appears to be greater than her expressive skills within functional activities and situations.

**2. Cognitive Skills**

- Describe the level of cognitive impairment (no impairment to significant cognitive impairment) as it relates to the person's need for and ability to use a SGD.
- Describe the person's attention, memory, and problem-solving skills as they relate to using a SGD to enhance or develop daily, functional communication skills. *A good statement to include would be something*

*like “cognitive capacity cannot be accurately assessed due to his/her lack of expressive skills. However, we think he/she reacts at appropriate levels given appropriate interactions with peers and support staff”.*

- Other possible statements: attends to conversation, retains task instructions, can learn new tasks
- **The report should state:** The patient possesses the cognitive/linguistic abilities to effectively use a SGD to communicate and achieve functional communication goals.

**Example:** The patient presents with mild impairment in cognitive functioning as it relates to using the speech generating device; however, her attention, memory, and problem-solving skills observed during the evaluation appear to be within functional limits. Based on this, the patient possesses the cognitive/linguistic abilities to effectively use a SGD to communicate and achieve functional communication goals.

### 3. Physical Status

- Describe pertinent considerations regarding motor skills, ambulatory status, positioning and seating.
- Describe how the person will access the SGD (direct selection, scanning, Headmouse, eye gaze accessory) and the person's access requirements.
- If ambulatory, document that the person can lift and carry a device of \_\_\_\_ weight, or who is going to transport it if the user cannot.
- If non-ambulatory, and uses wheelchair, state make and model, and who propels the wheelchair
- Describe if accommodations may be required over time to deal with changes in physical access.
- **The report should state:** "The patient possesses the physical abilities to effectively use a SGD and required accessories to communicate."

**Example:** Client continues to be ambulatory, but has difficulty navigating all environments. She does require a device that can be mounted as she just received her power wheelchair for use when her physical abilities decline throughout the day. She will require a desktop mount to ensure adequate positioning. The patient possesses the physical abilities to effectively use a SGD and required accessories to communicate.

### 4. Vision Status

- Describe the communicator's vision relative to using a SGD (along a continuum from normal vision to blindness).
- Include the following elements if/when pertinent to SGD use/selection: acuity, visual tracking, visual field, size of symbols, size of font, number of words or symbols and spacing.
- If there are no special visual needs, you may simply state that vision is corrected with glasses, for example.
- **The report should state:** "The patient possesses the visual abilities to effectively use a SGD to communicate functionally."

**Example:** No history of visual impairment. The patient possesses the visual abilities to effectively use a SGD to communicate functionally

### 5. Hearing Status

- Describe the communicator's hearing relative to communicating with a SGD (along a continuum from normal hearing to deafness).
- Include specifics (if related to SGD use/selection) regarding acuity, localization, understanding of natural speech, understanding speech generated by a SGD.
- If a hearing impairment is present, describe how the SGD needs to provide visual text for the pt. to preview.
- **The report should state:** "The patient possesses the hearing abilities to effectively use a SGD to communicate functionally."

**Example:** No issues reported with hearing. The patient possesses the hearing abilities to effectively use a SGD to communicate functionally

## Section 3: Daily Communication Needs

### A. Specific Daily Functional Communication Needs

- This section should list the person's daily functional communication (not just medical) needs in areas described:
- Describe communication partners (e.g. spouse, immediate family)
- Describe communication environments (e.g home, doctor's office)
  - Communication to enable person to get physical needs met (e.g., ability to communicate in emergency situations, directing behavior of caregivers, advocating for him/herself, communicating with family, friends, or clergy using the phone)
  - Communication to enable person to obtain necessary medical care and participate in medical decision-making, (e.g., reporting medical status and complaints, asking questions of medical providers, responding to medical provider's questions, discussing choices for end of life care, communicating with medical providers by phone).
  - Communication to enable person to carry out family and community interactions.

**Example:** Patient needs to communicate in the following environments: home, community, school. She will need to communicate with her immediate family, extended family, friends, school staff, and medical caregivers.

Daily communication activities include expressing wants and needs, expressing feelings and frustrations, asking questions, telling stories, participating in conversations, and being apart of interactions with other children.

## **B. Ability to Meet Communication Needs with Non-SGD Treatment Approaches**

This section should document why the patient is unable to fulfill daily functional communication needs using natural speech (or speech aids) and non-SGD treatment approaches.

- Discuss success of speech therapy (to date and future prognosis) without a SGD
- Discuss the individual's ability to use low-tech strategies and natural modes of communication to meet daily functional communication needs.
- Discuss why a SGD is required in addition to, or instead of low-tech strategies and natural speech.
- Show explicitly that other forms of treatment have been considered and ruled out.
- Mention issues related to communicating with primary partners and caregivers in specific contexts.

### **Example:**

"(Name)'s daily functional communication needs cannot be met using natural communication methods or low-tech/no-tech AAC techniques. She demonstrates significant motor and speech apraxia with Rett Syndrome. She is currently unable to produce any functional speech. She previously had a small vocabulary of spoken words, but lost that ability as she regressed based on the disease.

**Speech Therapy** - (Name) has been receiving speech therapy services for 8 months. Although gains have been made in reading comprehension, (Name) remains functionally nonverbal.

**Sign language** – Sign language is not a viable option for communication due to the physical limitations of (Name) and the inability of most communication partners to understand this method of communication. This is not an adequate form of communication for (Name) as (he/she) is limited in (his/her) acquisition of signs, and most people in his everyday environment are not competent in sign language. This limits (his/her) communication partners and renders (him/her) unable to meet (his/her) daily communication needs.

**Writing** - Writing is not a viable communication method due to physical limitations of (Name) and effectiveness due to lack of speech output.

**Communication symbols, communication boards and PECS** – These methods limit communication to the symbols provided in a book or board. Managing these symbols and having them readily available to the individual during communication opportunities presents a challenge to independent, easily accessible communication. Navigating through pages of language and/or individual symbol cut outs (usually with the assistance of others) slows down or completely stops the communication process. Picture boards and PECS have been used and not found to be an effective means of communication. The focus inevitably shifts to managing the communication system at

the cost of the individual independently communicating preferences, wants and medical needs.

Furthermore, these systems have no voice output, nor are they able to create novel messages. Without voice output an individual cannot independently call for help or direct attention to medical needs with someone who is not familiar with the system. Communication is limited to communication partners who understand the symbols, and even then, the communication partner is left to determine the intent behind an individual touching a particular picture symbol.

For these reasons, low tech and no tech options were eliminated from consideration.

#### **Section 4: Functional Communication Goals**

*Document 2-3 goals that correspond to specific daily functional communication and medical needs **in each** of the following areas Linguistic, Operational, Social and Strategic competencies, and illustrate how the patient will benefit from the acquisition of and training on the SGD. If you are unsure of long range goals refer to the goals from the AAC Goal Grid.*

Examples:

- Will combine two or more symbols to indicate medical status, needs or emotional state.
- Will tell or retell a story related to a particular event or context with minimal assistance.
- Will turn device on in preparation for communication
- Will navigate to page contextually relevant page to access communication
- Will use humor during social interaction
- Will spontaneously use greetings and farewells with by incorporating quickfires and my phrases.
- Will select from 1 or more messages to prevent communication breakdown
- After signaling a misunderstanding, will utilize 2 or more strategies to repair misunderstanding.

#### **Section 5: Rationale for Device Selection**

This section will explain why certain device features are required. The rationale will relate the person's skills and abilities as described in Section 2.

**The report should state:** "This individual requires a speech generating device with (list specific features) to meet the person's functional communication goals."

##### **A. General Features of Recommended SGD and Accessories**

## **1. Input Features/Selection Technique**

- A. Individual requires access to Direct Selection
  - Keyboard with access to dynamic display screens with adjustable number of selections/buttons on each screen.
  - Touch sensitive screen with adjustment options to improve accuracy
- B. Individual requires access to Direct Selection via HeadMouse or Eye Gaze
  - Optical pointer, head mouse, eye gaze, other (if needed)
  - Need to rule out scanning and switches
- C. Scanning (if needed)
  - Display: number of keys, dynamic/static
  - Mode: visual or auditory scanning
  - Type of scan: linear, row/column, group/row/column, directed (joystick, trackball), adjustable speed
  - Switch: type (pressure, feedback), position, mount
- D. Encoding Type
  - Language organized in categories, access to a keyboard, word prediction, access to prestored phrases as well as individual words/letters for novel utterances.

## **2. Message Characteristics/Features**

- A. Type of Symbols
  - Color symbols, access to scene based language, real pictures for easy access to language.
  - Is literate and does not need symbols
- B. Storage Capacity**
  - Ability to produce messages of varied length
  - Ability to store a large number of messages for improved speed and access .
  - Other (specify)
- C. Vocabulary Expansion and Rate Enhancement**
  - Vocabulary organized in levels with access to real scenes which reduce cognitive load and provide context. Access to Quickfires, My phrases and common constructions
  - Word prediction
  - Slots (unique to Series 5 devices)
  - Other (specify)

## **3. Output Features**

- Voice with intelligible lifelike qualities (gender/age specific); natural-sounding
- Highly salient visual display
- Auditory and visual feedback when pressing a location on the screen.

## **4. Other Features (NOTE: These can relate to AAC accessories)**

- Portability to be used in various environments throughout the day
- Ability to be heard clearly over the phone or from another room if that is a communication need
- Size and weight, transport/mount, case/carrier requirements
- Battery time required
- Ability to support a keyguard (if needed)
- Ability to support an eyegaze accessory (if needed)

## **B. Description of Equipment Used and/or Considered During the Evaluation**

- Include evidence that the individual was present and actively participated in the assessment process. Discuss assessment outcomes that demonstrate the person's ability to use the SGD and recommended accessories.
- Discuss other access methods tried and why they are unsuccessful. Please remember, the person reviewing this report may not have a clinical background. You need to be very explicit in your reasons why other access methods failed. If a HeadMouse or Eye Gaze is needed, please give very specific reasons why scanning was ruled out as an access method.

Example:

**Direct Selection:** Describe accuracy on selecting items with their hand/finger. If unable to use direct select, please explain why they had difficulty.

For example, NAME could not lift arm to reach device. NAME has difficulty with repetitive motion which causes overexertion which brings on fatigue.

**Scanning:** NAMEs fine motor skills are not adequate for accessing an SGD with direct selection. His/her gross motor skills are adequate to use the speech device via switch access. He/she possesses the ability to access the buttons on the speech device with a pillow switch using 12 buttons on the screen.

**Head mouse:** NAME has no functional use of her hands/arms. He/she is dependent with self-care and activities of daily living. [Name could not lift arm to reach device.] He/she was not able to repeatedly access a switch for scanning because the repetitive motion caused her to fatigue within a few minutes. Name has adequate range of motion in her neck to use a Tracker Pro head mouse

**Eyegaze:** Describe accuracy using this method. Describe if fatigue was decreased and was able to communicate phrases without errors.

Discuss other SGD's used and/or considered and why they were not appropriate for this user. It is not necessary to **try** each device: state why it was considered and **WHY** it was ruled out without a trial.

**Example:**

- E2506: An example of this category is the NAME DEVICE. This type of device is a dynamic static display device with recorded speech. This requires recorded speech to function. A communicative partner must record all phrases into the device for communication to occur. This can be very limiting and prohibitive to

the generation of novel utterances. Because this can only produce recorded words and phrases, it does not have text-to-speech capabilities; therefore, using a keyboard is not possible. For this reason, E2506 was ruled out.

- E2508: An example of this category is the NAME DEVICE. This type of device is a typing device only requiring message formulation by physical contact. This type of device allows an individual to type a message then press a button to speak. This was quickly eliminated from consideration as typing is not an efficient mode of communication for this individual.

**The report MUST state:**

"Based on the above assessment, it has been determined that the XYZ device is the most appropriate communication device for (Patient Name)".

**D. SGD and Accessories Recommended**

- List the specific SGD and accessories and include **medical justification** as to why this SGD and **specifically the accessories** being requested will enable the individual to achieve functional communication goals, as stated earlier in the report. Separate all items being requested. For example

E2510 name SGD being recommended  
E2512 Mounting system  
E2599 Accessories to SGD

**Example statements for accessories**

**Wheelchair Mounting System** – to position the SGD in the optimal place for effective visual and physical access of the device.  
User Accessible Carry Case – for protection of the device while be used throughout the day and during transport

**Keyguard** – to reduce target errors due to fine motor problems

**Headmouse or Tracker Pro** – this is an alternate access device where the user will move their head to control a pointer on the screen. This pointer will activate the desired square when the user dwells on it.

The **Eye Gaze** will allow (Name) to access the (Device) using no body movements other than the pupils of (his/her) eyes. (Name) has no well controlled body parts to use other access methods. There are no other options of access other than the Eye Gaze. (He/She) does not have head control to access a Headmouse accurately or use scanning for switch access.

### **E. Patient and Family Support of SGD**

- Discuss participation of the family/caregiver/advocate and state that they agree to the selected SGD and will support the equipment and its use for daily communication.

### **F. Physician Involvement Statement**

- **The report should state:**

This report was forwarded to the treating physician, **(insert MD name address and phone here)**. The physician was asked to write a prescription for the recommended equipment.

### **Section 6: Treatment Plan**

Address all functional communication goals previously stated for the beneficiary and identify the plan for achieving these goals using the SGD and accessories.

- Frequency of SLP treatment
- Type of Treatment (individual vs. group)
- Projected Frequency of Reassessment
- Follow-up Requirements for SGD and Accessories
  - Individual(s) responsible for programming
  - Individual(s) responsible for troubleshooting

### **Section 7: SLP Assurance of Financial Independence and Signature**

- **The report should state:** "The SLP performing this evaluation is not an employee of and does not have a financial relationship with the supplier of any SGD."
- SLP signature
- Evaluating SLP's name & contact information (agency, address & telephone number)
- ASHA Certification Number
- State License Number