



AAC & SLPs
Assessment & Implementation

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Agenda

- **SGD & AAC Assessments**
- **SGD evaluations**
 - Candidacy
 - Components of Evaluation
- **AAC evaluation**
 - Current Levels of Communication
 - Intervention Planning



<http://www.aac-rerc.com/>

AAC refers to ways (other than speech) that are used to send a message from one person to another (sign language, communication devices, PECS, typing messages)

SGD stands for “speech generating device” OR one of the AAC options The phrase “**speech generating devices**” (SGDs) was coined by the Medicare Durable Medical Equipment Regional Carrier (DMERC) medical directors in 2000.

Candidacy- Who's it for anyway? people with...

- **Motor speech disorders (cerebral palsy, apraxia..)**
 - Dysarthria (weakness)
 - Apraxia (motor coordination problems- affecting oral control)
- **Aphonia**
 - Loss of the voice resulting from disease, injury to the vocal cords, or various psychological causes
- **Autism:**
 - global language processing and production deficits paired with sensory integration problems.
- **Developmental Disabilities:**
 - Overall delayed/disordered language not allowing them to meet their needs across their environments
- **Language Learning Disabled Students**
 - Moderate-Severe language deficits that requires extensive visual input/output for functioning
- **Receptive/Expressive Discrepancy:**
 - Difference for any reason (including above) in student's ability to understand language and express themselves.
- **Traumatic brain injury**

Motor- these are our multihandicapped, OHI kids- in wheelchairs with ot pt services

Autism: primary problem are sensory issues-how they process information they gain through their senses- speech being one- if you can't process it well, it is difficult to learn to produce it

Need aac to help them understand their partner/teacher and also to help them express themselves

LLD students most likely won't need full speaking aac devices BUT they may need the visual support of symbols, labels and lists to help them comprehend information more readily- this is another form of augmenting natural speech- except the teacher's speech is being "augmented"

Hands On Assessment of Equipment & Techniques

5. ASSESSMENT OF SPECIFIC EQUIPMENT AND TECHNIQUES- copy additional forms as needed Fill in details, check items patient can accomplish, mark N/A for features not available on this device, and X for features not accessible by this patient.

DEVICE/SOFTWARE:

Length of Trial:
 Considered but rejected without trial due to:
 inability to meet required features lack of symbols to represent language
 lack of voice output limited ability to meet communication needs in the near future
 weight or size limiting portability small size not meeting physical or visual needs
 other: _____
 Trial during evaluation session Longer trial (> 1 week)
Additional Information:

Techniques To Elicit Communication:
 discussion response to questions role play functional activity (play, look at magazine)
 other: (describe) _____

Access Methods:
 direct selection, with touch enter delay, with touch exit delay
 keyboard: number of locations= 6 8 12 15 20 30 40 60 100 150
 partner assisted scanning scanning joystick mouse/mouse alternative
 other: _____
 Describe settings, scanning pattern, etc:

RESULTS OF TRIAL

Range of Motion: Sufficient on Left Right Both **Size of Display:** 10x12 9x7 5x3
Size of Symbols: Keyboard 1" 2" >3"
Navigation: single page, no navigation can navigate pages - list pages:
Navigation Support: independent verbal prompts taught in context repetition hand over hand
 visual cue-button shape, highlight taught in context partner assisted navigation
Type of Symbol: Object Photograph Symbol Word Spelling
Page Format: Grid Free Form Scene
Number of Symbols on Page: 2-4 8 12 20 40 60 >60
Message Unit: Sentence Phrase Word Letter
Mean Length of Utterance: 1 word 2 words 3-5 words using carrier phrases only >3 words independently combined
 Ex: I want...I see...I go...I like...
 on single page on single page
 with navigation to other pages to complete sentence with navigation to other pages to complete sentence
Functions: request respond comment share information reject
Vocabulary Expansion: Multiple levels Dynamic Display Encoding
Editing Functions: close popup delete clear message
Rate: Word prediction Abbreviation expansion Pre-stored messages

Conclusion:
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Speech Generating Device Assessment Components

1. Demographic Information
2. Current Communication Impairment
 - A. General Statements
 1. Anticipated Course of Impairment
 2. Impairment Type & Severity
 - B. Comprehensive Assessment
 1. Hearing, Vision & Physical Status
 2. Language & Cognitive Skills
3. Daily Communication Needs
 - A. Specific Daily Functional Communication Needs
 - B. Ability to meet communication needs with non-SGD treatment approaches
4. Functional Communication Goals

AAC-RERC website. <http://www.aac-rerc.com> -- Medicare Funding of AAC Technology. Information obtained on November 16, 2007. Supported in part by the National Institute on Disability and Rehabilitation Research (NIDRR).

The AAC-RERC conducts a comprehensive program of research, development, training, and dissemination activities that address the NIDRR priorities and seek to improve technologies for individuals who rely on augmentative and alternative communication (AAC) technologies. The mission of the AAC-RERC is to assist people who rely on augmentative and alternative communication to achieve their goals by advancing and promoting AAC technologies and supporting the individuals who use, manufacture, and recommend them.

This group was actively involved in writing Medicare's requirements for SGDs. These are the reflect the most accepted standards of practice and are conformed to by most insurance companies, Medicare and Medicaid. If you address all of the issues raised by the Medicare guidelines, you will be more likely to get SGDs funded. In addition, because these were written by AAC thought leaders, these guidelines help us to complete comprehensive, well-thought out evaluations.

Notes from AAC/SGD CIF PROTOCOL:

Step One: Initial Client Information Form

To be completed by family/team prior to evaluation

Client Info: Personal

Client Name:DOB:Social Security Number:Gender:Date of Onset:Student: yes no
Name of School: Grade:Employed: yes no
Name of Employer:Medicare #Medicaid #Managed Care Medicaid yes no
Managed Care Medicaid ID#Does client currently own a communication device: yes no Make and Model:Date of Purchase:

Client Info: Residence

Place of Residence: Home FacilityIf Facility, Name: Facility Main

SGD Assessment Components Cont.

5. Rationale for Device Selection
 - A. Rationale for Device Selection
 1. Input Features/ Selection Technique
 2. Message Characteristics/Features
 3. Output Features
 4. Other Features (Note: These relate to AAC accessories)
 - B. Recommended Medicare Device and Accessory Codes
 - C. Description of equipment and procedures used during any demonstrations of the recommended SGD and any other SGDs and accessories.
 - D. SGD and accessories recommended.
 - E. Patient/family support of SGD



Step III: Hands-On Trials and Results

4. Required Features

Use this section to identify features of a communication device that must be present for your client to be the most functional communicator possible. Some features may be needed immediately and others may be needed for language growth and development. You may include a large number of features here. You will use this list to justify your equipment recommendation in a later section.

Required Features

Language

Message generation via spelling (language structure)

Message generation via combinations of single words (language structure)

Message generation via pre-stored messages (language use)

Combination of message generation modes for quick communication and creation of novel messages

(language use and language structure)

Variety of symbols to represent words or concepts

Ability to use digital photos to represent words or concepts

Ability to use scenes to set the context for communication

Word, character, and phrase prediction to speed rate of communication or decrease effort

when spelling

Other:

SGD Assessment Components Cont.

6. Treatment Plan (frequency, type, schedule, follow-up)
7. Functional Benefit of Upgrade (if upgrading currently owned equipment)
8. SLP Assurance of Financial Independence and Signature

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7. Treatment Plan and Follow-Up

INTERVENTION SCHEDULE

Recommended Follow-Up:

No follow-up treatment

Limited number of follow-up treatment sessions after receipt of device: _____
(#)

On-going therapy with _____ minutes per session; _____ number of sessions per week

Individual therapy recommended

Group treatment recommended

Treatment is available at:

TREATMENT GOALS

Select goals that are most appropriate for patient.

Operational:

Using written instructions will program at least 10 messages on existing pages with _____ % accuracy

(within _____ week/months).

Patient will demonstrate the ability to program messages with _____ % accuracy

(within _____ week/months).

Patient will demonstrate comprehension of basic maintenance and operations

Free Sample Reports and Report Writing Software

- **AAC Funding Help .com**
http://www.aacfundinghelp.com/report_coach.html
 - SGD Funding Fast Facts
 - SGD Funding Programs
 - AAC Report Coach
 - AAC Funding General Resources
- **Dynavox Technologies** www.dynavoxtech.com
 - Funding Manager software
 - Dynavox Toolkit
- **AAC-RERC** www.aac-rerc.com
 - a collaborative research group dedicated to the development of effective AAC technology

AAC Assessment- Intervention Planning



Introduction to Communicative Competence

- **To begin looking at successful communication at any level, we need to address two areas:**
 - Levels of Communication Independence
 - Communicative Competence



Dynavox has compiled this information into their InterAACT page design. Grid handout

Basically- how independent of a communicator are they and how good at it are they?

Levels of Communication Independence

- **Functional (Emergent)**
- **Situational (Context Dependent)**
- **Independent (Creative)**

See InterAACT flyer



Functional (Emergent)

Difficult to know if these individuals actually understand their communication partners.
Limited purposeful communication, especially when symbols are involved
Primarily uses non-symbolic strategies to communicate (gestures, body language, facial expressions, behavior).
Focus on communicating functional information (basic to the situation).
Social interactions are limited or just beginning to develop.
Require assistance from the communication partner to narrow choices or provide other guidance.
Communicates a limited number of messages in a small set of specific contexts or routines.

Situational (Context Dependent)

Understands simple and clear symbols.
Beginning to understand more abstract symbols.
Understand most communication about things that are present, but may misunderstand references to people, situations, and items that are not present.
May communicate effectively in a limited number of situations OR may communicate in a limited way across a variety of situations
Overall ability to communicate effectively depends on the environment, topic, or communication partner.
Has very limited ability to creatively combine symbols/words to create new messages.
Participates in predictable conversational topics or routines but may have difficulty initiating or adding to the topic
Increasing literacy skills is an important goal.

Independent (Creative)

Understands communication in the same way as others his/her age.
Able to talk about a broad range of age-appropriate subjects in flexible ways.
Follows the linguistic rules appropriate for his/her age.
Socially engaged at his/her age level.
Writes and spells at or near age level.
Able to combine single words, spelling, and phrases together to create novel messages about variety of subjects.

Communicative Competence



- **Communicative Competence (Light, 1989)**
 - The ability to communicate functionally in natural environments to meet daily communication needs.
 - **DOES NOT** infer full mastery of communication skills. Nor does it infer that I'm competent in all environments. It implies **achievement of an adequate level of communication to meet the demands of the situation.**

Basically, the idea of communicative competence says that you can be a successful communicator as long as you are meeting your daily communication needs. You don't have to be meeting them independently. You don't have to be meeting them with beautiful grammar. You don't have to be meeting them with specific vocabulary. You just have to meet your daily communication needs. You can be a successful communicator at any level.

Assistive technology is only PART of the answer

"The device alone doesn't make a competent, proficient communicator"
(Beukleman, 1991).

Those who rely on AAC strategies begin as novices and **EVOLVE** in competence with appropriate intervention of:

Support

Instruction

Practice

Encouragement

The 3 Big “W”s!

The ability to communicate:

Whatever

Whenever

Whomever



For most of our kids it is hard for us to think that they can even accomplish this goal. Hard to think about. Seems too far in the future. Hard to plan for...

Introduce the continuum – try to place them into a starting place on the continuum...

Goals for Communicative Competence

- **Goals for communicative competence can be divided into four components:**
 - Operational competency
 - Linguistic competency
 - Social competency
 - Strategic competency

Linguistic competence. Learn about issues such as the impact of AAC on an individual's natural speech production, the development and use of picture-based communication systems, and the relationship between spoken language and the "language" of AAC systems.

Operational competence. Consider issues related to technical operation of AAC systems, including motor development and control, cognitive factors like awareness and memory, and sensory-perceptual development.

Social competence. Explore factors such as the effect of developmental disabilities on social communication, challenges to developing social connections, and the ability to conduct conversations.

Strategic competence. Examine operational, linguistic, and social constraints faced by AAC users and learn about adaptive skills that allow users to make the most of what they can do.

From Communicative Competence for Individuals Who Use AAC

From Research to Effective Practice

*Edited by Janice C. Light, Ph.D., David R. Beukelman, Ph.D., & Joe Reichle, Ph.D.
2003*

Intervention Planning

Step One: Core Vocabulary Review

Step Two: Fringe Vocabulary
Brainstorming

Step Three: Schedule Analysis

Step Four: Target Selection



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