



BlueCross BlueShield
of Alabama

Name of Policy:

Speech Generating Devices

Policy #: 607

Category: DME

Latest Review Date: March 2016

Policy Grade: B

Background/Definitions:

As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

- 1. The technology must have final approval from the appropriate government regulatory bodies;*
- 2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;*
- 3. The technology must improve the net health outcome;*
- 4. The technology must be as beneficial as any established alternatives;*
- 5. The improvement must be attainable outside the investigational setting.*

Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:

- 1. In accordance with generally accepted standards of medical practice; and*
- 2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient's illness, injury or disease; and*
- 3. Not primarily for the convenience of the patient, physician or other health care provider; and*
- 4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.*

Description of Procedure or Service:

Speech generating devices (SGD's), also known as voice output communication aids, are electronic augmentative and alternative communication systems used to supplement or replace speech or writing for individuals with severe speech impairments who are unable to communicate with speech or alternatives methods such as writing and sign language. These allow for improved communication to assist in meeting the individual's needs and are referred to as augmentative and alternative communication (AAC) devices.

Digitized speech devices, referred to as devices with "whole message" speech output, use words or phrases that have been prerecorded for replay upon command of the SGD user. Synthesized speech translates a user's input into device-generated speech. Users of synthesized speech SGDs can create messages to address their communication needs. Some SGDs require message formulation by spelling and access physical contact with a keyboard, touch screen, or other display containing letters. Speech generating software programs permit a laptop computer, desktop computer or personal digital assistant (PDA) to function as an SGD.

Individuals with impaired communication requiring AAC devices are carefully evaluated by a Speech-language pathologist (SLP) to identify the type of system which will meet the communication need. Speech-language pathologists assist the individual in learning a variety of skills and strategies to maximum the functional use of this equipment.

This policy does not apply to electronic speech aids that are used by laryngectomized persons and persons with a permanently inoperative larynx. These are considered prosthetics.

Policy:

Effective for dates of service on or after August 29, 2015:

Speech generating devices (E2500-E2506, E2508, E2510) and speech generating software programs (E2511) meet Blue Cross and Blue Shield of Alabama's medical criteria for coverage when ALL the following criteria are met:

1. Member's medical condition is one resulting in a severe expressive speech impairment, **AND**
2. Member's speaking needs cannot be met using natural communication methods **AND**
3. Other forms of treatment have been considered and ruled out **AND**
4. Member's speech impairment will benefit from the device ordered **AND**
5. Formal written evaluation of cognitive and communication abilities by a speech language pathologist including:
 - a. Current communication impairment – type, severity, language skills, cognitive ability and anticipated course of impairment **and**
 - b. An assessment of whether the member's daily communication needs could be met using other natural modes of communication **and**
 - c. Description of functional communication goals and treatment options **and**
 - d. Rationale for selection of specific device and/or accessories

Accessory integration input devices **meet** Blue Cross Blue Shield of Alabama's medical criteria for coverage when **ALL of the above criteria** are met **AND** the patient **requires** one of the following methods of access due to functional impairments (i.e., Amyotrophic lateral sclerosis):

- Optical Head Pointer/Mouse
- OR**
- Eye Gaze Technology
 - Eye gaze technology input device meets medical necessity only when patient has limited head movement/control

Speech generating devices do not meet Blue Cross and Blue Shield of Alabama's medical criteria for coverage and are considered **not medically necessary** when **ALL** the above criteria are not met.

Convenience and other non DME items such as, but not limited to, carrying case and mounting device would be **non-covered**.

Previously covered devices **meet** Blue Cross and Blue Shield of Alabama's medical criteria for coverage to be replaced when the following criteria are met:

- The equipment has suffered irreparable damage (cost more to repair than to replace) and has been in the home **for five years or longer**;

Replacement or upgrade of existing, properly functioning equipment, even if warranty has expired, **does not meet** Blue Cross and Blue Shield of Alabama's medical criteria for coverage.

Coverage is **limited to one** speech-generating device. **Software** required to enable a laptop computer, desktop computer or PDA to **function as a speech generating device** may be covered when medical criteria noted above is met, however, charges for installation or technical support are not separately reimbursable.

Coverage for non-medical items, even when the items may be used to serve a medical purpose, such as smart devices (iPads, smart phones, tablets, personal computers, etc.) are non-covered. This includes smart devices/iPads used in conjunction with speech generating devices.

Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administers benefits based on the member's contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

Key Points:

Motor speech disorders cause significant adverse impacts on an individual's ability to communicate needs and achieve activities of daily living. Personal independence and family life are severely impacted and can lead to isolation through lack of interaction. More than two million people in the United States alone suffer from some type of serve communication disorder.

According to the American Speech-Language-Hearing Association (ASHA), there are two primary methods that users access an AAC device. The first direct selection involves pointing with a body part or using a pointing device or switch that is turned on with a body part, air puff or eyebrow movement. Another method, scanning, involves lights that pass over each choice and the user activates a switch to stop the light and make a choice. Scanning typically requires less motor control but higher cognitive functioning than direct selection.

The ASHA details three basic ways language is represented in augmentative and alternative communication (AAC):

- Single-meaning pictures – does not require reading, uses symbols or pictures;
- Alphabet-based systems – requires reading, symbol sequences are long and symbols can predict words after several letters are selected;
- Semantic compaction – does not require reading, symbol sequences are short and typically between one and two symbols per word, and symbol set is small. This type of system is the most commonly used.

Available systematic studies have been limited by the small numbers of participants. A 2010 systematic review by Rispoli et al reported 35 studies on a total of 86 individuals with varying degrees of developmental disabilities. Eighty-six percent of the participants were able to meet their target communication goals with 56% providing conclusive evidence of positive outcomes.

A systematic review of the functionality and medical uses of augmentative and alternative communication devices with acquired neurogenic conditions/communication disorders was reported by Beukelman et al. in 2007. The authors summarized the recent advances, limitations, as well as acceptance, and use of AAC devices for six groups of people: those with ALS, traumatic brain injury (TBI), brainstem impairments, severe or chronic aphasia and apraxia, primary progressive aphasia and dementia. The conclusion of the authors was that the impact of AAC devices varies considerably among individuals. Use of augmentative and alternative communication (AAC) devices among individuals with ALS and TBI has increased in the last 10 years.

Key Words:

Speech generating device, SGD, digitized speech, synthesized speech, augmentative and alternative communication, AAC, Tobii Dynavox, Xpress, LightWriter SL40, Maestro, Vmax+, Tobii Dynavox T10, T15, I12, I15

Approved by Governing Bodies:

Speech generating devices are Food and Drug Administration (FDA) Class II devices.

Benefit Application:

Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply.

FEP: Special benefit consideration may apply. Refer to member’s benefit plan. FEP does not consider investigational if FDA approved and will be reviewed for medical necessity.

Current Coding:

CPT Codes:

E2500	Speech generating device, digitized speech, using pre-recorded messages, less than or equal to 8 minutes recording time
E2502	Speech generating device, digitized speech, using pre-recorded messages, greater than 8 minutes but less than or equal to 20 minutes recording time
E2504	Speech generating device, digitized speech, using pre-recorded messages, greater than 20 minutes but less than or equal to 40 minutes recording time
E2506	Speech generating device, digitized speech, using pre-recorded messages, greater than 40 minutes recording time
E2510	Speech generating device, synthesized speech, permitting multiple methods of message formation and multiple methods of device access
E2511	Speech generating software program, for personal computer or digital assistant
E2512	Accessory for speech generating device, mounting system
E2599	Accessory for speech generating device, not otherwise classified

References:

1. Agency for HealthCare Research and Quality (AHRQ). Evidence report/technology assessment no. 52. Criteria for determining disability in speech-language disorders (summary). Available at: archive.ahrq.gov/clinic/tp/spdistp.htm.
2. American Speech-Language-Hearing Association (ASHA), Introduction to augmentative and alternative communication. Available at: www.asha.org/public/speech/disorders.
3. Beukelman DR, Fager S, et al. ACC for adults with acquired neurological conditions: A Review. *Augment Altern Commun*, 2007; 23(3):230-242.
4. Miller, D, Light J, Schlosser, R. The impact of augmentative and alternative communication interventions on the Speech production of individuals with

developmental disabilities: a research review. *Journal of Speech, Language, and Hearing Research*, 2006; 49:248-264.

5. Rispoli MJ, Franco JH, van der Meer L, et al. The use of speech generating devices in communication interventions for individuals with developmental disabilities: a review of the literature. *Dev Neurorehabil*, 2010; 13(4):276-293.
6. Shepherd, T, Campbell, K, Renzoni, A, et al. Reliability of speech generating devices: a 5-year review. *Augmentative and Alternative Communication*, 2009; 25(3):145-153.

Policy History:

Medical Policy Group, July 2015 **(6)**: Newly adopted policy; no change to review process.

Medical Policy Administration Committee, July 2015

Available for comment July 15 through August 28, 2015

Medical Policy Group, August 2015 **(6)**: Clarification statement regarding speech generating input devices added to policy section; no change to policy intent.

Medical Policy Group, March 2016 **(6)**: Change in policy statement to remove criteria specific to E2506, E2508 and E2510 models; added policy statement with criteria for input accessories for integration into speech generating devices, replacement devices and related software.

Medical Policy Group, October 2017 **(6)**: Updates to Key Words.

Medical Policy Group, May 2018 **(6)**: No literature review, updated policy to include non-coverage of smart devices.

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.