2018 CP:Durable Medical Equipment

Subset: Speech Generating Devices (SGD) [1, 2, 3, 4]

Requested Service: Speech generating device, synthesized speech, permitting multiple methods of message formulation and multiple methods of device access

Patient:	Name:	DOB:	ID #:	GROUP #:
	Sex (circle): M / F	Height:	Weight:	
Provider/PCP:	Name:	Fax #:	Phone #:	
	NPI/ID #:	Signature:		Date:
Servicing:	Vendor/Facility:		Phone #:	
	Diagnosis/ICD:	Service Date:	Authorization: / / to / /	

ICD-10:

HCPCS:

INSTRUCTIONS: Choose one of the following options and continue to the appropriate section

- ▢ 10. Initial request
- ▢ 20. Replacement request

▢ 10. Initial request

1. Diagnosed with severe expressive speech impairment [5, 6]
   - ▢ A) Yes
   - ▢ B) No

   • If option Yes selected, then go to question 2
   • No other options lead to the requested service

2. Formal evaluation of cognitive and communication abilities has been completed by a speech-language pathologist (SLP) [7]
   - ▢ A) Yes
   - ▢ B) No

   • If option Yes selected, then go to question 3
   • No other options lead to the requested service

Initial request (continued...)

3. Documentation supports, Choose all that apply: (8)
   - ▢ A) Detailed communication impairment (type, severity, language skills, cognition, anticipated duration) (9)
   - ▢ B) Exclusion of other forms of treatment including natural modes of communication to improve intelligibility (10)
   - ▢ C) Functional communication goals
   - ▢ D) Treatment options and rationale for specific device (11)
   - ▢ E) Cognitive and physical abilities appropriate to specific device (12, 13, 14, 15)
   - ▢ F) Treatment plan and training schedule
   - ▢ G) Other clinical information (add comment)

   • If the number of options selected is 6 and option G not selected, then go to question 4
   • No other options lead to the requested service

4. Choose all that apply:
   - ▢ A) Speech impairment will benefit from speech generating device ordered
   - ▢ B) Speech-language pathologist's written evaluation sent to treating physician prior to ordering device
   - ▢ C) Other clinical information (add comment)

   • If the number of options selected is 2 and option C not selected, then go to question 5
   • No other options lead to the requested service

5. Choose one: (16)
   - ▢ A) Limited specific vocabulary necessary (17, 18)
   - ▢ B) Extensive core vocabulary necessary (19, 20, 21)
   - ▢ C) Speech generating software necessary (22)
   - ▢ D) Other clinical information (add comment)

   • If option B selected, then go to question 6
   • No other options lead to the requested service

6. Choose one: (13)
   - ▢ A) Reliable motor control established and device access necessary via physical contact only with either a keyboard, touch screen, or other display
   - ▢ B) Multiple modes of access and methods of message formulation necessary
   - ▢ C) None of the above

   • If option B selected, then the rule is satisfied; you may stop here
   • No other options lead to the requested service

▢ 20. Replacement request

1. Choose one: (23)
   - ▢ A) Upgrade to current device necessary
   - ▢ B) Replacement of current device with same or like
   - ▢ C) Other clinical information (add comment)

   • If option A selected, then go to question 2
   • If option B selected, then go to question 3
   • No other options lead to the requested service

Replacement request (continued...)

2. Documentation supports, Choose all that apply:
   - ▢ A) Functional benefit from upgraded device clearly identified
   - ▢ B) ≥ 5 years from receipt of initial device (23)
   - ▢ C) Other clinical information (add comment)

> • If the number of options selected is 2 and option C not selected, then the rule is satisfied; you may stop here
> • No other options lead to the requested service

3. Documentation supports, Choose all that apply: (23)
   - ▢ A) Device continues to be necessary to meet communication needs
   - ▢ B) ≥ 5 years from receipt of initial device or documentation supporting irreparable damage
   - ▢ C) Other clinical information (add comment)

> • If the number of options selected is 2 and option C not selected, then the rule is satisfied; you may stop here
> • No other options lead to the requested service

Reference

Ltd - This requested service is designated as 'Limited Evidence' in this clinical scenario. Criteria cannot be met.

2nd - Secondary review required. Criteria cannot be met.

Off-label - Use of a drug for an indication not approved by the U.S. Food and Drug Administration (FDA).

Notes:

1:
InterQual® Durable Medical Equipment (DME) criteria are derived from the systematic, continuous review and critical appraisal of the most current evidence-based literature and include input from our independent panel of clinical experts. To generate the most appropriate recommendations, a comprehensive literature review of the clinical evidence was conducted. Sources searched included PubMed, Agency for Healthcare Research and Quality (AHRQ) Technology Assessments, Choosing Wisely, Centers for Medicare and Medicaid Services (CMS) Local and National Coverage Determinations, the Cochrane Library, the FDA, the National Institute of Health and Care Excellence (NICE), and the National Guideline Clearinghouse. Other medical literature databases, medical content providers, data sources, regulatory body websites, and specialty society resources may also have been used. Relevant studies were assessed for risk of bias following principles described in the Cochrane Handbook. The resulting evidence was assessed for consistency, directness, precision, effect size, and publication bias. Observational trials were also evaluated for the presence of a dose-response gradient and the likely effect of plausible confounders.

2:
Alternate name(s) for this equipment include:

Augmentative alternative communication device (AAC)

3:
The codes associated with a given durable medical equipment recommendation may include those codes for the base piece of equipment as well as select accessories when clinically indicated. Adjunctive codes (e.g., supplies, accessories) may be included within the recommendation for the main piece of equipment to provide supplementary information to the reviewer when making decisions regarding these complex requests. InterQual® does not endorse nor does it require the use of these codes as part of the review.

4:
Over 2 million people in the United States have a severe communication disorder, impairing their ability to talk. The impairment may be congenital (e.g., cerebral palsy, autism, intellectual disability), acquired (e.g., stroke, head injury, cancer), or degenerative (e.g., Huntington's disease, AIDS muscular dystrophy) (American Speech-Language-Hearing Association, Basic Information About Augmentative and Alternative Communication. 2015 [cited Jan 12 2015]).

Low-technology devices can be initiated as early as 1 year of age in individuals with neurological diagnoses or developmental conditions. These criteria cover high- technology devices that can be used in children as young as 2 or 3 years and in adults at any point in the treatment regimen or disease process.

These criteria cover high-technology devices that can be used in individuals at any point in the treatment regimen or disease process. Speech generation or augmentative and alternative communication (AAC) refers to ways, other than speech, that are used to send messages from one person to another. Speech generating devices (SGD) or AAC devices are used by individuals with severe speech disabilities to meet their functional communication needs and can be either low or high-technology devices. Speech generation may be by audible word or phrase generation as well as communication via written text including email, text, and phone messaging. This includes the necessary device updates from the supplier. A laptop or tablet however can be used in the absence of illness or injury and is therefore typically not considered durable medical equipment.

SGD or AAC devices can be classified as unaided (gestures or manual signing) or aided systems (external equipment to assist communication). Low-technology aided systems include communication boards. High-technology aided systems include picture-exchange systems and SGD, often called voice output communication aids (VOCA).

High-technology devices are electronic SGDs and are usually computer-based. Digitized speech generating devices (devices with "whole message" speech output) use words or phrases that have been recorded by someone other than the SGD user. Pre-recorded messages vary by time segments. Synthesized speech translates a users input into device-generated speech using algorithms representing linguistic rules. Users of synthesized SGDs can independently create messages as their communication needs dictate. Some SGDs may require message formulation by spelling, and access with a keyboard, touch screen, or other display containing letters. Researchers continue to work to develop newer devices that are able to translate the users' disordered speech into synthesized

speech that is closer to natural speech. These are called “voice-input voice-output” communication aides (VIVOCAs) (Hawley et al., IEEE Trans Neural Syst Rehabil Eng 2013, 21: 23-31).

Speech generating software programs enable a laptop computer, desktop computer, or personal digital assistant (PDA) to function as a SGD (American Speech-Language-Hearing Association, Speech-Language Pathology Medical Review Guidelines. 2011 [cited Jan 12 2015]).

5:
Severe expressive speech impairment is the inability or limited ability to communicate daily wants, needs, or thoughts via the spoken word.

6:
Clinical presentations that result in severe expressive speech disabilities include but are not limited to severe language delays, cerebral palsy, mental retardation, autism, traumatic brain injury, stroke, amyotrophic lateral sclerosis, dystonia, Huntington's disease, multiple sclerosis, Down syndrome, muscular dystrophy, apraxia, and dysarthria.

7:
Identifying the device features of a system that will meet the communication needs of the beneficiary without exceeding those needs is a critical step in matching products to the person. The speech-language pathologist’s evaluation should report the identification of those needed features and consideration of alternatives (including lower cost alternatives to the recommended device). A hands-on experience by the beneficiary with the device, prior to ordering, may be an advantageous way to ensure the selected SGD is the optimal choice for maximal independence, particularly when the evaluator has a clinical question to answer about the need for a particular feature.

8:
A formal evaluation by a speech-language pathologist (SLP) should include (American Speech-Language-Hearing Association, Speech-Language Pathology Medical Review Guidelines. 2011 [cited Jan 12 2015]). :

1. Current communication impairment:
-type
-severity
-language abilities
-cognitive skills
-anticipated duration of impairment;

2. Other forms of treatment as well as attempts at using natural modes of communication to enhance intelligibility have been explored and established as less effective;

3. Functional communication goals and treatment options;

4. Rationale for device selection;

5. Treatment plan and training schedule for selected device; and

6. Cognitive and physical abilities appropriate for communication with selected device and accessories.

9:
Communication involves listening, reading, writing, speaking, and gesturing and requires a multifaceted relationship between cognition (i.e., thinking, understanding, learning, remembering), language, and speech. Cognitive processes can range from basic to complex and include such things as attention, memory, reasoning, and executive functioning (American Speech-Language-Hearing Association, Speech-Language Pathology Medical Review Guidelines. 2011 [cited Jan 12 2015]). Important considerations also include sensory-perceptual skills, literacy level, and behavioral and environmental needs.

When an individual requires a speech generating device (SGD), and there is a need for more than one spoken language, it is up to the judgment of the treating clinician (and team members as appropriate) as to which language should be chosen for use with the SGD.

10:
No one augmentative and alternative communication (AAC) system or speech generating device (SGD) is universally applicable across individuals with developmental disabilities. Some individuals benefit from low-technology, some benefit from high-technology, and some benefit from using a combination of low and high-technology devices (Gevarter et al., Res Dev Disabil 2013, 34: 4404-14). When deciding on a device to use, each individual's abilities, goals, and preferences must be considered including the rationale for why natural modes to enhance intelligibility of communication are not appropriate including a list of what treatment techniques and technology have been tried and have been found to be unsuccessful.

11:
How the individual accesses the device is an important component in the decision-making process and should be included in the rationale when the options for a speech generating device have been outlined.

Direct selection is an access strategy that requires an individual to have reliable motor control in order to select and send a message by touch, eye-gaze, infrared light beams, applied pressure, or transmission of acoustic signals and speech recognition. Direct selection is the fastest and most efficient form of input.

In scanning, each symbol in a display is highlighted one-by-one, either manually by a partner (e.g., light technology) or electronically through a light and sound cursor. When the target symbol is reached, the user indicates the selection by the means available to them (e.g., eye blink, head switch). Symbols can be scanned one-by-one in linear fashion or in groups. Because scanning is slower and can tax attention and cognitive resources, direct selection is the first choice access method whenever possible (Wilkinson and Hennig, Ment Retard Dev Disabil Res Rev 2007; 13 (1): 58-69).

12:
The individual must have the cognitive ability to comprehend the purpose and the use of the speech generating device. The individual's cognitive status and ability to learn new information will help determine what features the device needs to have.

13:
Information regarding the individual's motor control (e.g., fine and gross movements, position, seating, ambulation requirements) may be derived from an occupational therapy or physical therapy evaluation. This type of evaluation may be necessary to assist in determining the most appropriate mode of accessing the speech generating device (i. e., eye tracking and gaze interaction), seating and positioning needs, as well as to determine the mounting needs of the device and access peripherals and should be included as supporting documentation.

14:
Gross motor and fine motor control can be affected by physical attributes of the device (weight and size) and should be part of the feature matching.

15:
For individuals with mobility limitations, in addition to complex communication needs, proper seating along with functional placement of their speech generating device (SGD) or alternative and augmentative communication device (AAC) displays and control interface, can contribute significantly to communication success. Goals of seating and positioning for these individuals include improving postural alignment and stability, motor control, sensory and bodily functions (e.g., vision, breathing), and attention and arousal (Higginbotham et al., Augment Altern Commun 2007; 23(3): 243-257). When appropriate, consideration may be necessary regarding interfacing the access for a SGD with the interface used on an individual's power mobility device.

16:
The speech-language pathologist (SLP) evaluation will indicate the amount of vocabulary an individual needs access to in order to communicate in a variety of contexts and for a variety of purposes.

17:
Limited specific (fringe) vocabulary includes user-specific words that allow individuals to express themselves as unique. These words are highly individualized and situation specific. There can be larger or smaller sets of fringe vocabulary depending on the individual’s needs. In comparison, core vocabulary includes words that are useful to a

large number of individuals in a variety of situations. These words often include pronouns, helping verbs, prepositions, etc.

18:
Digitized speech devices use prerecorded words or phrases (recorded by someone other than the individual or the individual when inevitable speech loss is predicted) that can be played upon command. These devices can be programmed to reflect the individual's age, gender, dialect, language, and culture (Mills et al., Augment Altern Commun 2014, 30: 226-36). When choosing digitized speech devices for young children, it is important to consider the intelligibility of the voice of the child speaker (Drager and Finke, Augment Altern Commun 2012, 28: 181-9). The primary limitation of this type of device is that the communication is restricted to a set number of prerecorded words or phrases and novel words already programmed in the device.

19:
Synthesized speech is computer generated from specific input, based on various acoustic/phonetic algorithms (Wilkinson and Hennig, Ment Retard Dev Disabil Res Rev 2007; 13(1): 58–69). The advantage of this type of device is that the individual can independently create messages through a variety of access methods (e.g., touch screen, keyboard, mouse, trackball, joystick, switches).

20:
A synthesized speech system can meet the needs of an individual with an extensive core vocabulary because the individual can independently input information that is translated using algorithms into unique messages. The unlimited number of words or messages allows for personal expression to be communicated.

21:
Extensive core vocabulary may be necessary when individuals have higher level cognitive functioning requirements (i.e., developing or existing executive level functioning). Executive level functioning includes the cognitive abilities required for complex goal directed behavior and adaptation to environmental changes. Being able to plan, organize, and strategize are important components of executive level functioning. Self monitoring and self awareness skills enable the individual to conform behavior to meet social expectations. Executive level functioning allows independent care, performance of useful work, and maintenance of social relationships. An appropriate evaluation should identify the features an individual needs which can then be matched to the appropriate speech generating device.

22:
Speech generating software enables an individual's computer or mobile technology device (i.e., personal digital assistant, smart phone, tablet, iPad, iPod, iPod Touch) to function as an augmentative and alternative communication device (Couper et al., Dev Neurorehabil 2014, 17: 99-109; Kagohara et al., Res Dev Disabil 2013, 34: 147-56; American Speech-Language-Hearing Association, Speech-Language Pathology Medical Review Guidelines. 2011 [cited Jan 12 2015]). Based on medical appropriateness criteria, speech generating software may be recommended but does not include the personal computing devices in which the software operates.

23:
The reasonable use lifetime for a speech generating device (SGD) is typically 5 years.

ICD-10-CM (circle all that apply): F80.1, F80.2, F80.4, F80.89, R47.01, R47.1, R47.81, R47.82, R47.89, R49.1, R49.8, Other _____

HCPCS (circle all that apply): E2510, E2512, E2599, Other _____