



# CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all plans administered by CIGNA Companies including plans administered by Great-West Healthcare, which is now a part of CIGNA.

Effective Date ..... 8/15/2010  
Next Review Date ..... 8/15/2011  
Coverage Policy Number ..... 0177

## Subject **Speech/Language Therapy**

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### Hyperlink to Related Coverage Policies

- Attention-Deficit/Hyperactivity Disorder (ADHD): Assessment and Treatment
- Aural Rehabilitation
- Autism Spectrum Disorders/Pervasive Developmental Disorders: Assessment and Treatment
- Cochlear and Auditory Brainstem Implants
- Devices for Voice Rehabilitation Following Total Laryngectomy
- Occupational Therapy
- Outpatient Acute Rehabilitation
- Sensory and Auditory Integration Therapy - Facilitated Communication
- Speech Generating Devices
- Speech Therapy for Swallowing and Feeding Disorders
- Stuttering Treatment Devices

### INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans as well as benefit plans formerly administered by Great-West Healthcare. Please note, the terms of a participant's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a participant's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a participant's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable group benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2010 CIGNA

## Coverage Policy

Under many benefit plans, coverage for outpatient speech therapy and speech therapy provided in the home is subject to the terms, conditions and limitations of the Short-Term Rehabilitative Therapy benefit as described in the applicable benefit plan's schedule of copayments.

Outpatient speech therapy is the most medically appropriate setting for these services unless the individual independently meets coverage criteria for a different level of care.

Many benefit plans have exclusion language that impacts coverage of speech therapy, including any or all of the following:

- **A maximum allowable speech therapy benefit for duration of treatment or number of visits. When this is present and the maximum allowable benefit is exhausted, coverage will no longer be provided even if the medical necessity criteria described below are met.**
- **Specific coverage exclusions for rehabilitative services for learning disabilities, developmental delays, autism, mental retardation and/or for treatments which are not restorative in nature**
- **Specific coverage exclusions for behavioral training/treatment or services that are considered educational and/or training in nature. In benefit plans where this exclusion is present, services that are considered training such as voice therapy for conditions such as voice disorders without evidence of an anatomic abnormality, neurological condition, or injury would not be covered.**
- **Specific coverage exclusions for myofunctional therapy for dysfluency (e.g., stuttering, spastic dysphonia or other involuntarily acted conditions) or functional articulation disorders (e.g., tongue thrust, lisp, verbal apraxia)**
- **Specific coverage exclusions for maintenance or preventive care consisting of routine, long-term, or non-medically necessary care provided to prevent recurrences or to maintain the member's current status**
- **Under many benefit plans formerly administered by Great-West Healthcare, speech therapy is only covered for the restoration of speech due to impairment following acute injuries, diseases or conditions when the speech therapy services are expected to result in significant clinical improvement within two months.**

**If coverage is available for speech therapy, the following conditions of coverage apply.**

**CIGNA covers an evaluation by an appropriate healthcare provider as medically necessary for the assessment of a speech/language/voice impairment.**

**CIGNA covers as medically necessary EITHER of the following:**

- **A prescribed course of speech therapy by an appropriate healthcare provider for the treatment of a severe impairment of speech/language and an evaluation has been completed by a certified speech-language pathologist that includes age-appropriate standardized tests that measure the extent of the impairment, performance deviation, and language and pragmatic skills assessment levels.**
- **A prescribed course of voice therapy by an appropriate healthcare provider for a significant voice disorder that is the result of anatomic abnormality, neurological condition, or injury (e.g., vocal nodules or polyps, vocal cord paresis or paralysis, post-operative vocal cord surgery).**

**When ALL of the following criteria are met:**

- **The treatment being recommended has the support of the treating physician.**
- **The therapy being ordered requires the one-to-one intervention and supervision of a speech-language pathologist.**
- **The therapy plan includes specific tests and measures that will be used to document significant progress every two weeks.**
- **Meaningful improvement is expected from the therapy.**
- **The treatment includes a transition from one-to-one supervision to an individual or caregiver provided maintenance program upon discharge.**

**CIGNA does not cover speech or voice therapy in ANY of the following situations, as it is excluded from many benefit plans and considered not medically necessary when used for these purposes:**

- **any computer-based learning program for speech or voice training purposes**
- **school speech programs**

- speech or voice therapy that duplicates services already being provided as part of an authorized therapy program through another therapy discipline (e.g., occupational therapy)
  - group speech or voice therapy (because it is not one-on-one, individualized to the specific person's needs)
  - maintenance programs of routine, repetitive drills/exercises that do not require the skills of a speech-language therapist and that can be reinforced by the individual or caregiver
  - vocational rehabilitation programs and any programs with the primary goal of returning an individual to work
  - therapy or treatment provided to prevent or slow deterioration in function or prevent reoccurrences
  - therapy or treatment intended to improve or maintain general physical condition
  - therapy or treatment provided to improve or enhance job, school or recreational performance
  - long-term rehabilitative services when significant therapeutic improvement is not expected
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## General Background

Speech therapy is the treatment of defects and disorders of speech and language disorders. Prior to the initiation of speech therapy, a comprehensive evaluation of the patient and his or her speech and language potential is generally required before a full treatment plan is formulated. As part of the evaluation, standardized assessment tests should be used for evaluations to identify and quantify impairment and may include the following (Kortte and Palmer, 2002):

- Receptive-Expressive Emergent Language Scale (REEL): infants (birth to three years)
- Test of Language Development (TOLD): school-age children
- Porch Index of Communication Ability (PICA): adults
- Boston Diagnostic Aphasia Examination: adults
- Peabody Picture Vocabulary Test (PPVT): for all ages

For the child with a speech delay, the speech/language evaluation may demonstrate that the potential exists that, through speech therapy, the child will reach an age-appropriate level of speech. Some situations for which speech therapy may be appropriate in the prelingual child include: following documented central nervous system anoxia and/or long-term intubation, chronic otitis media, or after cochlear implant or cleft palate surgery.

A hearing test may also be conducted to determine if the child is experiencing mild hearing loss as a result of transient or persistent ear infections or allergies. Should these conditions be identified, then medical management and monitoring should be used to minimize the effects that this could have on future language learning. Comorbid psychiatric disorders, environmental deprivation, pervasive developmental disorders, mental retardation, autism and selective mutism should all be considered in cases of language delay (Koyama, et al., 2009).

Speech therapy services should be individualized to the specific communication needs of the patients. It should be provided one-to-one by a speech-language pathologist educated in the assessment of speech and language development, the treatment of language and speech disorders. A speech-language pathologist can offer specific strategies, exercises and activities to regain function communication abilities (Kortte and Palmer, 2002).

Documentation of the proposed treatment plan should include all of the following:

- findings of the speech evaluation, including motor and expressive results
- short- and long-term measurable goals, with expectations for progress
- specific treatment techniques and/or exercises to be used during this treatment
- determination of how the goals will be measured and reported every two weeks
- expected duration of therapy for goals to be met
- documented strategy to transition this supervised therapy to a patient-administered or caregiver-directed maintenance program

Before continuing speech/language services, the results of these patient-specific measures should demonstrate that the individual is consistently improving and that a plateau (i.e., where no additional meaningful improvements are being measured or are expected to occur) has not been reached. Once the individual has reached their goals or a therapeutic plateau has been reached, then ongoing therapy becomes maintenance in nature.

The use of group therapy is not one-on-one, individualized to the specific patient needs. Services that are provided by speech therapists and occupational therapists may overlap (Michaud, et al., 2004). Speech therapy that is being provided as part of an occupational training program is considered duplicative in nature.

### **Speech and Language Impairments**

Language impairment is the inability to comprehend and/or appropriately use language. The impairment may involve the form of language (i.e., phonology, morphology, and syntax), the content of language (i.e., semantics), the function of language in communication (i.e., pragmatics), or any combination of the above. The terms language or speech impairment do not include dialectal differences, auditory processing disorders or selective mutism. Language is the brain's use of symbols for communication. Language is the unique human ability to communicate through symbols, whether spoken or written language, Braille, musical notation, or most forms of sign language. Language is distinct from speech, which is the verbal expression of language.

Speech and language impairments can result from a variety of local, systemic and neurological conditions. Examples of local impairments are injury or localized disease of the vocal cords; tumors or growths that cause swallowing and speech difficulty; and congenital cleft lip or cleft palate. Neurological causes of speech and language problems include stroke and a variety of conditions, such as multiple sclerosis. Speech and language impairments include may include the following conditions (Kortte and Palmer, 2002):

- Aphasia: This disorder involves the expression of language, the comprehension of language, or both. It can be classified into specific syndromes according to the ability to produce, understand and repeat language. The ability to produce language is assessed in terms of fluency, which is defined as the rate of speech and amount of effort in producing speech. There are several syndromes of aphasia and each is associated with a particular set of language capabilities and disabilities. Global aphasia is when both expressive and receptive problems are present. These include:
  - Broca's: This syndrome is characterized with nonfluent speech, intact comprehension and poor repetition skills.
  - Wernicke's: This syndrome is characterized with fluent speech, poor comprehension and poor repetition skills.
  - Conduction: This syndrome is characterized by fluent speech, intact comprehension and poor repetition skills.
  - Transcortical motor: This syndrome is characterized with nonfluent speech, intact comprehension and intact repetition skills.
  - Transcortical sensory: This syndrome is characterized by fluent speech, poor comprehension and intact repetition skills.
  - Anomic: This syndrome is characterized fluent speech, and intact comprehension and repetition skills.
- Aphonia: This is the total loss of speech sounds.
- Apraxia/dyspraxia: This is the inability or difficulty to form words or speak, despite the ability to use the oral and facial muscles to make sounds.
- Dysarthria: With this impairment, there is an impairment or clumsiness in the uttering of words due to diseases that affect the oral, lingual or pharyngeal muscles; speech may be difficult to understand, but the ability to communicate is present.
- Dysphasia: impairment of speech resulting from a brain lesion, stroke or neurodevelopmental disorder
- Stuttering: disruption in the fluency of speech; affected persons repeat letters or syllables, pause or hesitate abnormally, or fragment words when attempting to speak.

### **Communication Disorders in Children**

Language tends to develop in a predictable pattern in children. The acquisition of language and communication goes from preverbal to verbal skills and the comprehension of language precedes spoken words. Assessment of language should be an element of every well-child visit. There is no generally accepted classification of

childhood communication disorders; however the American Psychiatric Association (APA) in the Diagnostic and Statistical Manual of Mental Disorders provides a basic classification system that recognizes the following four types of communication disorders (APA, 2000):

- Expressive language disorder—criteria for this condition include:
  - Scores obtained from standardized individually administered measures of expressive language development are substantially below those obtained from standardized measures of both nonverbal intellectual capacity and receptive language development. The disturbance may be manifest clinically by symptoms that include having a markedly limited vocabulary, making errors in tense, or having difficulty recalling words or producing sentences with developmentally appropriate length or complexity.
  - Difficulties with expressive language interfere with academic or occupational achievement or with social communication.
  - Criteria are not met for mixed receptive-expressive language disorder or a pervasive developmental disorder.
  - If mental retardation is present, a speech-motor or sensory deficit, or environmental deprivation is present, the language difficulties are in excess of those usually associated with these problems.
- Mixed receptive language disorder—criteria for this condition include:
  - Scores obtained from a battery of standardized individually administered measures of both receptive and expressive language development are substantially below those obtained from standardized measures of nonverbal intellectual capacity. Symptoms include those for expressive language disorder as well as difficulty understanding words, sentences, or specific types of words, such as spatial term.
  - Difficulties significantly interfere with academic or occupational achievement or with social communication
  - Criteria are not met for a pervasive developmental disorder.
  - If mental retardation is present, a speech-motor or sensory deficit, or environmental deprivation is present, the language difficulties are in excess of those usually associated with these problems.
- Phonologic disorder (formerly referred to as developmental articulation disorder)—criteria for this condition include:
  - Failure to use developmentally expected speech sounds that are appropriate for age and dialect. This includes errors in sound production, use, representation, or organization such as, but not limited to, substitutions of one sound for another or omissions of sounds (e.g., final consonants).
  - The difficulties in speech sound production interfere with academic or occupational achievement or with social communication.
  - If mental retardation is present, a speech-motor or sensory deficit, or environmental deprivation is present, the language difficulties are in excess of those usually associated with these problems.
- Stuttering—criteria for this condition include:
  - Disturbance in the normal fluency and time patterning of speech that is inappropriate for the individuals' age and is characterized by frequent occurrences of one or more of the following:
    - sound and syllable repetitions
    - sound prolongations
    - interjections
    - broken words (e.g., pauses within a word)
    - audible or silent blocking (e.g., filled or unfilled pauses in speech)
    - circumlocutions (e.g., word substitutions to avoid problematic words)
    - words produced with an excess of physical tension
    - monosyllabic whole-word repetitions (e.g., "I-I-I-I see him")

Communication disorders are demonstrated by a significant discrepancy between language and nonverbal intellectual development; although no specific cutoff criteria are provided (Simms, 2007). Within these classifications, providers are likely to see children with a wide range of language and communication difficulties. Mixed receptive-expressive language disorder may also be referred to as specific language impairment or developmental dysphasia or developmental language disorder.

**Pragmatic Language Disorder:** This disorder goes beyond the basic understanding of words and grammar and involves the use of language in social settings. Children who have this disorder may have difficulty

comprehending the social context of conversations. It may be considered in the context of specific language impairment but is also seen as a symptom as of other many other disorders, including: autism and pervasive developmental disorder, Asperger's syndrome, nonverbal learning disability and right-hemisphere brain damage. It is also recognized by some providers as a distinctive developmental language disorder (Simms, 2007).

**Articulation Disorders/Phonologic Disorders:** In this condition speech problems that interfere with sound articulation are usually considered a phonologic impairment. It has been noted that approximately 7.5% of three- to eleven-year old children exhibit significant speech sound distortions. In most circumstances these children babble at the normal age, and produce a wide range of vowel and consonant sound. As they progress they typically omit, substitute, or reduce consonants and clusters of sounds. These children may be unintelligible (Simms, 2007).

**Dysarthria/Motor Speech Disorder:** These disorders involve damage to the central or peripheral neurological mechanism. They may be caused by neuromotor disorders, such as cerebral palsy, muscular dystrophy, myopathy, or facial palsy. The resulting dysarthria may affect both speech and nonspeech functions (e.g., smiling, chewing, swallowing). There may be a lack of strength and muscular control manifests as slurring of words and distorted vowels and consonants and slow labored speech (Simms, 2007).

**Verbal Apraxia:** This disorder is characterized by inconsistent distortion of speech sounds. It may be the result of difficulty in planning and coordinating movements for speech production. In this condition the same word may be pronounced differently each time. There may be struggling behaviors and searching for the capability to produce the word. The apraxia may be limited to oral motor function, or it may be a more generalized problem affecting fine and/or gross motor coordination (Simms and Schum, 2007).

**Late Talker Syndrome:** This condition may also be referred with terms: maturational delay or late bloomer. Children with delayed expressive language development, with no evidence of motor speech disorder and whose receptive language abilities are normal may have a maturational expressive language delay. This may be considered to a normal variant of development. It is a diagnosis that is generally made by exclusion, when other causes are ruled out. It is thought to be more common in boys than girls and tends to run in families. After these children start talking they continue to do well and there appears to be little long-term risk of speech, language or learning impairment. Little scientific research has been conducted on this condition (Koyama, et al., 2009).

### **Otitis Media**

Otitis media with effusion (OME) is the presence of fluid in the middle ear without signs or symptoms of acute ear infection. Persistent middle-ear fluid from OME may result in decreased mobility of the tympanic membrane and serve as a barrier to sound conduction. It is commonly diagnosed between six and 30 months old. Joint guidelines from the (American Academy of Family Physicians [AAFP], American Academy of Otolaryngology-Head and Neck Surgery [AAO-HNS] and American Academy of Pediatrics [AAP], 2004) on otitis media with effusion note that a hearing testing is recommended when OME persists for three months or longer or at any time that language delay, learning problems, or a significant hearing loss is suspected. The guidelines note that conductive hearing loss often accompanies OME and may adversely affect binaural processing, sound localization, and speech perception in noise. In addition it is noted that while hearing loss caused by OME may impair early language acquisition, the child's home environment has a greater impact on outcomes. Randomized trials suggest that there is no impact on children with OME who are not at risk as identified by screening or surveillance (AAFP/AAO-HNS/AAP (2004).

The AAFP/AAO-HNS/AAP (2004) guidelines recommend that language testing should be conducted for children with hearing loss (pure-tone average more than 20-dB HL on comprehensive audiometric evaluation). Young children with speech and language delays during the preschool years are at risk for continued communication problems and later delays in reading and writing. Interventions may be needed to improve communication and other functional outcomes for children with histories of OME. Children's speech and language can be tested at ages six to 36 months by direct engagement of a child and by interviewing the parent with the Early Language Milestone Scale. In addition the child's parent or caregiver can be interviewed with the MacArthur Communicative Development Inventory and the Language Development Survey. The Denver Developmental Screening Test II can be used to screen general development including speech and language in older children. Comprehensive speech and language evaluation is recommended for children who fail testing or whenever the child's parent or caregiver expresses concern (AAFP/AAO-HNS/AAP, 2004).

## **Autism Spectrum Disorders/Pervasive Developmental Disorders (PDD)**

The communication problems of autism and pervasive developmental disorders (PDD) vary, depending upon the intellectual and social development of the individual. Some patients may be unable to speak, whereas others may have rich vocabularies and are able to talk about topics of interest in great depth (National Institute on Deafness and Other Communication Disorders [NIDCD], 2010b). Although there is a variation, the majority of individuals with autism/PDD will have minimal or no problem with pronunciation; however, most will have difficulty effectively using language (NIDCD, 2010b).

When autism or some other developmental disability is suspected, an assessment by speech-language pathologist may be part of the comprehensive evaluation. It has been noted in the literature that there is no single approach that is best for all individuals with autism/PDD (NIDCD, 2010b). Some individuals respond well to highly structured behavior modification programs; others respond better to in-home therapy that uses real situations as the basis for training. The American Academy of Child & Adolescent Psychiatry (AACAP) guidelines regarding assessment of children, adolescents and adults with autism/PDD note that educational services (e.g., including special education, some forms of behavior modification and other services) are the central and integral aspect of the treatment for autism/PDD (Volkmar, et al., 1999). While communication deficits are often present with autism/PDD, speech pathology treatment is considered behavioral and training in nature. When these deficits overlap with an impairment of speech due to a separate neurological cause, speech therapy may be medically necessary.

### **Literature Review**

While there are limited clinical trials published regarding the efficacy of speech therapy, there are several systematic reviews published regarding speech and voice therapy. Cirrin and Gillam (2008) conducted a systematic review of articles that assess the outcomes of language intervention practices for school age students with spoken language disorder. Twenty-one studies included in the review. Eleven of the studies limited participants to children in kindergarten and first grade and there were no studies that focused on students in middle grades or high school. The review noted that there is little research evidenced to guide evidenced-based decisions about treatment options. Greener et al. (2005) reported the results of a Cochrane meta-analysis that was conducted to assess the effects of formal speech and language therapy and nonprofessional types of support from untrained providers for people with aphasia after stroke. Twelve studies met the criteria for review. It was noted that most studies were old with poor or unassessable methodological quality. The authors concluded that speech and language therapy treatment for people with aphasia after a stroke has not been shown either to be clearly effective or clearly ineffective within a randomized controlled trial. Treatment should be based management of patients should be based on other forms of evidence. Additional research is needed to determine the effectiveness of speech therapy in this population.

Pennington et al., (2004) conducted a Cochrane systematic review to determine the effectiveness of speech language therapy for children with cerebral palsy. Eleven studies were included in the review. Seven studies evaluated treatment rendered to children; four investigated the effects of training for communications partners. There was a wide variation in age, type and severity of cerebral palsy, cognitive and linguistic skills. There were methodological flaws that prevented firm conclusions from being made about the effectiveness of therapy. The maintenance of skill was not investigated thoroughly. The authors noted that further research is needed to investigate the effectiveness of new and established interventions and their acceptability to families. In 2004, Law et al. reported on a meta-analysis conducted to determine the effectiveness of speech and language interventions for children with primary speech and language delay/disorder. From the 25 studies reviewed, the authors concluded the results suggest that speech and language therapy is effective for children with phonological or vocabulary difficulties, but there is a lack of evidence that interventions are effective for children with receptive difficulties, and no conclusion could be drawn for the use of expressive syntax interventions. There was also no significant difference found in therapy administered by a professional versus therapy provided by a trained parent, or that group interventions produced better outcomes than individual interventions. The studies did show that using peers with normal language as part of the intervention did have a positive impact on the therapy outcomes. Deane et al. (2001) conducted a Cochrane systematic review, to compare the efficacy of speech and language therapy versus placebo or no interventions in patients with Parkinson's disease. The study identified two trials with 71 patients. The method of randomization was good in one of the trials and the concealment of allocation was inadequate in both trials. These methodological problems could likely lead to bias from a number of sources. Meta-analysis was not possible due to variation in methods. The authors noted that with the methodological flaws noted in the studies, the small number of patients examined,

and the possibility of publication bias, that there is insufficient evidence to support or refute the efficacy of any given form of speech and language therapy over another to treat dysarthria in Parkinson's disease.

### **Voice Therapy**

Voice therapy is a form of speech therapy used for treatment of voice disorders. Voice disorders, or vocal disorders, can result in a voice that is unpleasant and can impede effective communication. The ability to produce speech is present; it is the voice quality, pitch, resonance or duration that is affected. The cause may be organic or functional. Organic voice disorder may be caused by congenital or acquired anatomic abnormalities. Functional disorders may be caused by emotional or psychological problems but this may lead to anatomic alterations. Voice disorders are generally classified depending on the area of problem—there often are several problems areas and may include problems with voice quality, resonance, loudness and pitch (Choi and Zalzal; 2005). Dysphonia and hoarseness are often used interchangeably; however, hoarseness is a symptom of altered voice quality and dysphonia is a diagnosis (Schwartz, et al., 2009).

Voice is produced by vibration of the vocal fold which are two bands of smooth muscle tissue that lie opposite each other and are located in the larynx or voice box. Vocal nodules are small benign growths on the vocal cords. They are callous growths that usually form in pairs, one on each vocal fold. They form at the area that receives the most pressure when the folds come together to vibrate. Vocal polyps are benign growths that are similar to vocal nodules but are softer, usually extramucosal while nodules are submucosal. They most often form on only one vocal cord. The voice of individuals with vocal nodules and polyps usually sounds hoarse, low-pitched, and slightly breathy. In general these conditions are diagnosed with a physical examination along with an examination of the vocal cords with laryngoscopy or fiberoptic laryngoscopy performed (National Institute on Deafness and Other Communication Disorders [NIDCD], 2010a). Vocal cord paralysis occurs when one or both of the vocal cords do not open or close properly. The symptoms can range from mild to life-threatening (NIDCD, 2010c). The condition may be treated with surgery or voice therapy which may include exercises to strengthen the vocal cords or improve breath control during speech. Surgical removal of the vocal cord nodule or polyp may be needed if voice therapy has failed. Since these conditions easily recur following surgery if the vocal misuse continues and other periods of voice therapy by a speech-language pathologist after surgery may be indicated (NIDCD, 2010a).

An evaluation by a speech-pathologist will include assessment of the pitch, loudness, and quality of the person's voice, and will also assess vocal techniques such as breathing and style of voicing. A voice recording may be made with trial therapy techniques used to test their effectiveness in improving the voice (NIDCD, 2010a).

Therapeutic interventions may include education in how the voice works and good vocal hygiene, physiologic vocal exercises to improve the quality and strength of the voice, and compensatory techniques to optimize vocal function (Ashley, et al., 2006). Voice therapy techniques fall into two main categories (Ruotsalainen, et al., 2009):

- Indirect treatment: these focus on psychosocial aspects such as patient education, auditory training and vocal hygiene programs
- Direct treatment: these techniques focus on mechanical or physical aspects such as yawn-sign method, establishing optimal pitch and laryngeal manipulation

**Literature Review—Voice Therapy:** Speyer (2008) reported on a systematic review regarding the effects of voice therapy. The review included 47 studies of treatment of dysphonia on a functional or organic base without any neurological origin. Review articles, case reports, and articles limited to populations smaller than five subjects were excluded. Overall, the authors found that the impression is that the number of papers is small and many studies have methodological problems. While no conclusion could be made, the review indicated that when statistically significant positive results they appear to be modest in general and the therapy effects in individual patients are varying. Direct voice therapies appear to be more effective than indirect therapies.

Ruotsalainen et al. (2007) reported on a Cochrane review that evaluated the effectiveness of interventions to treat functional dysphonia in adults. Functional dysphonia in this review was defined as an impaired voice sound and/or reduced vocal capacity with a possible concomitant diagnosis of minor pathologies of the vocal cords (e.g., nodules, polyps, or edema). The review included six studies with one noted to be of high quality. The conclusion noted that evidence is available for the effectiveness of comprehensive voice therapy comprising both direct and indirect therapy elements; however, larger and methodically better studies are needed with outcome measurements that correlate with treatment objectives.

**Professional Societies/Organizations—Voice Therapy:** Clinical practice guidelines published by the American Academy of Otolaryngology–Head and Neck Surgery (AAO-HNS) for the management of hoarseness (dysphonia) note that “clinicians should advocate voice therapy for patients diagnosed with hoarseness that reduces voice-related quality of life (Schwartz, et al., 2009). The guidelines note that, “A trial of conservative management is typically instituted prior to surgical intervention for most pathologies and may obviate the need for surgery. Many benign soft tissue lesions of the vocal folds are self-limited or reversible. The conservative management strategy indicated depends on the likely underlying etiology but may include voice therapy or rest, smoking cessation, and anti-reflux therapy.”

A technical report from the American Speech-Language-Hearing Association (ASHA) (2005) for the use of voice therapy in the treatment of dysphonia notes that, “research data and expert clinical experience support the use of voice therapy in the management of patients with acute and chronic voice disorders. Voice therapy contributes to increased effectiveness and efficiency in the treatment of voice disorders. When surgery is necessary, adjunct voice therapy can improve surgical outcomes, prevent additional injury, and limit additional treatment costs.”

### **Speech Software and Computer-Based Programs**

Computer-based programs have been developed that are proposed to improve reading and language skills. The use of speech software or computer-based programs, (e.g., Fast ForWord® [Scientific Learning Corporation, Oakland, CA], Laureate Language Systems [Laureate Learning Systems, Inc. Winooski, VT]) repetitive training devices/exercises or school-based programs are considered training in nature and are not considered medically appropriate, as they do not involve the formal interaction of one-to-one supervision with a speech-language pathologist.

**Literature Review—Speech Software and Computer-Based Programs:** Bothe et al. (2008) conducted a randomized controlled trial to compare the language and auditory processing outcomes of children assigned to Fast ForWord-Language (FFW-L) to the outcomes of children assigned to nonspecific or specific language intervention comparison treatments that did not contain modified speech. Two hundred and sixteen children between the ages of 6 and 9 years with language impairments were randomly assigned to one of four arms: FFW-L, academic enrichment (AE), computer-assisted language intervention (CALI), or individualized language intervention (ILI) provided by a speech-language pathologist. One hour and 40 minutes of therapy was provided to all children, five days per week, for six weeks. Language and auditory processing measures were administered to the children by blinded examiners before treatment, immediately after treatment, three months after treatment, and six months after treatment. The children in all four arms improved significantly on a global language test and a test of backward masking. The children with poor backward masking scores who were randomized to the FFW-L arm did not present greater improvement on the language measures than children with poor backward masking scores who were randomized to the other three arms. Participants in the FFW-L and CALI arms earned higher phonological awareness scores than children in the ILI and AE arms at the six-month follow-up testing. The FFW-L program, the language intervention that provided modified speech to address a hypothesized underlying auditory processing deficit, was not more effective at improving general language skills or temporal processing skills than a nonspecific comparison treatment (AE) or specific language intervention comparison treatments (CALI and ILI) that did not contain modified speech stimuli. These findings question the temporal processing hypothesis of language impairment and the proposed benefits of using acoustically modified speech to improve language skills. In view of the finding that children in the three treatment arms and the active comparison arm made clinically relevant gains on measures of language and temporal auditory processing appears to indicate that a variety of intervention activities can facilitate development.

### **Summary**

Speech therapy services may be appropriate for a subset of individuals with a severe speech impairment. There should be clear documentation of this process, and the goal(s) of therapy should include measures that will be used to demonstrate that a meaningful improvement has occurred as a result of the therapy.

Determination of the medical necessity for speech therapy for an adult or child should be based on the individual’s medical condition and the severity of the functional impairment; age-specific functional impairment scores should be used, and the evaluation should be conducted by a certified speech-language pathologist. The therapy plan should include measurable goals, testing applications that will be used to measure improvement,

and specific timeframes to begin an early transition from one-to-one supervision by a professional to a patient- or caregiver-provided level.

Voice therapy is a form of speech therapy that is used for treatment of voice disorders. Voice therapy may be considered medically necessary when there is a significant voice disorder that is the result of anatomic abnormality, neurological condition, or injury (e.g., vocal nodules or polyps, vocal cord paresis or paralysis, post-operative vocal cord surgery).

## Coding/Billing Information

**Note:** This list of codes may not be all-inclusive.

**Covered when medically necessary:**

<b>CPT<sup>®</sup>* Codes</b>	<b>Description</b>
92506	Evaluation of speech, language, voice, communication, and/or auditory processing
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual

<b>HCPCS Codes</b>	<b>Description</b>
G0153	Services of speech and language pathologist in home health setting, each 15 minutes
S9128	Speech therapy, in the home, per diem
S9152	Speech therapy, re-evaluation

<b>ICD-9-CM Diagnosis Codes</b>	<b>Description</b>
161 - 161.9	Malignant neoplasm of the larynx
191	Malignant neoplasm of brain
195.0	Malignant neoplasm of head, face, and neck
198.3	Secondary malignant neoplasm of brain and spinal cord
225.0-225.8	Benign neoplasm of brain and other parts of nervous system
235 - 235.1	Neoplasm uncertain behavior digestive and respiratory systems
235.6	Neoplasm of uncertain behavior, larynx
237.5	Neoplasm of uncertain behavior of brain and spinal cord
239.6	Neoplasm of unspecified nature of brain
381.10-381.3	Chronic otitis media
382.1-382.4	Chronic suppurative and unspecified otitis media
389.00-389.08	Conductive hearing loss
389.10-389.18	Sensorineural hearing loss
389.20-389.22	Mixed conductive and sensorineural hearing loss
434 - 434.91	Occlusion of cerebral arteries
435 - 435.9	Transient cerebral ischemia
438.10-438.19	Speech and language deficits due to late effects of cardiovascular disease
476.0-476.1	Chronic laryngitis and laryngotracheitis
478.30-478.34	Paralysis of vocal cords or larynx

478.4 <sup>†</sup>	Polyp of vocal cord or larynx
478.5 <sup>†</sup>	Other diseases of vocal cords
749.0-749.25	Cleft palate and cleft lip
784.40 <sup>†</sup>	Voice and resonance disorder, unspecified
784.41 <sup>†</sup>	Aphonia
784.42 <sup>†</sup>	Dysphonia
784.49 <sup>†</sup>	Other voice and resonance disorders
	Multiple/Varied

<sup>†</sup>**Note: Covered when medically necessary and the diagnosis is a result of an anatomic abnormality, neurological condition or an injury.**

**Not Medically Necessary/Training/Not Covered:**

CPT* Codes	Description
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder; group, 2 or more individuals

**Speech/voice therapy not covered for the following conditions under many benefit plans. This list is not all inclusive:**

ICD-9-CM Diagnosis Codes	Description
307.0	Stuttering
307.9	Other and unspecified special symptom or syndrome, not elsewhere classified
314.1	Hyperkinesia with developmental delay
315.02	Developmental dyslexia
315.3-315.9	Developmental speech or language disorder
317-319	Mental retardation
750.0	Tongue tie
783.42	Delayed milestones
784.51	Dysarthria
784.59	Other speech disturbance
784.60	Symbolic dysfunction, unspecified
784.61	Alexia and dyslexia
784.69	Other symbolic dysfunction
	Multiple/varied

**\*Current Procedural Terminology (CPT®) ©2010 American Medical Association: Chicago, IL.**

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## Policy History

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<u>Pre-Merger Organizations</u>	<u>Last Review Date</u>	<u>Policy Number</u>	<u>Title</u>
CIGNA HealthCare	8/15/2008	0177	Speech/Language Therapy

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Connecticut General Life Insurance Company has acquired the business of Great-West Healthcare from Great-West Life & Annuity Insurance Company (GWLA). Certain products continue to be provided by GWLA (Life, Accident and Disability, and Excess Loss). GWLA is not licensed to do business in New York. In New York, these products are sold by GWLA’s subsidiary, First Great-West Life & Annuity Insurance Company, White Plains, N.Y.