Altered Auditory Feedback Device (SpeechEasy®) for the Treatment of Stuttering

Policy Number: HS-158

Original Effective Date: 3/4/2010

Revised Date(s): 3/4/2011; 3/1/2012

DISCLAIMER

The Clinical Coverage Guideline is intended to supplement certain standard WellCare benefit plans. The terms of a member’s particular Benefit Plan, Evidence of Coverage, Certificate of Coverage, etc., may differ significantly from this Coverage Position. For example, a member’s benefit plan may contain specific exclusions related to the topic addressed in this Clinical Coverage Guideline. When a conflict exists between the two documents, the Member’s Benefit Plan always supersedes the information contained in the Clinical Coverage Guideline. Additionally, Clinical Coverage Guidelines relate exclusively to the administration of health benefit plans and are NOT recommendations for treatment, nor should they be used as treatment guidelines. The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.

APPLICATION STATEMENT

The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.
BACKGROUND

Stuttering is a disorder in which certain sounds, syllables, or words are repeated or prolonged, disrupting the normal flow of speech. Symptoms are generally worse in stressful situations such as talking in public or on the telephone, while talking or singing in unison may temporarily alleviate symptoms, a phenomenon known as the choral effect. Altered auditory feedback (AAF) attempts to emulate the choral effect by allowing the user to hear their voice with a slight time delay and/or a pitch shift which is said to create the illusion of another individual speaking at the same time. Such devices include the SpeechEasy®. Stuttering usually develops in young children as they are learning to speak and may occur in 2% to 5% of children at some stage. In the United States, approximately 3 million people or 1% of the adult population stutter. Usual treatment for stuttering includes various behavioral vocal techniques to assist speakers with generating difficult words or sounds and with actively monitoring their own speech.

The literature search identified 5 uncontrolled studies of the SpeechEasy device and a satisfaction survey of patients who purchased the device. Results of these studies do not provide reliable evidence that the SpeechEasy device is an effective treatment for stuttering. Several studies performed under ideal conditions in the speech laboratory indicated that patients benefited from use of this device; however, the only study that assessed stuttering in more realistic situations of daily life and involved statistical analysis of the results found that improvements in speech were not statistically significant. Moreover, the available studies were relatively small and uncontrolled, enrolled patients with large differences in stuttering severity, and had limited or no long-term assessment of speech to evaluate the durability of improvements. Further studies are needed to determine whether the SpeechEasy device provides statistically and clinically significant improvements in speech for patients who stutter.

Cost Analysis

Janus Development Group Inc. markets 4 models of the SpeechEasy device, ranging in price from $4100 for the largest behind-the-ear model to $5100 for the smallest model, which is completely in the ear canal.

Summary

Results of the available studies do not provide reliable evidence that the SpeechEasy device is an effective treatment for stuttering. The studies performed under ideal conditions in the speech laboratory indicated that patients benefited from use of this device; however, the only study that assessed stuttering in more realistic SDL and involved statistical analysis of the results found that improvements in speech were not statistically significant. Moreover, the available studies were relatively small, uncontrolled, had limited or no follow-up, and enrolled patients with large differences in stuttering severity. Additional studies are needed to determine whether the SpeechEasy device provides statistically and clinically significant improvements in speech for patients who stutter (Hayes, 2009).

A rating of D was assigned to SpeechEasy in 2009 based on:

- Insufficient or lack of evidence to support efficacy;
- Minor safety issues;
- A minimally defined intended patient population; and
- Patient centered outcomes that are not well defined.

POSITION STATEMENT

Altered auditory feedback devices, such as the SpeechEasy® (Janus Development Group Inc.) are considered experimental and investigational and are NOT a covered benefit.
ALTERED AUDITORY FEEDBACK DEVICE (SPEECHEASY®) FOR THE TREATMENT OF STUTTERING

HS-158

CODING

CPT® Codes - No applicable codes

ICD-9-CM Procedure Code - No applicable codes

Non Covered HCPCS Codes
E1399 Durable medical equipment, miscellaneous (No specific HCPCS Level II Code is designated.)

Non Covered ICD-9-CM Diagnosis Code
307.0 Stuttering


REFERENCES

Peer Reviewed


Government Agencies, Professional and Medical Organizations


HISTORY AND REVISIONS

Date Action
3/1/2012 • Approved by MPC. Included Hayes rating. Updated cost range.
12/1/2011 • New template design approved by MPC.
3/4/2011 • Approved by MPC.