

Clinical Policy: Biofeedback for Behavioral Health Disorders

Reference Number: LA.CP.BH.300

Last Revision: 1/5/2023

Coding Implications

Revision Log

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Biofeedback or neurofeedback is a noninvasive technique intended to enable an individual to learn how to change a physiological activity for the purpose of improving health and performance. It employs instruments that measure physiological activities such as brainwaves, heart rate, breathing rate, muscle activity and skin temperature. Neurofeedback is a process in which a patient learns to increase or decrease specific brain activity using real-life feedback from a scalp electroencephalogram (EEG). Patients are encouraged to increase desired brain activity and decrease undesired activity.

Biofeedback therapy for CABH Medicare members/enrollees may be covered under the Medicare National Coverage Determination, *Biofeedback Therapy 30.1* for outpatient services when it is reasonable and necessary for the individual patient for muscle re-education of specific muscle groups or for treating pathological muscle abnormalities of spasticity, incapacitating muscle spasm, or weakness, and more conventional treatments (heat, cold, massage, exercise) have not been successful. This therapy is not covered for treatment of ordinary muscle tension states or for psychosomatic conditions. In accordance with 21 CFR § 882.5050 - Biofeedback Device, biofeedback devices are approved by the Food and Drug Administration (FDA) as Class II (special controls).

Policy/Criteria

- I. It is the policy of Louisiana Healthcare Connections that initial behavioral health related biofeedback is **medically necessary** if all the following are met:
 - A. Diagnoses of anxiety disorder, or post-traumatic stress disorder as listed in the most current version of the Diagnostic and Statistical Manual of Mental Disorders (DSM), and
 - B. There are significant symptoms that interfere with the individual's ability to function in at least one life area as measured by a widely recognized validated standardized severity scale focused on the symptom profile;
 - C. The individual is motivated to actively participate in the treatment plan, including being responsive to the care plan requirements (e.g., practice and follow-through at home);
 - D. The individual is capable of participating in the treatment plan (physically as well as intellectually);
 - E. The condition can be appropriately treated with biofeedback (e.g., existing pathology does not prevent success of the treatment);
 - F. There is evidence that standard evidence-based outpatient treatments (including psychotherapy and medication management) are considered insufficient to safely and effectively treat the patient's condition
 - G. There is a readily identifiable response measurable by a symptom specific validated standardized scale;
 - H. Biofeedback training is performed by a physician or qualified non-physician practitioner who has undergone biofeedback training and certification. This can include nurse

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practitioners, physician assistants, qualified mental health professionals, psychologists and where applicable biofeedback technicians.

- II.** It is the policy of Louisiana Healthcare Connections that continuation of behavioral health related neurofeedback is **medically necessary** if all the following are met:
- A. Initial criteria are still met;
 - B. The frequency of sessions is scheduled to occur at a rate consistent with the presenting symptoms and showing results, while a lower rate may impede progress;
 - C. Treatment plan is individualized with clearly stated realistic goals and objectives;
 - D. Treatment is structured to achieve optimum benefit and expected benefit is documented;
 - E. Progress related to neurofeedback can be clearly described by at least a 25% reduction in severity, as compared to the baseline severity score;
 - F. When medically necessary, appropriate psychopharmacological intervention is provided;
 - G. There is documented transition out of neurofeedback planning from the start of treatment, which may include ensuring the ability of the patient to continue the biofeedback-learned techniques independently after the biofeedback sessions end.

Reconsideration of medical necessity should be made if more than 25 neurofeedback treatments sessions in a 12-month period are necessary.

- III.** It is the policy of Louisiana Healthcare Connections that neurofeedback is **no longer medically necessary** and discharge from treatment is medically appropriate when any one of the following are met:
- A. The document goals and objectives have been substantially achieved, or
 - B. Patient no longer meets admission criteria, symptom severity has dropped by 50%, or
 - C. Patient is not engaging in treatment, rendering biofeedback ineffective, despite multiple documented attempts to address non-participation issues, or
 - D. Patient refuses treatment, or
 - E. Patient is not making progress toward treatment goals and there is no reasonable expectation of progress with this treatment approach, or
 - F. It is reasonably predicted that continuing improvement can occur after discontinuation of neurofeedback with ongoing psychotherapy, medication management and community support.
- IV.** It is the policy of Louisiana Healthcare Connections that neurofeedback may be considered **experimental/investigational** for any behavioral health diagnosis other than what is noted in this policy.

Background

During biofeedback, the patient is seated in a comfortable chair facing a computer screen. Electrodes are placed on the patient's scalp. Target brain waves and event-related potentials are recorded and processed by an electroencephalograph and computer; concurrently, presented ('fed back') to the patient, typically as a visual representation (e.g., a ball moving up or down to signify fast and slow-wave activity), or in the format of a video game. Feedback for desirable activity may include sounds or visual cues (e.g., smiley face), points, or increased control in the

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computer game. Undesirable activity is discouraged by similar means. Patients are instructed to use the feedback to regulate their brain activity. Sessions last between 30 and 60 minutes and up to 25 sessions are scheduled. A therapist is typically present to facilitate learning (e.g., asks the patient about strategies that seem successful, encourages the patient to try different strategies until a successful one is identified). Patients are instructed to practice strategies at home between sessions.

These instruments offer almost instant “feedback” information to the user. The presentation of this information along with changes in thinking, emotions and behavior, may support learning of a skill set of techniques leading to desirable physiological changes. Over time, such changes may endure or the learned skills may be applied without the continued use of an instrument.

Biofeedback has been used to treat children and adults with anxiety and PTSD. It has been typically performed in the outpatient setting and it is usually not provided as a stand-alone treatment, but in conjunction with other therapies such as psychotherapy and medication management.

Biofeedback for behavioral conditions generally do not meet the criteria standard as an evidence-based treatment. Although not conclusive, the treatment of anxiety disorders using neurofeedback is mostly based on observational history and case reports.

There is weak scientific evidence found in the nationally recognized literature about the efficacy of Neurosound/Biosound treatment as applied to billing under the Neurofeedback CPT code. LHCC will not authorize Neurosound/Biosound under the Neurofeedback CPT code.

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2017, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only and may not support medical necessity. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT® Codes	Description
90875	30 minutes of individual psychophysiological therapy incorporating biofeedback training by any modality (face-to-face with patient), with psychotherapy
90876	45 minutes of individual psychophysiological therapy incorporating biofeedback training by any modality (face-to-face with the patient), with psychotherapy

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ICD-10-CM Diagnosis Codes that Support Coverage Criteria

ICD-10-CM Code	Description
F41.1	Generalized Anxiety Disorder
F43.10, F43.11 F43.12	Post-Traumatic Stress Disorder, unspecified, acute or chronic
F41.0	Panic Disorder

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Converted corporate to local policy.	08/15/2020	
Annual review conducted. Neurofeedback references changed to biofeedback to align with the Centene Policy CP.MP.168 for Biofeedback for non-behavioral health diagnoses; Added references to CMS NCD - Biofeedback Therapy (30.1) and FDA approved as Class II; and 45 minutes to CPT code 90875, and 30 minutes to CPT code 90876. Added "and may not support medical necessity" to coding implications. Added "Revision" to date in Revision Log. Changed Last Review to "Date of last revision" in header on page 1. Changed all instances of member to member/enrollee. Updated references.	8/2022	
Removed statement "Note: Please refer to the Louisiana Healthcare Connections Policy LA.CP.MP.168 for Biofeedback for non-behavioral health diagnoses. This policy is contingent on the member/enrollee having this benefit." The policy referenced is retired. Updated "24" to "25" in Reconsideration of medical necessity located under part II to coincide the Background information. Removed "Other behavioral health diagnoses may be considered allowable by certain states" coverage provisions as outlined in their Medicaid/Medicare manuals, LCDs, NCDs, or specific contractual requirements. In order to be covered, medical necessity must still be met." This statement is not specific to LHCC guidance. Reviewed and updated CPT codes.	1/5/23	3/6/23

References

1. CMS Medicare Coverage, National Coverage Determination, Publication Number 100-3; Manual Section Number 30.1; Manual Section Title Biofeedback Therapy; version 1; effective date, longstanding NCD; [NCD - Biofeedback Therapy \(30.1\) \(cms.gov\)](https://www.cms.gov/medicare-coverage-determinations/national-coverage-determinations/national-coverage-determination-number-100-3)
2. Mayo Clinic. Anxiety disorders. 2017. <https://www.mayoclinic.org/diseases-C>

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3. Combined neurofeedback and heart rate variability training for individuals with symptoms of anxiety and depression: A retrospective study (White et al., 2017), *NeuroRegulation*;
4. Effectiveness of neurofeedback therapy for anxiety and stress in adults living with a chronic illness: a systematic review protocol (Blaskovits et al., 2017), *JBIC Database of Systematic Reviews and Implementation Reports*;
5. Effectiveness of neurofeedback therapy in children with separation anxiety disorder (Sadjadi and Hashemian, 2014), *African Journal of Psychiatry*;
6. Neurofeedback: A Comprehensive Review on System Design, Methodology and Clinical Applications Hengameh Marzbani,¹ Hamid Reza Marateb,¹ and Marjan Mansourian^{2,*} *Basic Clin Neurosci.* 2016 Apr; 7(2): 143–158.
7. GAD-7 source: <https://patient.info/doctor/generalised-anxiety-disorder-assessment-gad-7>
8. PTSD Scale Self-Report for DSM-5 (PSS-SR5): <https://www.div12.org/wp-content/uploads/2014/11/PSS-SR5.pdf>
9. Adult ADHD Scale Self-Report Screening Scale for DSM-5 (ASRS-5): https://www.hcp.med.harvard.edu/ncs/ftpdir/adhd/ASRS-5_English.pdf
10. ADHD Symptom Test for Children, Parents' Self-Report Scale: <https://www.additudemag.com/adhd-symptoms-test-children/>
11. Hou, Y., Zhang, S., Li, N., Huang, Z., Wang, L., & Wang, Y. (2021). Neurofeedback training improves anxiety trait and depressive symptom in GAD. *Brain and Behavior*, 11(3). <https://doi.org/10.1002/brb3.2024>

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable LHCC administrative policies and procedures.

This clinical policy is effective as of the date determined by LHCC. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the

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requirements of law and regulation shall govern. LHCC retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

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