

Clinical Policy: Biofeedback for Behavioral Health Disorders

Reference Number: CP.BH.300

Date of Last Revision: 05/25

[Coding Implications](#)

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Description

Biofeedback is a therapeutic technique that enables individuals to gain voluntary control over specific physiological functions to support improved health and behavioral outcomes. It involves the use of precise instruments to monitor physiological activity, including brainwave patterns, heart rate, respiration, muscle tension, and skin temperature. Real-time feedback is provided to the individual, facilitating the development of self-regulation skills for targeted physiological processes.¹

Note: Please refer to the Centene Policy CP.MP.168 for Biofeedback for non-behavioral health diagnoses. This policy is contingent on the member/enrollee having this benefit.

Policy/Criteria

- I. It is the policy of Centene Advanced Behavioral Health and health plans affiliated with Centene Corporation[®] that up to 25 sessions of *initial* behavioral health-related biofeedback are **medically necessary** if all the following are met:
 - A. The member/enrollee has a diagnosis of anxiety disorder or post-traumatic stress disorder as listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM V-TR);
 - B. There are significant symptoms that interfere with the member/enrollee'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 member/enrollee is motivated to and can actively participate in the treatment plan, including being responsive to the care plan requirements (e.g., practice and follow-through at home);
 - D. A comprehensive treatment plan includes biofeedback as an adjunctive intervention in addition to other primary evidence-based interventions;
 - 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 treat the member/enrollee's condition safely and effectively;
 - 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 practitioners, physician assistants, qualified mental health professionals, psychologists and, where applicable, biofeedback technicians;
 - I. A treatment plan is individualized with clearly stated realistic goals and objectives;
 - J. Treatment is structured to achieve optimum benefit and expected benefit is documented;

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- K. There is a documented planned transition out of biofeedback from the start of treatment, which may include ensuring the ability of the member/enrollee to continue the biofeedback-learned techniques independently after the biofeedback sessions end.
- II.** It is the policy of Centene Advanced Behavioral Health and health plans affiliated with Centene Corporation that up to an additional 20 sessions for the *continuation* of behavioral health-related biofeedback will be reviewed on a case-by-case basis by a Medical Director, informed by all the following:
- A. The 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. Progress related to biofeedback can be clearly described by at least a 25% reduction in severity compared to the last review;
 - D. When medically necessary, appropriate psychopharmacological intervention is provided;
 - E. There is documented planned transition out of biofeedback from the start of treatment, which includes, but is not limited to the following:
 - 1. Identifies a plan which ensures the member/enrollee can continue biofeedback-learned techniques independently after the biofeedback sessions end;
 - 2. Identifies a goal with a clear and reasonable score range on a validated scale assessment which demonstrates meaningful progress from the treatment.
- III.** It is the policy of Centene Advanced Behavioral Health and health plans affiliated with Centene Corporation that biofeedback is **no longer medically necessary** and discharge from treatment is medically appropriate when any one of the following are met:
- A. The documented goals and objectives have been achieved;
 - B. The member/enrollee no longer meets initiation or continuation criteria, or symptom severity has dropped by 50%;
 - C. The member/enrollee is not engaging in treatment, rendering biofeedback ineffective, despite multiple documented attempts to address non-participation issues;
 - D. The member/enrollee refuses treatment;
 - E. The member/enrollee is not making progress toward treatment goals and there is no reasonable expectation of progress with this treatment approach;
 - F. It is reasonably predicted that continuing improvement can occur after discontinuation of biofeedback with ongoing psychotherapy, medication management and/or community support.
- IV.** It is the policy of Centene Advanced Behavioral Health and health plans affiliated with Centene Corporation there is insufficient evidence in the published peer-reviewed literature to support the use of biofeedback for any behavioral health diagnosis other than what is noted in this policy as medically necessary.
- V.** It is the policy of Centene Advanced Behavioral Health and health plans affiliated with Centene Corporation that there is insufficient evidence in the published peer-reviewed literature to support the use of neurosound/biosound treatment, typically billed under the neurofeedback CPT code.

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Background

During a biofeedback session, a trained clinician applies electrical sensors to specific parts of a patient’s body to monitor the physiological response to stress, such as muscle contraction during a tension headache. The information is conveyed back to a person in real time via auditory (hearing) and visual (seeing) cues. These cues may be in the form of a beeping sound or a flashing light. With this feedback, the patient learns to recognize how the body responds to stress. The next step is to guide the patient towards developing techniques to produce positive physical changes.²

Biofeedback has demonstrated clinical effectiveness in the treatment of various behavioral health conditions, including anxiety disorders and post-traumatic stress disorder (PTSD). A meta-analysis of heart rate variability biofeedback (HRVB) interventions found moderate to large effect sizes in reducing PTSD symptoms among military service members, with low attrition rates and favorable participant outlooks.^{3,4} A systematic review and meta-analysis of neurofeedback interventions for PTSD reported a moderate effect size in reducing PTSD symptoms, with improvements observed in arousal, anxiety, depression, and intrusive thoughts.⁵

The practical implementation of neurofeedback and biofeedback as clinical therapies is currently unregulated in terms of educational standards, medical security, and the use of standardized protocols for specific disorders. Research suggests that there is further needed to identify the effectiveness of existing and newly developed protocols.

The Association for Applied Psychophysiology and Biofeedback¹

Biofeedback is NOT used as a treatment alone, nor can it be used independently to make a diagnosis. It should be used as an adjunctive tool to be combined with established therapeutic interventions under the guidance of qualified clinicians, educators, or coaches. While several biofeedback-based interventions have been well validated others are at various stages of research and development. The efficacy of certain forms and applications of biofeedback has yet to be confirmed through rigorous, peer reviewed studies involving adequate sample sizes, controlled conditions and long term follow up periods.

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 2024, 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. 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
90901*	Biofeedback training by any modality
90875*	30 minutes of individual psychophysiological therapy incorporating biofeedback training

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

*Code may be used for both medically necessary and not medically necessary (i.e., neurosound/biosound) therapies.

Reviews, Revisions, and Approvals	Revision Date	Approval Date
CBH Clinical Policy CP.BH.300 Neurofeedback for Behavioral Health Disorders adapted from MHN Clinical Policy HNCA.CP.MP.162 Neurofeedback for Behavioral Health Disorders.	05/20	5/20
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.	5/22	6/22
Ad hoc Review. “Last Review Date” in policy header changed to “Date of Last Revision,” and “Date” in the revision log was changed to “Revision Date.” Removed description paragraph pertaining to NCD biofeedback verbiage and FDA approval. Replaced all instances of “patient” with “member/enrollee.” Replaced “or” and “commas” with “semi-colons. Replaced all instances of the statement: “It is the policy of Centene Advanced Behavioral Health (CABH)” with the statement “It is the policy of Centene Advanced Behavioral Health and health plans affiliated with Centene Corporation.” Incorporated treatment plan information into section I. I-K. In section III.B, replaced the word “admission” with “initiation or continuation criteria.” In section IV, replaced “Experimental/investigational” verbiage with “current evidence does not support the safety and efficacy of biofeedback.” Removed verbiage pertaining to state criteria for biofeedback. Removed verbiage between the ICD-10 coding table and revision log that referred to LCDs and/or state regulations taking precedence, as this is duplicative with the policy disclaimer. Removed references related to ADHD severity scales as ADHD is not an included indication. Updated coding implications verbiage to reflect 2021 AMA copyright. Replaced all instances of “dashes (-) in page numbers with the word “to.”	11/22	12/22
Annual Review. Changed instances of the word “patient” and “individual” within the criteria section to “member/enrollee.” Added I.E., “Comprehensive treatment plan includes biofeedback as an adjunctive intervention in addition to other primary evidence-based interventions.” In section II. Added the statement “that up to 20 sessions for the continuation of behavioral health-related biofeedback will be reviewed on a case-by-case basis by a Medical Director”. Removed ICD 10 Code chart. Background and references reviewed and updated. Reviewed by external specialist.	6/23	

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Clarified policy description statement II. adding that “up to an additional” 20 sessions for the continuation of behavioral health-related biofeedback will be reviewed. In II.C. Removed the statement “as compared to the base line severity score” and added the statement “compared to the last review.” Clarified policy statement in II.E. adding: “II.E.1. Identifies a plan which ensures the member/enrollee can continue biofeedback-learned techniques independently after the biofeedback sessions end; and II.E.2: Identifies a goal with a clear and reasonable score range on a validated scale assessment which demonstrates meaningful progress from the treatment.”	7/23	07/23
Annual Review. Updated description. Minor rewording in criteria with no clinical significance. Removed coding implications section about billing for neurosounds/biosound. Added criteria point V. to indicate insufficient scientific evidence to support the efficacy of neurosound/biosound treatment. References reviewed and updated.	06/24	07/24
Annual review. Updated description. Removed duplicative criteria in D. regarding treatment plan participation. Minor rewording in criteria with no clinical significance. Background updated with no impact to criteria. References reviewed and updated. Reviewed by external specialist.	05/25	05/25

References

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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. The Health Plan 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. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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 Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. 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 requirements of law and regulation shall govern. The Health Plan 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. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at <http://www.cms.gov> for additional information.

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