# Clinical Policy: Biofeedback

Reference Number: CP.MP.168
Date of Last Revision: 11/22

Coding Implications
Revision Log

**See Important Reminder at the end of this policy for important regulatory and legal information.**

## Description

Biofeedback therapy provides visual, auditory or other evidence of the status of certain body functions so that a person can exert voluntary control over the functions, and thereby alleviate an abnormal bodily condition. Biofeedback therapy often uses electrical devices to transform bodily signals indicative of such functions as heart rate, blood pressure, skin temperature, salivation, peripheral vasomotor activity, and gross muscle tone into a tone or light, the loudness or brightness of which shows the extent of activity in the function being measured.[1]

**Note:** For neurofeedback for behavioral health conditions, refer to *CP.BH.300 Neurofeedback for Behavioral Health Conditions*.

## Policy/Criteria

**I.** It is the policy of health plans affiliated with Centene Corporation® that biofeedback is **medically necessary** when the basic and treatment-specific criteria in A and B are met.

Reconsideration of medical necessity should be made if more than 14 biofeedback treatments sessions in a 12 month period are necessary.

A. Basic Criteria - meets all of the following:
   1. The individual is motivated to actively participate in the treatment plan and agrees to the plan of care requirements, (e.g., practice and follow-through at home);
      a. If a child, support and guidance are available for fulfillment of the plan of care, (e.g., practice and follow-through at home);
   2. The individual is capable of participating in the treatment plan (physically as well as intellectually);
   3. There is a readily identifiable and measurable response;
   4. Biofeedback training is performed by a physician or qualified non-physician practitioner which can include physical and occupational therapists, nurse practitioners, physician assistants, and clinical nurse specialists.

B. Treatment-Specific Criteria - meets any of the following:
   1. Stress, urge, or mixed urinary incontinence in adult members/enrollees who have or previously had a female reproductive system, with no cognitive impairments that would limit participation, and who have failed a documented four week trial of Kegel pelvic muscle exercise training;
   2. Dysfunctional voiding in children, when other alternative options have been unsuccessful (e.g., timed voiding, prophylactic antibacterial therapy for recurrent urinary tract infections, short term anticholinergic medications to assist developing a normal voiding pattern);
   3. Fecal incontinence and all of the following:
      a. One of the following:
         i. Anorectal manometry demonstrates weakness of the external anal sphincter;

ii. Decreased ability to perceive rectal distension because of nerve injury;
b. None of the following contraindications:
i. Isolated internal anal sphincter weakness;
ii. Overflow incontinence associated with behavioral or psychiatric disorders;
iii. Neurological disorders associated with substantial loss of rectal sensation and/or the inability to contract the external anal sphincter;
iv. Decreased rectal storage capacity from resection, inflammation, or fibrosis;
v. Suspected or established major structural damage to continence mechanisms;

4. Chronic constipation in patients with organic neuromuscular impairment who have difficulty with outlet obstruction;
5. Thermal biofeedback combined with relaxation training or electromyography (EMG) biofeedback as treatment options in management of tension and migraine headaches;
6. Chronic pain as part of a rehabilitation program;
7. Muscle re-education of specific muscle groups or for treating pathological muscle abnormalities of spasticity, incapacitating muscle spasm (including pain due to spasm), or weakness when more conventional treatments (heat, cold, massage, exercise, support) have not been successful.

**II.** It is the policy of health plans affiliated with Centene Corporation that there is insufficient evidence to draw conclusions regarding the efficacy of biofeedback for any other circumstances than those specified above.

**Background**

The three most commonly used forms of biofeedback therapy are: (1) electromyography (EMG), which measures muscle tension; (2) thermal biofeedback, which measures skin temperature; and (3) neurofeedback or electroencephalography (EEG), which measures brain wave activity. Various forms of biofeedback appear to be effective for a narrow range of health problems.

First line treatment of urinary incontinence (stress, urgency, mixed) consists of behavioral treatments with an emphasis on improving quality of life. Initial treatment includes lifestyle modifications and pelvic floor muscle exercise (Kegel exercises). Biofeedback is used as an adjunct to pelvic floor muscle exercises. By providing individuals with concurrent feedback on muscle tone, biofeedback is intended to improve the patient's ability to perform pelvic muscle exercises. Augmented versions also use abdominal and perineal EMG recordings to demonstrate improper contraction of abdominal and gluteal muscles. A systematic review and meta-analysis of 17 randomized or quasi-randomized trials found that compared with women who received pelvic floor muscle exercises alone, those that also received biofeedback were more likely to report improvement or cure of urinary incontinence.[1]

Dysfunctional voiding in children is a learned behavior of abnormal urination, which often evolves from attempts to suppress impending or active bladder contractions by inappropriately contracting the pelvic floor muscles, thereby tightening the urinary sphincter complex. Symptoms vary but daytime wetness and urinary tract infections are common. Other urinary symptoms include urgency, frequency, infrequency, and constipation. Usual care of dysfunctional voiding includes voiding on a schedule and keeping voiding diaries. Kegel or pelvic floor exercises may help children gain conscious control of pelvic floor musculature and

urination.[2] Biofeedback teaches children how to identify and control the muscle groups involved in voiding. It is reserved for children with dysfunctional voiding despite an adequate trial of conservative therapy and/or pharmacotherapy. Available studies suggest that biofeedback-directed pelvic floor exercises can improve urinary function in dysfunctional voiding, including those who have previously failed conservative treatment. Biofeedback therapy may result in a faster resolution of symptoms than traditional pelvic floor training without biofeedback.

Biofeedback therapy improves symptoms in more than 70% of patients with defecatory disorders. Biofeedback can be useful in the treatment of constipation to train patients to relax their pelvic floor muscles during straining and to correlate relaxation and pushing to achieve defecation. By the relearning process, the non-relaxing pelvic floor is gradually suppressed and normal coordination restored. Biofeedback has been shown to improve rectoanal coordination during defecation and symptoms of constipation despite reduced laxative use. Biofeedback is also used in the treatment of fecal incontinence.[3]

*American Gastroenterological Association*
Pelvic floor retraining by biofeedback therapy rather than laxatives is recommended for defecatory disorders (strong recommendation, high-quality evidence).[3] Instrumented anorectal biofeedback therapy should be used to manage symptoms in defacatory disorders (strong recommendation; minimal risk of harm; quality of evidence: moderate.)[17]

*American Society of Colon and Rectal Surgeons*
Biofeedback may be considered as an initial treatment for patients with fecal incontinence and some preserved voluntary sphincter contraction when there is no response to simple dietary modification, medications, and other supportive measures. In their most recent guidelines on the treatment of fecal incontinence, the American Society of Colon and Rectal Surgeons assigned a strong recommendation in favor of biofeedback.[4]

*American Academy of Neurology*
The American Academy of Neurology recommends relaxation training, thermal biofeedback combined with relaxation training, EMG biofeedback, and cognitive-behavioral therapy as treatment options for prevention of migraine (Grade A). Specific recommendations regarding which of these to use for specific patients cannot be made.[5]

**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 2020, 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 |
| 90912 | Biofeedback training, perineal muscles, anorectal or urethral sphincter, including EMG and/or manometry, when performed; initial 15 minutes of one-on-one physician or other qualified health care professional contact with the patient |
| 90913 | Biofeedback training, perineal muscles, anorectal or urethral sphincter, including EMG and/or manometry, when performed; each additional 15 minutes of one-on-one physician or other qualified health care professional contact with the patient (List separately in addition to code for primary procedure) |

| Reviews, Revisions, and Approvals | Revision Date | Approval Date |
|---|---|---|
| Policy adopted from Health Net NMP168 Biofeedback | 06/17 | 07/17 |
| References reviewed and updated. | 05/18 | 05/18 |
| Removed information note that improvement of fecal/urinary incontinence should be noted in 4 sessions. | 09/18 | |
| Removed criteria point under I.A stating including being responsive to care plan requirements and the condition can be appropriately treated with biofeedback. Added child specific bullet point under I.A.1. Codes reviewed. Specialist review. | 04/19 | 05/19 |
| References reviewed and updated. Removed CPT 90911 – code deleted 1/1/2020. Replaced with 2020 CPT codes, 90912 and 90913. Removed I.B.5 "Anal muscle abnormalities of spasticity, incapacitating muscle spasm, and/or muscle weakness" as duplicative and revised language in I.B.3. Added contraindications to I.B.3.b. | 04/20 | 05/20 |
| References reviewed and updated. In II, replaced "experimental /investigational" language with the statement that there is insufficient evidence to draw conclusions regarding the efficacy of biofeedback for any other circumstances than those specified above."Replaced "member" with "member/enrollee." | 05/21 | 05/21 |
| Added note to refer to CP.BH.300 Neurofeedback for behavioral health conditions. | 10/21 | |
| Annual review. Updated background with no impact on criteria. Changed "review date" in the header to "date of last revision" and "date" in the revision log header to "revision date." References reviewed, updated and reformatted. Reviewed by specialist. | 12/21 | 12/21 |
| Annual review. References reviewed and updated. In I.B.1. changed "female" to "members/enrollees who have or previously had a female reproductive system" and reworded "cognitively intact" to "no cognitive impairments that would limit participation". ICD-10 code table removed. | 11/22 | 11/22 |

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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 member/enrollees. This clinical policy is not intended to

recommend treatment for member/enrollees. Member/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

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**Note: For Medicaid member/enrollees**, 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 member/enrollees,** 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.