

MEDICAL POLICY – 8.01.519

Nonpharmacologic Treatment of Hyperhidrosis

BCBSA Ref. Policy: 8.01.19

Effective Date: Oct. 1, 2024

Last Revised: May 1, 2025

Replaces: 8.01.19

RELATED MEDICAL POLICIES:

5.01.512 Botulinum Toxin

Select a hyperlink below to be directed to that section.

[POLICY CRITERIA](#) | [DOCUMENTATION REQUIREMENTS](#) | [CODING](#)
[RELATED INFORMATION](#) | [EVIDENCE REVIEW](#) | [REFERENCES](#) | [HISTORY](#)



Clicking this icon returns you to the hyperlinks menu above.

Introduction

Hyperhidrosis is a medical term that means excessive sweating. There are two types of hyperhidrosis: primary (focal) hyperhidrosis and secondary hyperhidrosis. Primary focal hyperhidrosis is sweating that's not due to another medical condition or is a side effect of medication. This kind of sweating is its own medical condition, and it takes place on specific parts of the body such as the hands, feet, underarms, or head and neck. These specific areas are known as focal areas.

The other type of hyperhidrosis is secondary hyperhidrosis. This is sweating that happens because of another medical reason such as diabetes, menopause, or obesity.

This policy describes when and what types of treatments may be medically necessary for primary focal and secondary hyperhidrosis.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria

This policy outlines when the nonpharmacologic treatment of hyperhidrosis is considered medically necessary (click condition to navigate to that section):

- [Primary focal hyperhidrosis](#)
- [Severe secondary gustatory hyperhidrosis](#)

*Note: See [Definition of Terms](#) below

Condition	Indications
Hyperhidrosis	<p>Treatment of hyperhidrosis in the absence of a functional impairment* as described in this policy is considered not medically necessary.</p> <p>*Note: See Definition of Terms below</p>
<p>Primary focal hyperhidrosis</p> <p>Use links below to navigate to treatment options by region:</p> <ul style="list-style-type: none"> • Axillary • Palmar • Plantar • Craniofacial 	<p>Treatment of primary focal hyperhidrosis may be considered medically necessary for treatment of a functional impairment* as seen in any of the following medical conditions:</p> <ul style="list-style-type: none"> • Acrocyanosis (bluish discoloration) of the hands; or • History of recurrent skin maceration with bacterial or fungal infections; or • History of recurrent secondary infections; or • History of persistent eczematous dermatitis despite medical treatments with topical dermatologic or systemic anticholinergic agents <p>*Note: See Definition of Terms below</p>
Focal region	Treatment
<p>Primary focal hyperhidrosis</p> <ul style="list-style-type: none"> • Axillary 	<p>The following treatments may be considered medically necessary for individuals ≥ 18 years of age to treat the axillary region when treatment of a functional impairment* criteria have been met (see above):</p> <ul style="list-style-type: none"> • Endoscopic transthoracic sympathectomy (ETS), if conservative treatment (i.e., aluminum chloride 20% solution and botulinum toxin) has failed • Surgical excision of axillary sweat glands, if conservative treatment (i.e., aluminum chloride 20% solution and botulinum toxin) has failed

Condition	Indications
	<p>The following treatments are considered investigational for the treatment of axillary regions:</p> <ul style="list-style-type: none"> • Axillary liposuction • Iontophoresis • Microwave treatment • Radiofrequency ablation
<p>Primary focal hyperhidrosis</p> <ul style="list-style-type: none"> • Palmar 	<p>The following treatments may be considered medically necessary for individuals ≥ 18 years of age to treat the palmar region when treatment of a functional impairment* criteria have been met (see above):</p> <ul style="list-style-type: none"> • Endoscopic transthoracic sympathectomy (ETS), if conservative treatment (i.e., aluminum chloride 20% solution and botulinum toxin type A) has failed <p>The following treatments are considered investigational for the treatment of the palmar region:</p> <ul style="list-style-type: none"> • Iontophoresis • Microwave treatment • Radiofrequency ablation
<p>Primary focal hyperhidrosis</p> <ul style="list-style-type: none"> • Plantar 	<p>The following treatments may be considered medically necessary to treat the plantar region when treatment of a functional impairment* criteria have been met (see above):</p> <ul style="list-style-type: none"> • Aluminum chloride 20% solution <p>The following treatments are considered investigational for treatment of the plantar region:</p> <ul style="list-style-type: none"> • Iontophoresis • Lumbar sympathectomy • Microwave treatment • Radiofrequency ablation
<p>Primary focal hyperhidrosis</p> <ul style="list-style-type: none"> • Craniofacial 	<p>The following treatment may be considered medically necessary to treat the craniofacial region when treatment of a functional impairment* criteria have been met (see above):</p> <ul style="list-style-type: none"> • Endoscopic transthoracic sympathectomy (ETS), if conservative treatment (i.e., aluminum chloride 20% solution) has failed

Condition	Indications
	<p>The following treatments are considered investigational for the treatment of the craniofacial region:</p> <ul style="list-style-type: none"> • Iontophoresis • Microwave treatment • Radiofrequency ablation
Severe secondary gustatory hyperhidrosis	<p>The following treatment may be considered medically necessary to treat severe secondary gustatory hyperhidrosis:</p> <ul style="list-style-type: none"> • Tympanic neurectomy, if conservative treatment (i.e., aluminum chloride 20% solution) has failed <p>The following treatment is considered investigational as a treatment for severe secondary gustatory hyperhidrosis including, but not limited to:</p> <ul style="list-style-type: none"> • Iontophoresis

Aluminum chloride solution is approved by FDA for treatment of primary hyperhidrosis.

FDA: US Food and Drug Administration; OTC: over-the-counter.

Documentation Requirements

For primary focal hyperhidrosis (excessive sweating)

Clinical documentation supporting treatment of a functional impairment as seen in one or more of the medical conditions noted below along with the affected focal region (axillary, palmar, plantar, or craniofacial) and the requested treatment (endoscopic transthoracic sympathectomy, surgical excision of axillary sweat glands) along with the conservative treatments that were trialed and failed:

- Acrocyanosis of the hands (a bluish or purplish color to the hands)

OR

- History of persistent eczematous dermatitis (red, itchy skin) despite medical treatments with topical dermatological or systemic anticholinergic agents

OR

- History of recurrent secondary infections

OR

- History of recurrent skin maceration (skin that softens) and with bacterial or fungal infections.

For severe secondary gustatory hyperhidrosis (excessive sweating after eating spicy foods)

Documentation Requirements

Clinical documentation noting the affected area of excessive sweating, the requested treatment, and the conservative treatment trialed and failed:

- Tympanic neurectomy, if conservative treatment has failed

Coding

Code	Description
CPT	
32664	Thoracoscopy, surgical; with thoracic sympathectomy
64818	Sympathectomy, lumbar
69676	Tympanic neurectomy

Note: CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). HCPCS codes, descriptions and materials are copyrighted by Centers for Medicare Services (CMS).

Related Information

Definition of Terms

Cosmetic: In this policy, cosmetic services are those which are primarily intended to preserve or improve appearance. Cosmetic surgery is performed to reshape normal structures of the body in order to improve the individual's appearance or self-esteem.

Physical functional impairment: In this policy, physical functional impairment means a limitation from normal (or baseline level) of physical functioning that may include, but is not limited to, problems with ambulation, mobilization, communication, respiration, eating, swallowing, vision, facial expression, skin integrity, distortion of nearby body parts or obstruction of an orifice. The physical functional impairment can be due to structure, congenital deformity, pain, or other causes. Physical functional impairment excludes social, emotional, and psychological impairments or potential impairments.

Reconstructive surgery: In this policy, reconstructive surgery refers to surgeries performed on abnormal structures of the body, caused by congenital defects, developmental abnormalities, trauma, infection, tumors, or disease. It is generally performed to improve function.

Primary focal hyperhidrosis: A multispecialty working group defined primary focal hyperhidrosis as a condition characterized by visible, excessive sweating of at least 6 months in duration without apparent cause and with at least 2 of the following features:

- age at onset younger than 25 years
- bilateral and relatively symmetric sweating
- cessation of focal sweating during sleep
- frequency of at least once per week
- impairment of daily activities
- positive family history

The Hyperhidrosis Disease Severity Scale (HDSS) is used by individuals to rate the severity of their symptoms on a scale of 1 to 4 (see [Table 1](#) below).

Table 1. The Hyperhidrosis Disease Severity Scale

Score	Definition
1	My underarm sweating is never noticeable and never interferes with my daily activities
2	My underarm sweating is tolerable but sometimes interferes with my daily activities
3	My underarm sweating is barely tolerable and frequently interferes with my daily activities
4	My underarm sweating is intolerable and always interferes with my daily activities

Benefit Application

Nonsurgical agents may be managed under a pharmacy benefit.



Description

Hyperhidrosis, or excessive sweating, can lead to impairments in psychological and social functioning. Various treatments for hyperhidrosis are available, such as topical antiperspirant agents (e.g., aluminum chloride 20% solution), oral medications, botulinum toxin, and surgical procedures.

Background

Hyperhidrosis

Hyperhidrosis has been defined as excessive sweating, beyond a level required to maintain normal body temperature, in response to heat exposure or exercise. It can be classified as primary or secondary. Primary focal hyperhidrosis is idiopathic, typically involving the hands (palmar), feet (plantar), or axillae (underarms). Secondary hyperhidrosis can result from a variety of drugs (e.g., tricyclic antidepressants, selective serotonin reuptake inhibitors) or underlying diseases/conditions (e.g., febrile diseases, diabetes, menopause). Secondary hyperhidrosis is usually generalized or craniofacial sweating.

Secondary gustatory hyperhidrosis is excessive sweating on ingesting highly spiced foods. This trigeminovascular reflex typically occurs symmetrically on the scalp or face and predominately over the forehead, lips, and nose. Secondary facial gustatory occurs independently of the nature of the ingested food. This phenomenon frequently occurs after injury or surgery in the region of the parotid gland. Frey syndrome is an uncommon type of secondary gustatory hyperhidrosis that arises from injury to or surgery near the parotid gland resulting in damage to the secretory parasympathetic fibers of the facial nerve. After the injury, these fibers regenerate, and miscommunication occurs between them and the severed postganglionic sympathetic fibers that supply the cutaneous sweat glands and blood vessels. The aberrant connection results in gustatory sweating and facial flushing with mastication. Aberrant secondary gustatory sweating follows up to 73% of surgical sympathectomies and is particularly common after bilateral procedures.

The consequences of hyperhidrosis are primarily psychosocial. Symptoms such as fever, night sweats, or weight loss require further investigation to rule out secondary causes. Sweat

production can be assessed with the Minor starch-iodine test, which is a simple qualitative measure to identify specific sites of involvement.

Treatment

A variety of therapies have been investigated for primary hyperhidrosis, including topical therapy with aluminum chloride, topical anticholinergic medications, oral anticholinergic medications, iontophoresis, intradermal injections of botulinum toxin, endoscopic transthoracic sympathectomy, and surgical excision of axillary sweat glands. Treatment of secondary hyperhidrosis focuses on the treatment of the underlying cause, such as discontinuing certain drugs or hormone replacement therapy as a treatment for menopausal symptoms.

Iontophoresis uses an electrical current to deliver medication transdermally. A charged ionic drug is placed on the skin with an electrode of the same charge, which drives the drug into the skin, with the purpose of achieving better penetration of the drug into the underlying tissue. The benefits of this method would be an enhancement of treatment effects and a reduction in adverse events associated with systemic administration of the drug.

Surgical treatment options include removal of the eccrine glands and/or interruption of the sympathetic nerves. Eccrine sweat glands produce an aqueous secretion, the overproduction of which is primarily responsible for hyperhidrosis. These glands are innervated by the sympathetic nervous system. Surgical removal has been performed in individuals with severe isolated axillary hyperhidrosis.

Various surgical techniques of sympathectomy have been tested. The second (T2) and third (T3) thoracic ganglia are responsible for palmar hyperhidrosis, the fourth (T4) thoracic ganglion controls axillary hyperhidrosis, and the first (T1) thoracic ganglion controls craniofacial hyperhidrosis. Thoracic sympathectomy has been investigated as a potentially curative procedure, primarily for combined palmar and axillary hyperhidrosis unresponsive to nonsurgical treatments. While accepted as an effective treatment, sympathectomy is not without complications. In addition to the immediate surgical complications of pneumothorax or temporary Horner syndrome, compensatory sweating on the trunk generally occurs in most individuals, with different degrees of severity. Medical researchers have investigated whether certain approaches (e.g., T3 sympathectomy vs T4 sympathectomy) result in less compensatory sweating, but there remains a lack of consensus about which approach best minimizes the risk of this adverse event. Also, with lumbar sympathectomy for plantar hyperhidrosis, there has been concern about the risk of postoperative sexual dysfunction in both men and women.

Outcome Measures

Outcomes from different surgical and medical treatment modalities are best assessed using a combination of tools. Quantitative tools include gravimetry, evaporimetry, and the Minor starch-iodine test. Qualitative assessment tools include general health surveys and hyperhidrosis-specific surveys. Of these, the Hyperhidrosis Disease Severity Scale (HDSS) (see [Table 1](#)) has had a good correlation to other assessment tools and is practical in the clinical setting.

Summary of Evidence

Primary Focal Hyperhidrosis

Iontophoresis

For individuals who have primary focal hyperhidrosis (i.e., axillary, palmar, plantar, craniofacial) who receive iontophoresis, the evidence includes a systematic review, a randomized controlled trial (RCT), and case series. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. The RCT found that iontophoresis was less effective than botulinum toxin in the short-term treatment of palmar hyperhidrosis. Additional RCTs are needed comparing iontophoresis with sham or active treatment in individuals with various types of primary focal hyperhidrosis. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Microwave

For individuals who have primary focal hyperhidrosis (i.e., axillary, palmar, plantar, craniofacial) who receive microwave treatment, the evidence includes a systematic review, an RCT, and a case series. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. The systematic review and RCT found a short-term benefit of microwave treatment in reducing hyperhidrosis but also reported skin-related adverse events (e.g., pain, altered sensation). Additional RCTs are needed comparing microwave treatment with sham or active treatment in individuals with various types of primary focal hyperhidrosis. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Radiofrequency Ablation

For individuals who have primary focal hyperhidrosis (i.e., axillary, palmar, plantar, craniofacial) who receive radiofrequency ablation (RFA), the evidence includes two small RCTs and a nonrandomized cohort study. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. One nonrandomized comparative study found RFA inferior to surgical sympathectomy for individuals with severe bilateral palmar hyperhidrosis resistant to conservative treatment. Two small RCTs that compared RFA to botulinum toxin A in individuals with palmar or axillary hyperhidrosis had conflicting results. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Surgery

For individuals who have primary axillary hyperhidrosis who receive surgical excision of axillary sweat glands, the evidence includes review articles. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. The evidence has shown that excision is highly effective, and this treatment is considered standard of care for this indication. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have primary axillary and palmar hyperhidrosis who receive endoscopic transthoracic sympathectomy, the evidence includes several RCTs, a meta-analysis, and case series. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. The meta-analysis found a high rate of clinical efficacy after endoscopic transthoracic sympathectomy, although the rate of postoperative compensatory sweating was substantial. Subsequent studies have supported these findings. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have primary plantar hyperhidrosis who receive lumbar sympathectomy, the evidence includes one RCT conducted at a single center in Brazil, case series, and a systematic review. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. Case series have reported high rates of clinical efficacy, but findings are inconclusive due to lack of control groups. The RCT was limited by its small sample size and lack of blinded outcome assessment. Moreover, there have been substantial rates of compensatory sweating and concerns about adverse events on sexual functioning. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Secondary Gustatory Hyperhidrosis

For individuals who have severe secondary gustatory hyperhidrosis who receive iontophoresis or botulinum toxin, the evidence includes uncontrolled studies and systematic reviews. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. The systematic reviews did not identify any relevant RCTs. RCTs are needed to evaluate the safety and efficacy of these treatments for severe secondary gustatory hyperhidrosis. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have severe secondary gustatory hyperhidrosis who receive tympanic neurectomy, the evidence includes uncontrolled studies and systematic reviews. The relevant outcomes are symptoms, quality of life, and treatment-related morbidity. This treatment has high success rates, without the need for repeated interventions, and is considered standard of care for this indication. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

Ongoing and Unpublished Clinical Trials

Some currently ongoing and unpublished trials that might influence this review are listed in [Table 2](#).

Table 2. Summary of Key Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
Ongoing			
NCT02295891	Microwave Energy-induced Thermolysis of Axillary Apocrine Glands and Hair Follicles Will Result in Improvement of Secondary Psychopathology Related to Hyperhidrosis	24	Nov 2024
NCT03921320	Evaluation of Compensatory Sweating After Unilateral Videothoracoscopic Sympathectomy of the Dominant Side or Sequential Bilateral Videothoracoscopic Sympathectomy: a Multicentric Randomized Trial	200	Dec 2023 (status unknown)
NCT05737914	Bilateral Endoscopic Thoracic T3 Sympathectomy Versus T3 Radiofrequency Ablation for Treatment of Primary Palmar Hyperhidrosis	68	Oct 2023



NCT No.	Trial Name	Planned Enrollment	Completion Date
Unpublished			
NCT03433859	Prospective Multicentric Open Randomised Controlled Trial Comparing Topical Aluminium Chloride to OnabotulinumtoxinA Intradermal Injections in Residual Limb Hyperhidrosis (Lower Limbs)	54	Mar 2021
NCT02854540	Management of Palmar Hyperhidrosis with Hydrogel-based Iontophoresis	13	Aug 2018
NCT03236012	Hyperhidrosis of the Residual Limb in Patients With Amputations: Developing a Treatment Approach	25	Feb 2022
NCT05057117	Longevity of Microwave Thermolysis and Botulinum Toxin A for Treatment of Axillary Hyperhidrosis: a Randomized Intra-Individual Trial	30	Apr 2023

NCT: national clinical trial.

Practice Guidelines and Position Statements

The purpose of the following information is to provide reference material. Inclusion does not imply endorsement or alignment with the policy conclusions.

Guidelines or position statements will be considered for inclusion if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

National Institute for Health and Care Excellence

In 2014, the NICE issued guidance stating that there was sufficient evidence for the efficacy and safety of endoscopic thoracic sympathectomy for primary facial blushing to support the use of the procedure.³³

The Institute also issued guidance in 2014 on endoscopic thoracic sympathectomy for primary hyperhidrosis of the upper limb.³⁴ The guidance stated that "current evidence on the efficacy and safety of endoscopic thoracic sympathectomy for primary hyperhidrosis of the upper limb is adequate to support the use of this procedure." Also: "Due to the risk of side effects, this

procedure should only be considered in individuals suffering from severe and debilitating primary hyperhidrosis that has been refractory to other treatments.”

For severe primary axillary hyperhidrosis, NICE issued guidance in 2017 on the use of transcutaneous microwave ablation.³⁵ The guidance stated that there is inadequate evidence in both quantity and quality to evaluate the safety and efficacy of microwave ablation.

Society of Thoracic Surgeons

In 2011, the Society of Thoracic Surgeons published an expert consensus statement on the surgical treatment of hyperhidrosis.³⁶ The document stated that endoscopic thoracic sympathectomy is the treatment of choice for individuals with primary hyperhidrosis. It further recommended the following treatment strategies (with R referring to rib and the number to which rib):

- R3 interruption for palmar hyperhidrosis; an R4 interruption is also reasonable. The authors note a slightly higher rate of compensatory sweating with R3, but R3 is also more effective at treating hyperhidrosis.
- R4 or R5 interruption for palmar-axillary, palmar-axillary-plantar, or axillary hyperhidrosis alone; R5 interruption is also an option for axillary hyperhidrosis alone.
- R3 interruption for craniofacial hyperhidrosis without blushing; an R2 and R3 procedure is an option but may lead to a higher rate of compensatory sweating, and also increases the risk of Horner syndrome.

According to the statement, endoscopic thoracic sympathectomy has been recommended for individuals with severe symptoms that cannot be managed with other therapies who meet the following criteria:

- Onset of hyperhidrosis at an early age (before 16 years)
- <25 years of age at the time of surgery
- Body mass index <28 kg/m²
- No sweating during sleep
- No significant comorbidities
- Resting heart rate <55 beats per minute

Medicare National Coverage

There is no national coverage determination.

Regulatory Status

In 2011, the miraDry System (Miramar Labs) was cleared for marketing by the FDA through the 510(k) process for treating primary axillary hyperhidrosis. This microwave device is designed to heat tissue at the dermal-hypodermal interface, the location of the sweat glands. Treatment consists of two sessions for a total duration of approximately one hour. Sessions occur in a physician's office, and a local anesthetic is used. The device is currently not approved for the treatment of palmar or plantar hyperhidrosis.

In 2023, the Brella Sweat Control Patch (Candesant Biomedical, Inc.) was approved by the FDA through the 513(f)(2) de novo pathway for the treatment of primary axillary hyperhidrosis in adults. The patch is applied by a clinician and kept in place for up to 3 minutes, during which the patch's sodium layer creates heat after coming into contact with sweat, which leads to temporary inactivation of sweat glands.

References

1. Food and Drug Administration. Approved risk evaluation and mitigation strategies. <https://www.accessdata.fda.gov/scripts/cder/remis/index.cfm>. Accessed August 12, 2024.
2. Wade R, Rice S, Llewellyn A, et al. Interventions for hyperhidrosis in secondary care: a systematic review and value-of-information analysis. *Health Technol Assess*. Dec 2017; 21(80): 1-280. PMID 29271741
3. Rajagopal R, Mallya NB. Comparative evaluation of botulinum toxin versus iontophoresis with topical aluminium chloride hexahydrate in treatment of palmar hyperhidrosis. *Med J Armed Forces India*. Jul 2014; 70(3): 247-52. PMID 25378778
4. Solish N, Bertucci V, Dansereau A, et al. A comprehensive approach to the recognition, diagnosis, and severity-based treatment of focal hyperhidrosis: recommendations of the Canadian Hyperhidrosis Advisory Committee. *Dermatol Surg*. Aug 2007; 33(8): 908-23. PMID 17661933
5. Dogruk Kacar S, Ozuguz P, Eroglu S, et al. Treatment of primary hyperhidrosis with tap water iontophoresis in paediatric patients: a retrospective analysis. *Cutan Ocul Toxicol*. Dec 2014; 33(4): 313-6. PMID 24405389
6. McAleer MA, Collins P. A study investigating patients' experience of hospital and home iontophoresis for hyperhidrosis. *J Dermatolog Treat*. Aug 2014; 25(4): 342-4. PMID 23356798



7. Hsu TH, Chen YT, Tu YK, et al. A systematic review of microwave-based therapy for axillary hyperhidrosis. *J Cosmet Laser Ther.* Oct 2017; 19(5): 275-282. PMID 28281850
8. Glaser DA, Coleman WP, Fan LK, et al. A randomized, blinded clinical evaluation of a novel microwave device for treating axillary hyperhidrosis: the dermatologic reduction in underarm perspiration study. *Dermatol Surg.* Feb 2012; 38(2): 185-91. PMID 22289389
9. Hong HC, Lupin M, O'Shaughnessy KF. Clinical evaluation of a microwave device for treating axillary hyperhidrosis. *Dermatol Surg.* May 2012; 38(5): 728-35. PMID 22452511
10. Mostafa TAH, Hamed AA, Mohammed BM, et al. C-Arm Guided Percutaneous Radiofrequency Thoracic Sympathectomy for Treatment of Primary Palmar Hyperhidrosis in Comparison with Local Botulinum Toxin Type A Injection, Randomized Trial. *Pain Physician.* Nov 2019; 22(6): 591-599. PMID 31775406
11. Rummaneethorn P, Chalermchai T. A comparative study between intradermal botulinum toxin A and fractional microneedle radiofrequency (FMR) for the treatment of primary axillary hyperhidrosis. *Lasers Med Sci.* Jul 2020; 35(5): 1179-1184. PMID 31939036
12. Purtuloglu T, Atim A, Deniz S, et al. Effect of radiofrequency ablation and comparison with surgical sympathectomy in palmar hyperhidrosis. *Eur J Cardiothorac Surg.* Jun 2013; 43(6): e151-4. PMID 23428574
13. Hafner J, Beer GM. Axillary sweat gland excision. *Curr Probl Dermatol.* 2002; 30: 57-63. PMID 12471699
14. Deng B, Tan QY, Jiang YG, et al. Optimization of sympathectomy to treat palmar hyperhidrosis: the systematic review and meta-analysis of studies published during the past decade. *Surg Endosc.* Jun 2011; 25(6): 1893-901. PMID 21136103
15. Baumgartner FJ, Reyes M, Sarkisyan GG, et al. Thoracoscopic sympathectomy for disabling palmar hyperhidrosis: a prospective randomized comparison between two levels. *Ann Thorac Surg.* Dec 2011; 92(6): 2015-9. PMID 22115211
16. Yuncu G, Turk F, Ozturk G, et al. Comparison of only T3 and T3-T4 sympathectomy for axillary hyperhidrosis regarding treatment effect and compensatory sweating. *Interact Cardiovasc Thorac Surg.* Aug 2013; 17(2): 263-7. PMID 23644731
17. de Andrade Filho LO, Kuzniec S, Wolosker N, et al. Technical difficulties and complications of sympathectomy in the treatment of hyperhidrosis: an analysis of 1731 cases. *Ann Vasc Surg.* May 2013; 27(4): 447-53. PMID 23406790
18. Karamustafaoglu YA, Kuzucuoglu M, Yanik F, et al. 3-year follow-up after uniportal thoracoscopic sympathectomy for hyperhidrosis: undesirable side effects. *J Laparoendosc Adv Surg Tech A.* Nov 2014; 24(11): 782-5. PMID 25376004
19. Smidfelt K, Drott C. Late results of endoscopic thoracic sympathectomy for hyperhidrosis and facial blushing. *Br J Surg.* Dec 2011; 98(12): 1719-24. PMID 21928403
20. Wait SD, Killory BD, Lekovic GP, et al. Thoracoscopic sympathectomy for hyperhidrosis: analysis of 642 procedures with special attention to Horner's syndrome and compensatory hyperhidrosis. *Neurosurgery.* Sep 2010; 67(3): 652-6; discussion 656-7. PMID 20647968
21. Lembrança L, Wolosker N, de Campos JRM, et al. Videothoracoscopic Sympathectomy Results after Oxybutynin Chloride Treatment Failure. *Ann Vasc Surg.* Aug 2017; 43: 283-287. PMID 28478174
22. de Campos JRM, Lembrança L, Fukuda JM, et al. Evaluation of patients who underwent resympathectomy for treatment of primary hyperhidrosis. *Interact Cardiovasc Thorac Surg.* Nov 01 2017; 25(5): 716-719. PMID 29049566
23. Fukuda JM, Varella AYM, Teivelis MP, et al. Video-Assisted Thoracoscopic Sympathectomy for Facial Hyperhidrosis: The Influence of the Main Site of Complaint. *Ann Vasc Surg.* Jan 2018; 46: 337-344. PMID 28689957
24. Vasconcelos-Castro S, Soares-Oliveira M, Tuna T, et al. Thoracoscopic sympathectomy for palmar hyperhidrosis: How young is too young?. *J Pediatr Surg.* Nov 2020; 55(11): 2362-2365. PMID 31870560
25. Lima SO, Santos RS, Moura AMM, et al. A systematic review and meta-analysis to evaluate the efficacy of lumbar sympathectomy for plantar hyperhidrosis. *Int J Dermatol.* Aug 2019; 58(8): 982-986. PMID 31099425
26. Loureiro Mde P, de Campos JR, Kauffman P, et al. Endoscopic lumbar sympathectomy for women: effect on compensatory sweat. *Clinics (Sao Paulo).* Apr 2008; 63(2): 189-96. PMID 18438572



27. Hornberger J, Grimes K, Naumann M, et al. Recognition, diagnosis, and treatment of primary focal hyperhidrosis. *J Am Acad Dermatol*. Aug 2004; 51(2): 274-86. PMID 15280848
28. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Iontophoresis for Medical Indications. TEC Assessments 2003;Volume 18, Tab 3.
29. Li C, Wu F, Zhang Q, et al. Interventions for the treatment of Frey's syndrome. *Cochrane Database Syst Rev*. Mar 17 2015; (3): CD009959. PMID 25781421
30. Clayman MA, Clayman SM, Seagle MB. A review of the surgical and medical treatment of Frey syndrome. *Ann Plast Surg*. Nov 2006; 57(5): 581-4. PMID 17060744
31. de Bree R, van der Waal I, Leemans CR. Management of Frey syndrome. *Head Neck*. Aug 2007; 29(8): 773-8. PMID 17230557
32. National Institute of Health and Care Excellence (NICE). Endoscopic thoracic sympathectomy for primary facial blushing [IPG480]. 2014; <https://www.nice.org.uk/guidance/ipg480>. Accessed August 12, 2024.
33. National Institute of Health and Care Excellence (NICE). Endoscopic thoracic sympathectomy for primary hyperhidrosis of the upper limb [IPG487]. 2014; <https://www.nice.org.uk/guidance/ipg487>. Accessed August 12, 2024.
34. National Institute of Health and Care Excellence (NICE). Transcutaneous microwave ablation for severe primary axillary hyperhidrosis [IPG601]. 2017; <https://www.nice.org.uk/guidance/ipg601>. Accessed August 12, 2024.
35. Cerfolio RJ, De Campos JR, Bryant AS, et al. The Society of Thoracic Surgeons expert consensus for the surgical treatment of hyperhidrosis. *Ann Thorac Surg*. May 2011; 91(5): 1642-8. PMID 21524489

History

Date	Comments
09/07/99	Add to Therapy Section - New Policy
11/12/02	Replace Policy - Policy reviewed without literature review; new review date only.
09/12/03	Replace Policy - Policy updated regarding iontophoresis as a treatment for hyperhidrosis based on 2003 TEC Assessment; policy statement revised to indicate that this is considered investigational (previously considered medically necessary). Policy changed from "AR" to "BC."
03/09/04	Replace Policy - Policy revised regarding surgical treatments of axillary hyperhidrosis; surgical excision considered medically necessary, axillary liposuction considered investigational.
06/08/04	Replace Policy - Correction to policy statement to remove surgical excision of axillary sweat glands from investigative statement in Policy Section.
03/08/05	Replace Policy - Policy updated with literature search; policy statement unchanged.
02/06/06	Codes updated - No other changes.
06/02/06	Disclaimer and Scope updates - No other changes.
06/12/07	New PR Policy - Policy replaces BC.8.01.19. In the treatment of primary hyperhidrosis, treatment is considered medically necessary when physical functional impairment exists;



Date	Comments
	and cosmetic when no physical functional impairment is present; axillary liposuction is considered investigational. Botox is indicated as medically necessary treatment for secondary gustatory hyperhidrosis. Definitions of physical functional impairment, cosmetic and reconstructive surgery added to Benefit Application section.
11/12/07	Code updated - CPT code 89230 removed as directed by RPIW 11/8/07.
04/08/08	Replace Policy - Policy statement regarding aluminum chloride, iontophoresis, botulinum toxin, endoscopic transthoracic sympathectomy and surgical excision of axillary sweat glands changed from "cosmetic" to "not medically necessary" when there is no physical functional impairment. Description, Rationale and Reference sections updated.
05/12/09	Replace Policy - Policy updated with literature search; no change to policy statement. References added.
08/11/09	Code update - 68409 & 64818 added, no other changes.
12/08/09	Code Update - 89230 added back to policy.
02/09/10	Code Update - New 2010 code added.
04/13/10	Replace Policy - Policy updated with literature search; no change to policy statement.
11/15/10	Codes Updated - Additional J Codes added.
05/10/11	Replace Policy - Policy updated with literature search; no change to policy statement. Reference added.
07/10/12	Replace policy. An extensive reformatting of policy statement was done to mirror the layout of Blue Cross Policy 8.01.19 Treatment of Hyperhidrosis. Added Microwave treatment as investigational for primary focal hyperhidrosis. The Description and Rationale sections have been updated. Reference 2 replaced. Added CPT 69676 tympanic neurectomy and 97033 application of modality iontophoresis. Added ICD-9 procedure 99.27 Iontophoresis, added J3490 unclassified drugs, J0588 Injection, incobotulinumtoxinA, 1 unit.
10/09/12	Update Coding Section – ICD-10 codes are now effective 10/01/2014.
07/08/13	Replace policy. Policy statement has addition of <i>radiofrequency ablation</i> as investigational for treatment of palmar hyperhidrosis. Rationale updated based on a literature review through May 2013. References 4, 19, 20 and 32 added; other references renumbered or removed. Some policy sections reformatted for readability. Policy statement changed as noted.
07/31/14	Annual Review. Policy updated with literature search through May, 2014. References 5, 15, 20, 41 added; others renumbered/removed. Policy statements unchanged.
07/14/15	Annual Review. Policy updated with literature search through April, 2015. Policy statements reformatted and edited for clarity. The word "complications" changed to "conditions" in the policy statements. References 5, 33 added, reference 30 removed; others renumbered. Policy statements clarified, intent is unchanged. Coding update: CPT



Date	Comments
	codes 64650, 64653, 64809, 64818, 95923, 97033, and HCPCS codes J0585, J0586, J0587, J0588 & J3490 removed. Retained only CPT code 32664 that specifically relates to this policy. ICD-9 and ICD-10 procedure codes removed; they were listed for informational purposes only. Policy 5.01.512 removed from Related Policies section.
08/01/16	Annual Review, approved July 12, 2016. Policy updated with literature review through March 22, 2016; references 14, 30 and 37 added. Policy statements unchanged. Code table revised in the Policy Guidelines section, only CPT 32664 is retained for review purposes.
12/01/17	Annual Review, approved November 9, 2017. Literature review completed through October 2017. No new references added. Policy statements unchanged.
07/01/18	Annual Review, approved June 12, 2018, effective October 5, 2018. Policy updated with literature review through February 2018; references 1, 7, 20, 32-34, and 43 added. Policy section revised to align with evidence summary; Policy statements for iontophoresis and radiofrequency ablation changed to investigational for all categories. Botulinum toxin changed to investigational for plantar, craniofacial and secondary gustatory hyperhidrosis
09/01/19	Annual Review, approved August 6, 2019. Policy updated with literature review through October 2018; reference added. Policy statements unchanged.
04/01/20	Delete policy, approved March 19, 2020, effective April 1, 2020. This policy is replaced with 8.01.19, Policy statements remain unchanged; this is effectively a policy renumber.
09/01/20	Interim Review, approved August 4, 2020. Policy updated with literature review through April, 2020; references added. Policy statements unchanged.
09/01/21	Annual Review, approved August 3, 2021. Policy updated with literature review through May 6, 2021; references added. Format of policy statements edited from tabular to list, but intent unchanged.
09/01/22	Policy renumbered, approved August 9, 2022 from 8.01.19 Treatment of Hyperhidrosis to 8.01.519 Treatment of Hyperhidrosis. Policy updated with literature review through April 29, 2022; no references added. Policy statements unchanged. Added HCPCS codes J0585, J0586, J0587 and J0588.
03/01/23	Interim Review, approved February 14, 2023. Policy criteria has been reformatted for greater ease of understanding. Policy intent unchanged. Initial and re-authorization criteria added. Changed the wording from "patient" to "individual" throughout the policy for standardization. Added CPT codes 64650, 64653, 64818.
09/01/23	Annual Review, approved August 7, 2023. Policy updated with literature review through May 3, 2023; references added. Minor editorial refinements to policy statements; intent unchanged.
11/01/23	Interim Review, approved October 10, 2023. Policy title changed from "Treatment of Hyperhidrosis" to "Nonpharmacologic Treatment of Hyperhidrosis." Removed content on botulinum toxin from this policy as it is now reviewed in policy 5.01.512 Botulinum



Date	Comments
	Toxins. Otherwise, policy statements are unchanged. Removed HCPCS codes J0585-J0588 and CPT codes 64650 and 64653. Added CPT codes 11450, 11451 and 69676.
10/01/24	Annual Review, approved September 9, 2024. Policy updated with literature review through April 26, 2024; references added. Policy statements unchanged.
05/01/25	Coding update. Removed HCPCS 11450, 11451.

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. The Company adopts policies after careful review of published peer-reviewed scientific literature, national guidelines and local standards of practice. Since medical technology is constantly changing, the Company reserves the right to review and update policies as appropriate. Member contracts differ in their benefits. Always consult the member benefit booklet or contact a member service representative to determine coverage for a specific medical service or supply. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). ©2025 Premera All Rights Reserved.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.

