



# MASSACHUSETTS

Blue Cross Blue Shield of Massachusetts is an independent Licensee of the Blue Cross and Blue Shield Association

## Medical Policy Nonpharmacologic Treatment of Rosacea

### Table of Contents

- [Policy: Commercial](#)
- [Policy: Medicare](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [Information Pertaining to All Policies](#)
- [References](#)

### Policy Number: 462

BCBSA Reference Number: 2.01.71 (For Plans internal use only)  
NCD/LCD: N/A

### Related Policies

- Chemical Peels, #[732](#)
- Phototherapy: PUVA and UV-B, #[059](#)

### Policy

#### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

Excision and/or shaving of rhinophyma using a laser or other technique is considered **MEDICALLY NECESSARY** when there is documented evidence of bleeding, infection, or functional airway obstruction and it is reasonably likely the procedure will improve this condition.

Nonpharmacologic treatment of rosacea, including but not limited to laser and light therapy, dermabrasion, chemical peels, surgical debulking and electrosurgery, is considered **INVESTIGATIONAL**.

### Prior Authorization Information

#### Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

#### Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is <b>not required</b> .
Commercial PPO and Indemnity	Prior authorization is <b>not required</b> .
Medicare HMO Blue <sup>SM</sup>	Prior authorization is <b>not required</b> .
Medicare PPO Blue <sup>SM</sup>	Prior authorization is <b>not required</b> .

## CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above **medical necessity criteria MUST** be met for the following code to be covered for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

CPT codes:	Code Description
30120	Excision or surgical planing of skin of nose for rhinophyma

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT code above if **medical necessity criteria** are met:

### ICD-10 Diagnosis Codes

ICD-10 Diagnosis codes:	Code Description
L71.1	Rhinophyma

According to the policy statement above, the following CPT codes are considered investigational for the conditions listed for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

CPT codes:	Code Description
15780	Dermabrasion; total face (eg, for acne scarring, fine wrinkling, rhytids, general keratosis)
15781	Dermabrasion; segmental, face
15782	Dermabrasion; regional, other than face
15783	Dermabrasion; superficial, any site (eg, tattoo removal)
15788	Chemical peel, facial; epidermal
15789	Chemical peel, facial; dermal
15792	Chemical peel, nonfacial; epidermal
15793	Chemical peel, nonfacial; dermal
17000	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettment), premalignant lesions (eg, actinic keratoses); first lesion
17003	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettment), premalignant lesions (eg, actinic keratoses); second through 14 lesions, each (List separately in addition to code for first lesion)
17004	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettment), premalignant lesions (eg, actinic keratoses), 15 or more lesions

17106	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); less than 10 sq cm
17107	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); 10.0 to 50.0 sq cm
17108	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); over 50.0 sq cm

## Description

### Rosacea

Rosacea is characterized by episodic erythema, edema, papules, pustules, and telangiectasia that occur primarily on the face but also present on the scalp, ears, neck, chest, and back. On occasion, rosacea may affect the eyes. Patients with rosacea tend to flush or blush easily. Because rosacea causes facial swelling and redness, it is easily confused with other skin conditions such as acne, skin allergy, and sunburn.

Rosacea mostly affects adults with fair skin between the ages of 20 and 60 years and is more common in women, but often is most severe in men. Rosacea is not life-threatening, but if not treated, it may lead to persistent erythema, telangiectasias, and rhinophyma (hyperplasia and nodular swelling and congestion of the skin of the nose). The etiology and pathogenesis of rosacea are unknown but may result from both genetic and environmental factors. Some theories on the causes of rosacea include blood vessel disorders, chronic *Helicobacter pylori* infection, Demodex folliculorum (mites), and immune system disorders.

While the clinical manifestations of rosacea do not usually impact the physical health status of the patient, psychological consequences from the most visually apparent symptoms (i.e., erythema, papules, pustules, telangiectasias) may impact quality of life. Rhinophyma, an end-stage form of chronic acne, has been associated with obstruction of nasal passages and basal cell carcinoma in rare, severe cases. The probability of developing nasal obstruction or basal or squamous cell carcinoma with rosacea is not sufficient to warrant the preventive removal of rhinophymatous tissue.

### Treatment

Rosacea treatment can be effective in relieving signs and symptoms. Treatment may include oral and topical antibiotics, isotretinoin, b-blockers, alpha2-adrenergic agonists (e.g., oxymetazoline, clonidine), and anti-inflammatories. Patients are also instructed on various self-care measures such as avoiding skin irritants and dietary items thought to exacerbate acute flare-ups.

Nonpharmacologic therapy has also been tried in patients who cannot tolerate or do not want to use pharmacologic treatments. To reduce visible blood vessels, treat rhinophyma, reduce redness, and improve appearance, various techniques have been used such as laser and light therapy, dermabrasion, chemical peels, surgical debulking, and electrosurgery. Various lasers used include low-powered electrical devices and vascular light lasers to remove telangiectasias, carbon dioxide lasers to remove unwanted tissue from rhinophyma and reshape the nose, and intense pulsed lights that generate multiple wavelengths to treat a broader spectrum of tissue.

## Summary

Rosacea is a chronic, inflammatory skin condition without a known cure; the goal of treatment is symptom management. Nonpharmacologic treatments, including laser and light therapy as well as dermabrasion, which are the focus of this evidence review, are proposed for patients who do not want to use or are unresponsive to pharmacologic therapy.

### Summary of Evidence

For individuals who have rosacea who receive nonpharmacologic treatment (e.g., laser therapy, light therapy, dermabrasion), the evidence includes systematic reviews and several small, randomized, split-face design trials. Relevant outcomes are symptoms, change in disease status, and treatment-related morbidity. The systematic reviews reported favorable effects on erythema and telangiectasia with several laser types, including intense pulsed light (IPL), pulsed dye lasers, and neodymium-doped yttrium aluminum garnet (Nd:YAG) lasers. However, the systematic reviews did not pool results from individual

studies and the studies differed in the specific lasers being compared. Overall, the systematic review results were insufficient to establish whether any laser type is more effective and safe than others. The randomized controlled trials (RCTs) evaluated laser and light therapy. One RCT compared combination laser and pharmacologic therapy with pharmacologic therapy alone and 2 RCTs compared combination laser and pharmacologic therapy with laser therapy alone, but the lack of an arm evaluating laser therapy alone against established pharmacologic therapy does not allow a direct assessment on the efficacy of laser or light treatment compared with alternative treatments. No trials assessing other nonpharmacologic treatments were identified. There is a need for RCTs that compare nonpharmacologic treatments with placebo controls and with pharmacologic treatments. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

## Policy History

Date	Action
1/2024	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
2/2023	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
2/2022	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
2/2021	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
1/2020	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
2/2019	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
3/2018	Annual policy review. New references added.
1/2017	Annual policy review. New references added.
1/2016	Annual policy review. New references added.
10/2015	Ongoing medically necessary and investigational indications transferred from medical policy #068, Plastic Surgery. 10/1/2015.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

## References

1. Chang HC, Chang YS. Pulsed dye laser versus intense pulsed light for facial erythema of rosacea: a systematic review and meta-analysis. *J Dermatolog Treat.* Jun 2022; 33(4): 2394-2396. PMID 34291712
2. Husein-ElAhmed H, Steinhoff M. Light-based therapies in the management of rosacea: a systematic review with meta-analysis. *Int J Dermatol.* Feb 2022; 61(2): 216-225. PMID 34089264
3. van Zuuren EJ, Fedorowicz Z, Carter B, et al. Interventions for rosacea. *Cochrane Database Syst Rev.* Apr 28 2015; 2015(4): CD003262. PMID 25919144
4. van Zuuren EJ, Fedorowicz Z, Tan J, et al. Interventions for rosacea based on the phenotype approach: an updated systematic review including GRADE assessments. *Br J Dermatol.* Jul 2019; 181(1): 65-79. PMID 30585305
5. Wat H, Wu DC, Rao J, et al. Application of intense pulsed light in the treatment of dermatologic disease: a systematic review. *Dermatol Surg.* Apr 2014; 40(4): 359-77. PMID 24495252

6. West TB, Alster TS. Comparison of the long-pulse dye (590-595 nm) and KTP (532 nm) lasers in the treatment of facial and leg telangiectasias. *Dermatol Surg.* Feb 1998; 24(2): 221-6. PMID 9491116
7. Mark KA, Sparacio RM, Voigt A, et al. Objective and quantitative improvement of rosacea-associated erythema after intense pulsed light treatment. *Dermatol Surg.* Jun 2003; 29(6): 600-4. PMID 12786702
8. Taub AF. Treatment of rosacea with intense pulsed light. *J Drugs Dermatol.* Jun 2003; 2(3): 254-9. PMID 12848109
9. Schroeter CA, Haaf-von Below S, Neumann HA. Effective treatment of rosacea using intense pulsed light systems. *Dermatol Surg.* Oct 2005; 31(10): 1285-9. PMID 16188180
10. Karsai S, Roos S, Raulin C. Treatment of facial telangiectasia using a dual-wavelength laser system (595 and 1,064 nm): a randomized controlled trial with blinded response evaluation. *Dermatol Surg.* May 2008; 34(5): 702-8. PMID 18318728
11. Papageorgiou P, Clayton W, Norwood S, et al. Treatment of rosacea with intense pulsed light: significant improvement and long-lasting results. *Br J Dermatol.* Sep 2008; 159(3): 628-32. PMID 18565174
12. Neuhaus IM, Zane LT, Tope WD. Comparative efficacy of nonpurpuragenic pulsed dye laser and intense pulsed light for erythematotelangiectatic rosacea. *Dermatol Surg.* Jun 2009; 35(6): 920-8. PMID 19397667
13. Lane JE, Khachemoune A. Use of intense pulsed light to treat refractory granulomatous rosacea. *Dermatol Surg.* Apr 2010; 36(4): 571-3. PMID 20402938
14. Nymann P, Hedelund L, Haedersdal M. Long-pulsed dye laser vs. intense pulsed light for the treatment of facial telangiectasias: a randomized controlled trial. *J Eur Acad Dermatol Venereol.* Feb 2010; 24(2): 143-6. PMID 20205349
15. Fabi S, Peterson J, Goldman M. Combination 15% azelaic acid gel and intense pulse light therapy for mild to moderate rosacea. *Lasers Surg Med* 2011;43:9689
16. Kassir R, Kolluru A, Kassir M. Intense pulsed light for the treatment of rosacea and telangiectasias. *J Cosmet Laser Ther.* Oct 2011; 13(5): 216-22. PMID 21848421
17. Kim TG, Roh HJ, Cho SB, et al. Enhancing effect of pretreatment with topical niacin in the treatment of rosacea-associated erythema by 585-nm pulsed dye laser in Koreans: a randomized, prospective, split-face trial. *Br J Dermatol.* Mar 2011; 164(3): 573-9. PMID 21143465
18. Huang YE, Li XL, Li TJ. [Clinical research of topical tacrolimus ointment combined with 585 nm pulsed dye laser in the treatment of rosacea]. *J Clinical Dermatol* 2012; 41:3089.
19. Tanghetti EA. Split-face randomized treatment of facial telangiectasia comparing pulsed dye laser and an intense pulsed light handpiece. *Lasers Surg Med.* Feb 2012; 44(2): 97-102. PMID 22180317
20. Alam M, Voravutinon N, Warycha M, et al. Comparative effectiveness of nonpurpuragenic 595-nm pulsed dye laser and microsecond 1064-nm neodymium:yttrium-aluminum-garnet laser for treatment of diffuse facial erythema: A double-blind randomized controlled trial. *J Am Acad Dermatol.* Sep 2013; 69(3): 438-43. PMID 23688651
21. Salem SA, Abdel Fattah NS, Tantawy SM, et al. Neodymium-yttrium aluminum garnet laser versus pulsed dye laser in erythemato-telangiectatic rosacea: comparison of clinical efficacy and effect on cutaneous substance (P) expression. *J Cosmet Dermatol.* Sep 2013; 12(3): 187-94. PMID 23992160
22. Friedmann DP, Goldman MP, Fabi SG, et al. The effect of multiple sequential light sources to activate aminolevulinic Acid in the treatment of actinic keratoses: a retrospective study. *J Clin Aesthet Dermatol.* Sep 2014; 7(9): 20-5. PMID 25276272
23. Seo HM, Kim JI, Kim HS, et al. Prospective Comparison of Dual Wavelength Long-Pulsed 755-nm Alexandrite/1,064-nm Neodymium:Yttrium-Aluminum-Garnet Laser versus 585-nm Pulsed Dye Laser Treatment for Rosacea. *Ann Dermatol.* Oct 2016; 28(5): 607-614. PMID 27746641
24. Handler MZ, Bloom BS, Goldberg DJ. IPL vs PDL in treatment of facial erythema: A split-face study. *J Cosmet Dermatol.* Dec 2017; 16(4): 450-453. PMID 28752575
25. Kim SJ, Lee Y, Seo YJ, et al. Comparative Efficacy of Radiofrequency and Pulsed Dye Laser in the Treatment of Rosacea. *Dermatol Surg.* Feb 2017; 43(2): 204-209. PMID 27893539
26. Kwon WJ, Park BW, Cho EB, et al. Comparison of efficacy between long-pulsed Nd:YAG laser and pulsed dye laser to treat rosacea-associated nasal telangiectasia. *J Cosmet Laser Ther.* Oct 2018; 20(5): 260-264. PMID 29388843
27. Campos MA, Sousa AC, Varela P, et al. Comparative effectiveness of purpuragenic 595 nm pulsed dye laser versus sequential emission of 595 nm pulsed dye laser and 1,064 nm Nd:YAG laser: a

- double-blind randomized controlled study. *Acta Dermatovenerol Alp Pannonica Adriat.* Mar 2019; 28(1): 1-5. PMID 30901061
28. Kim BY, Moon HR, Ryu HJ. Comparative efficacy of short-pulsed intense pulsed light and pulsed dye laser to treat rosacea. *J Cosmet Laser Ther.* Aug 2019; 21(5): 291-296. PMID 30285506
  29. Tirico MCCP, Jensen D, Green C, et al. Short pulse intense pulsed light versus pulsed dye laser for the treatment of facial redness. *J Cosmet Laser Ther.* Feb 17 2020; 22(2): 60-64. PMID 32041440
  30. Maxwell EL, Ellis DA, Manis H. Acne rosacea: effectiveness of 532 nm laser on the cosmetic appearance of the skin. *J Otolaryngol Head Neck Surg.* Jun 2010; 39(3): 292-6. PMID 20470675
  31. Wang H, An X, Wang Z. Effect and Safety of ALA-PDT Combined with 1550 nm Fractional Therapy Laser in Treating Rosacea. *Evid Based Complement Alternat Med.* 2022; 2022: 3335074. PMID 35865346
  32. Park S, Lee JH, Kang E, et al. A randomized split-face comparative study of long-pulsed alexandrite plus low-fluence Nd:YAG laser versus pulsed-dye laser in the treatment of rosacea. *Lasers Surg Med.* Nov 2022; 54(9): 1217-1225. PMID 36183378
  33. Sodha P, Suggs A, Munavalli GS, et al. A Randomized Controlled Pilot Study: Combined 595-nm Pulsed Dye Laser Treatment and Oxymetazoline Hydrochloride Topical Cream Superior to Oxymetazoline Hydrochloride Cream for Erythematotelangiectatic Rosacea. *Lasers Surg Med.* Dec 2021; 53(10): 1307-1315. PMID 34233378
  34. Osman M, Shokeir HA, Hassan AM, et al. Pulsed dye laser alone versus its combination with topical ivermectin 1% in treatment of Rosacea: a randomized comparative study. *J Dermatolog Treat.* Feb 2022; 33(1): 184-190. PMID 32141785
  35. Tong Y, Luo W, Gao Y, et al. A randomized, controlled, split-face study of botulinum toxin and broadband light for the treatment of erythematotelangiectatic rosacea. *Dermatol Ther.* May 2022; 35(5): e15395. PMID 35187781
  36. Barbarino SC, Bucay VW, Cohen JL, et al. Integrative skincare trial of intense pulsed light followed by the phyto-corrective mask, phyto-corrective gel, and resveratrol BE for decreasing post-procedure downtime and improving procedure outcomes in patients with rosacea. *J Cosmet Dermatol.* Sep 2022; 21(9): 3759-3767. PMID 35765796
  37. Tanghetti E, Del Rosso JQ, Thiboutot D, et al. Consensus recommendations from the American acne rosacea society on the management of rosacea, part 4: a status report on physical modalities and devices. *Cutis.* Feb 2014; 93(2): 71-6. PMID 24605343
  38. Del Rosso JQ, Tanghetti E, Webster G, et al. Update on the Management of Rosacea from the American Acne Rosacea Society (AARS). *J Clin Aesthet Dermatol.* Jun 2019; 12(6): 17-24. PMID 31360284
  39. Thiboutot D, Anderson R, Cook-Bolden F, et al. Standard management options for rosacea: The 2019 update by the National Rosacea Society Expert Committee. *J Am Acad Dermatol.* Jun 2020; 82(6): 1501-1510. PMID 32035944
  40. Schaller M, Almeida LM, Bewley A, et al. Rosacea treatment update: recommendations from the global ROSacea COnsensus (ROSCO) panel. *Br J Dermatol.* Feb 2017; 176(2): 465-471. PMID 27861741
  41. Schaller M, Almeida LMC, Bewley A, et al. Recommendations for rosacea diagnosis, classification and management: update from the global ROSacea COnsensus 2019 panel. *Br J Dermatol.* May 2020; 182(5): 1269-1276. PMID 31392722