

# PROVIDER POLICIES & PROCEDURES

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#### LIGHT THERAPY FOR ACNE

The primary purpose of this document is to assist providers enrolled in the Connecticut Medical Assistance Program (CMAP) with the information needed to support a medical necessity determination for light therapy for acne. By clarifying the information needed for prior authorization of services, HUSKY Health hopes to facilitate timely review of requests so that individuals obtain the medically necessary care they need as quickly as possible.

Acne vulgaris is a common chronic skin disease associated with blockage and/or inflammation of hair follicles and sebaceous glands resulting in the formation of non-inflammatory lesions, inflammatory lesions, or a mixture of both, affecting mostly the face but also the back and chest.

Clinician-administered light sources are used for the treatment of acne; however well-designed clinical trials supporting the benefit of these treatments are limited. Light therapy is defined as exposure to nonionizing radiation for therapeutic benefit. It can include the use of phototherapy, intense pulsed light, and photodynamic therapy. The mechanisms of action for light-based therapies in the treatment of acne are not completely understood.

Blue and red light therapy for acne are thought to work through the absorption of light by porphyrins produced by the bacterium Cutibacterium acnes. As a result of light exposure, the porphyrins become activated, leading to the production of free oxygen radicals and bacterial death. Red light activates porphyrins less intensely than blue light, but penetrates more deeply into the skin.

Intense pulsed light may function through inhibition of Cutibacterium acnes and/or damage to the sebaceous glands.

Photodynamic therapy involves the topical application of a photosensitizer prior to exposure to blue or red light, lasers, pulsed light sources, or non-pulsed broad-spectrum light. It is thought to inflict thermal damage to sebaceous glands and decrease sebum production. Photodynamic therapy also reduces obstruction of follicles, hyperkeratosis, and inflammation within acne lesions.

# **CLINICAL GUIDELINE**

Coverage guidelines for light therapy for acne are made in accordance with the DSS definition of Medical Necessity. The following criteria are guidelines *only*. Coverage determinations are based on an assessment of the individual and their unique clinical needs. If the guidelines conflict with the definition of Medical Necessity, the definition of Medical Necessity shall prevail. The guidelines are as follows:

Light therapy for acne including, <u>but not limited to</u>, intense pulsed light, light phototherapy, and photodynamic therapy, is **considered investigational and not medically necessary** due to insufficient evidence of clinical efficacy in peer-reviewed, published, medical literature.

Please note that authorization is based on medical necessity at the time the authorization is issued and is not a guarantee of payment. Payment is based on the individual having active coverage, benefits and policies in effect at the time of service.

# **NOTE: EPSDT Special Provision**

Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) is a federal Medicaid requirement that requires the Connecticut Medical Assistance Program (CMAP) to cover services, products, or procedures for Medicaid enrollees under 21 years of age where the service or good is medically necessary health care to correct or ameliorate a defect, physical or mental illness, or a condition identified through a screening examination. The applicable definition of medical necessity is set forth in Conn. Gen. Stat. Section 17b-259b (2011) [ref. CMAP Provider Bulletin PB 2011-36].

## **PROCEDURE**

Prior authorization for light therapy for acne is required. Requests for coverage are reviewed in accordance with procedures in place for reviewing requests for medical procedures. Coverage determinations are based upon a review of requested and/or submitted case-specific information.

# The following information is needed to review requests for light therapy for acne:

- 1. Fully completed authorization request via on-line web portal; and
- 2. Documentation from the requesting physician supporting medical necessity.

## **EFFECTIVE DATE**

This policy for the prior authorization for light therapy for acne for individuals covered under the HUSKY Health Program is effective May 1, 2022.

#### **LIMITATIONS**

Not Applicable

#### CODE:

OODE.		
Code	Description	
96999	Unlisted special dermatological service or procedure	

#### **DEFINITIONS**

- 1. **HUSKY A**: Connecticut children and their parents or a relative caregiver; and pregnant women may qualify for HUSKY A (also known as Medicaid). Income limits apply.
- 2. **HUSKY B**: Uninsured children under the age of 19 in higher income households may be eligible for HUSKY B (also known as the Children's Health Insurance Program) depending on their family income level. Family cost-sharing may apply.
- 3. **HUSKY C**: Connecticut residents who are age 65 or older or residents who are ages 18-64 and who are blind, or have another disability, may qualify for Medicaid coverage under HUSKY C (this includes Medicaid for Employees with Disabilities (MED-Connect), if working). Income and asset limits apply.
- 4. **HUSKY D**: Connecticut residents who are ages 19-64 without dependent children and who: (1) do not qualify for HUSKY A; (2) do not receive Medicare; and (3) are not pregnant, may qualify for HUSKY D (also known as Medicaid for the Lowest-Income populations).
- 5. HUSKY Health Program: The HUSKY A, HUSKY B, HUSKY C, HUSKY D and HUSKY Limited

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- Benefit programs, collectively.
- 6. **HUSKY Limited Benefit Program or HUSKY, LBP**: Connecticut's implementation of limited health insurance coverage under Medicaid for individuals with tuberculosis or for family planning purposes and such coverage is substantially less than the full Medicaid coverage.
- 7. HUSKY Plus Physical Program (or HUSKY Plus Program): A supplemental physical health program pursuant to Conn. Gen. Stat. § 17b-294, for medically eligible members of HUSKY B in Income Bands 1 and 2, whose intensive physical health needs cannot be accommodated within the HUSKY Plan, Part B.
- 8. Medically Necessary or Medical Necessity: (as defined in Connecticut General Statutes § 17b-259b) Those health services required to prevent, identify, diagnose, treat, rehabilitate or ameliorate an individual's medical condition, including mental illness, or its effects, in order to attain or maintain the individual's achievable health and independent functioning provided such services are: (1) Consistent with generally-accepted standards of medical practice that are defined as standards that are based on (A) credible scientific evidence published in peer-reviewed medical literature that is generally recognized by the relevant medical community, (B) recommendations of a physician-specialty society, (C) the views of physicians practicing in relevant clinical areas, and (D) any other relevant factors; (2) clinically appropriate in terms of type, frequency, timing, site, extent and duration and considered effective for the individual's illness, injury or disease; (3) not primarily for the convenience of the individual, the individual's health care provider or other health care providers; (4) not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of the individual and his or her medical condition.
- Prior Authorization: A process for approving covered services prior to the delivery of the service or initiation of the plan of care based on a determination by CHNCT as to whether the requested service is medically necessary.

## REFERENCES

- UpToDate: [website]. Waltham, MA: Walters Kluwer Health; 2021. Dover J, Batra P. Light-Based, Adjunctive, and Other Therapies for Acne Vulgaris. Literature review current through December 2023.
- Antoniou C, Dessinioti C, Sotiriadis D, et al. A multicenter, randomized, split-face clinical trial
  evaluating the efficacy and safety of chromophore gel-assisted blue light phototherapy for the
  treatment of acne. Int J Dermatol. 2016;55(12):1321-1328. doi:10.1111/ijd.13349
- Barbaric J, Abbott R, Posadzki P, et al. Light therapies for acne. Cochrane Database Syst Rev. 2016;9(9):CD007917. Published 2016 Sep 27. doi:10.1002/14651858.CD007917.pub2
- Boen M, Brownell J, Patel P, Tsoukas MM. The Role of Photodynamic Therapy in Acne: An Evidence-Based Review. Am J Clin Dermatol. 2017;18(3):311-321. doi:10.1007/s40257-017-0255-3
- Chang SE, Ahn SJ, Rhee DY, et al. Treatment of facial acne papules and pustules in Korean patients using an intense pulsed light device equipped with a 530- to 750-nm filter. Dermatol Surg. 2007;33(6):676-679. doi:10.1111/j.1524-4725.2007.33142.x
- de Vries FMC, Meulendijks AM, Driessen RJB, van Dooren AA, Tjin EPM, van de Kerkhof PCM.
  The efficacy and safety of non-pharmacological therapies for the treatment of acne vulgaris: A
  systematic review and best-evidence synthesis. J Eur Acad Dermatol Venereol. 2018;32(7):11951203. doi:10.1111/jdv.14881

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- El-Latif AA, Hassan FA, Elshahed AR, Mohamed AG, Elsaie ML. Intense pulsed light versus benzoyl peroxide 5% gel in treatment of acne vulgaris. Lasers Med Sci. 2014;29(3):1009-1015. doi:10.1007/s10103-013-1440-0
- Haedersdal M, Togsverd-Bo K, Wulf HC. Evidence-based review of lasers, light sources and photodynamic therapy in the treatment of acne vulgaris. J Eur Acad Dermatol Venereol. 2008;22(3):267-278. doi:10.1111/j.1468-3083.2007.02503.x
- Hamilton FL, Car J, Lyons C, Car M, Layton A, Majeed A. Laser and other light therapies for the treatment of acne vulgaris: systematic review. Br J Dermatol. 2009;160(6):1273-1285. doi:10.1111/j.1365-2133.2009.09047.x
- Jang MS, Doh KS, Kang JS, Jeon YS, Suh KS, Kim ST. A comparative split-face study of photodynamic therapy with indocyanine green and indole-3-acetic acid for the treatment of acne vulgaris. Br J Dermatol. 2011;165(5):1095-1100. doi:10.1111/j.1365-2133.2011.10472.x
- Keyal U, Bhatta AK, Wang XL. Photodynamic therapy for the treatment of different severity of acne: A systematic review. Photodiagnosis Photodyn Ther. 2016;14:191-199. doi:10.1016/j.pdpdt.2016.04.005
- Kim BJ, Lee HG, Woo SM, Youn JI, Suh DH. Pilot study on photodynamic therapy for acne using indocyanine green and diode laser. J Dermatol. 2009;36(1):17-21. doi:10.1111/j.1346-8138.2008.00580.x
- Moftah NH, Ibrahim SM, Wahba NH. Intense pulsed light versus photodynamic therapy using liposomal methylene blue gel for the treatment of truncal acne vulgaris: a comparative randomized split body study. Arch Dermatol Res. 2016;308(4):263-268. doi:10.1007/s00403-016-1639-6
- Nicklas C, Rubio R, Cárdenas C, Hasson A. Comparison of efficacy of aminolaevulinic acid photodynamic therapy vs. adapalene gel plus oral doxycycline for treatment of moderate acne vulgaris-A simple, blind, randomized, and controlled trial. Photodermatol Photoimmunol Photomed. 2019;35(1):3-10. doi:10.1111/phpp.12413
- Nikolis A, Fauverghe S, Scapagnini G, et al. An extension of a multicenter, randomized, split-face clinical trial evaluating the efficacy and safety of chromophore gel-assisted blue light phototherapy for the treatment of acne. Int J Dermatol. 2018;57(1):94-103. doi:10.1111/ijd.13814
- Orringer JS, Sachs DL, Bailey E, Kang S, Hamilton T, Voorhees JJ. Photodynamic therapy for acne vulgaris: a randomized, controlled, split-face clinical trial of topical aminolevulinic acid and pulsed dye laser therapy. J Cosmet Dermatol. 2010;9(1):28-34. doi:10.1111/j.1473-2165.2010.00483.x
- Papageorgiou P, Katsambas A, Chu A. Phototherapy with blue (415 nm) and red (660 nm) light in the treatment of acne vulgaris. Br J Dermatol. 2000;142(5):973-978. doi:10.1046/j.1365-2133.2000.03481.x
- Pariser DM, Eichenfield LF, Bukhalo M, Waterman G, Jarratt M; PDT Study Group. Photodynamic therapy with methyl aminolaevulinate 80 mg g(-1) for severe facial acne vulgaris: a randomized vehicle-controlled study. Br J Dermatol. 2016;174(4):770-777. doi:10.1111/bjd.14345
- Scott AM, Stehlik P, Clark J, et al. Blue-Light Therapy for Acne Vulgaris: A Systematic Review and Meta-Analysis. Ann Fam Med. 2019;17(6):545-553. doi:10.1370/afm.2445
- Song BH, Lee DH, Kim BC, et al. Photodynamic therapy using chlorophyll-a in the treatment of acne vulgaris: a randomized, single-blind, split-face study. J Am Acad Dermatol. 2014;71(4):764-771. doi:10.1016/j.jaad.2014.05.047
- Taylor MN, Gonzalez ML. The practicalities of photodynamic therapy in acne vulgaris. Br J Dermatol. 2009;160(6):1140-1148. doi:10.1111/j.1365-2133.2009.09054.x

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- Wat H, Wu DC, Rao J, Goldman MP. Application of intense pulsed light in the treatment of dermatologic disease: a systematic review. Dermatol Surg. 2014;40(4):359-377. doi:10.1111/dsu.12424
- Xu X, Zheng Y, Zhao Z, Zhang X, Liu P, Li C. Efficacy of photodynamic therapy combined with minocycline for treatment of moderate to severe facial acne vulgaris and influence on quality of life. Medicine (Baltimore). 2017;96(51):e9366. doi:10.1097/MD.0000000000000366
- Yeung CK, Shek SY, Bjerring P, Yu CS, Kono T, Chan HH. A comparative study of intense pulsed light alone and its combination with photodynamic therapy for the treatment of facial acne in Asian skin. Lasers Surg Med. 2007;39(1):1-6. doi:10.1002/lsm.20469
- Zheng W, Wu Y, Xu X, Gao X, Chen HD, Li Y. Evidence-based review of photodynamic therapy in the treatment of acne. Eur J Dermatol. 2014;24(4):444-456. doi:10.1684/ejd.2014.2347

# Clinical Practice Guidelines

- National Institute for Health and Clinical Evidence (NICE). [NG198] Acne vulgaris: management. June 2021.
- Zaenglein AL, Pathy AL, Schlosser BJ, et al. Guidelines of care for the management of acne vulgaris [published correction appears in J Am Acad Dermatol. 2020 Jun;82(6):1576]. J Am Acad Dermatol. 2016;74(5):945-73.e33. doi:10.1016/j.jaad.2015.12.037

# **PUBLICATION HISTORY**

Status	Date	Action Taken
Original Publication	March 2022	Approved at the March 9, 2022, CHNCT
		Medical Reviewer meeting. Approved by the
		CHNCT Clinical Quality Subcommittee on March
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Reviewed	March 2023	Reviewed and approved without changes at the
		March 8, 2023, CHNCT Medical Reviewer
		meeting. Approved by the CHNCT Clinical
		Quality Subcommittee on March 20, 2023.
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Reviewed	February 2024	Reviewed and approved without changes at the
		February 14, 2024, CHNCT Medical Reviewer
		meeting. Approved by the CHNCT Clinical
		Quality Subcommittee on March 18, 2024.
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