

Medical Policies



Policy E-9002

Number:

Policy Name: Phototherapy for Psychiatric Disorders

Policy Type: Medical Equipment (DME)

Subtype:

Effective

09-15-2025

Date:

Description

Seasonal affective disorder (SAD) is a seasonal form of major depression with features similar to major depressive disorder but occurring on a cyclical basis related to ambient light deprivation during winter months. Both phototherapy and medications are frequently used (University of Michigan, 2005). Current evidence-based guidelines on treatment of depression state that use of bright light therapy for the treatment of major depression with a seasonal specifier is well-established (ICSI, 2006; American Psychiatric Association, 2000).

Westrin and Lam (2007) stated that clinical studies show equal effectiveness with light and anti-depressants, so individual preference should be considered in the selection of initial treatment. Dawn stimulation, negative air ions, exercise as well as cognitive behavioral therapy are under investigation and may also be helpful treatments for SAD.

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Blue Cross Blue Shield North Dakota considers a high-intensity light unit for light box therapy medically necessary durable medical equipment (DME) for members who have seasonal affective disorder (SAD) and meet *both* of the following criteria.

- Member is diagnosed with bipolar disorder or recurrent major depression; and
- Member meets DSM-V criteria for a seasonal mood disorder: at least two (2) years of seasonal depressive episodes which completely remit when daylight increases in the spring, and which substantially outnumber any non-seasonal depressive episodes.

Blue Cross Blue Shield North Dakota considers light box therapy experimental and investigational for depressive symptoms in persons with any of the following: anorexia nervosa, cystic fibrosis, type 2 diabetes,

post-natal depression, premenstrual syndrome, non-seasonal depression, childhood sleep disorders, sleep disorders in the elderly and in visually impaired children, sleep or behavioral disorders in dementia, Parkinson disease, and for all other indications because its effectiveness for these indications has not been established.

Note: Light box therapy requires a high-intensity light unit (e.g., Bio-Light, Brite Lite, Dawn Simulator, etc.). They are not the same as "Tanning Lights" that give off an entirely different band or spectrum of light.

- Blue Cross Blue Shield North Dakota considers extra-ocular light therapy (application of phototherapy to areas of the body other than the retina) experimental and investigational for all indications including the treatment of members with SAD because its effectiveness has not been established.
- Blue Cross Blue Shield North Dakota considers non-retinal photo-biomodulation with red and near-infrared light (also known as low-level light therapy) experimental and investigational for the treatment of depressive disorder because its effectiveness has not been established.

Procedure Codes

E0203	E0691
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Criteria

Coverage is subject to the specific terms of the member's benefit plan.

Professional Statements and Societal Positions Guidelines

Not Applicable

Diagnosis Codes

Not Applicable

CURRENT CODING

HCPCS:

E0203	Therapeutic lightbox tabletp	Commercial
E0691	Uvl pnl 2 sq ft or less	Commercial
E0203	Therapeutic lightbox tabletp	Medicaid Expansion
E0691	Uvl pnl 2 sq ft or less	Medicaid Expansion

References

E-9002

- 1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders: DSM-IV. 4th ed. Washington, DC: American Psychiatric Association; 1994.
- 2. American Psychiatric Association. Practice guideline for the treatment of patients with major depressive disorder. Am J Psychiatry. 2000;157(4 Suppl):1- 45.
- 3. Anderson JL, Glod CA, Dai J, et al. Lux vs. wavelength in light treatment of seasonal affective disorder. Acta Psychiatr Scand. 2009;120(3):203-212.
- 4. Attar-Levey D. Seasonal depression. Therapie. 1998;53(5):489-498.
- 5. Avery DH. A turning point for seasonal affective disorder and light therapy research? Arch Gen Psychiatry. 1998;55(1):863-864.
- 6. Brouwer A, van Raalte DH, Diamant M, et al. Light therapy for better mood and insulin sensitivity in patients with major depression and type 2 diabetes: A randomised, double-blind, parallel-arm trial. BMC Psychiatry. 2015;15:169.
- 7. Caldieraro MA, Cassano P. Transcranial and systemic photobiomodulation for major depressive disorder: A systematic review of efficacy, tolerability and biological mechanisms. J Affect Disord. 2019;243:262-273.
- 8. California Technology Assessment Forum (CTAF). Phototherapy for seasonal affective disorder (SAD). Technology Assessment. San Francisco, CA: CTAF; June 11, 2003.
- 9. Cassano P, Petrie SR, Mischoulon D, et al. Transcranial photobiomodulation for the treatment of major depressive disorder. The ELATED-2 pilot trial. Photomed Laser Surg. 2018;36(12):634-646.
- 10. Cohen-Mansfield J. Nonpharmacologic interventions for inappropriate behaviors in dementia: A review, summary, and critique. Am J Geriatric Psych. 2001; 9(4):361-381.
- 11. Corral M, Kuan A, Kostaras D. Bright light therapy's effect on postpartum depression. Am J Psychiatry. 2000;157(2):303-304.
- 12. Craig M, Howard L. Postnatal depression. In: BMJ Clinical Evidence. London, UK: BMJ Publishing Group; updated May 2008.
- 13. Danilenko KV, Ivanova IA. Dawn simulation vs. bright light in seasonal affective disorder: Treatment effects and subjective preference. J Affect Disord. 2015;180:87-89.
- 14. Dauphinais DR, Rosenthal JZ, Terman M, et al. Controlled trial of safety and efficacy of bright light therapy vs. negative air ions in patients with bipolar depression. Psychiatry Res. 2012;196(1):57-61.
- 15. Desan PH, Weinstein AJ, Michalak EE, et al. A controlled trial of the Litebook light-emitting diode (LED) light therapy device for treatment of Seasonal Affective Disorder (SAD). BMC Psychiatry. 2007;7:38.
- 16. Eagles JM. Seasonal affective disorder. Br J Psychiatry. 2003;182:174-176.
- 17. Forbes D, Blake CM, Thiessen EJ, et al. Light therapy for improving cognition, activities of daily living, sleep, challenging behaviour, and psychiatric disturbances in dementia. Cochrane Database Syst Rev. 2014;2:CD003946.
- 18. Forbes D, Culum I, Lischka AR, et al. Light therapy for managing cognitive, sleep, functional, behavioural, or psychiatric disturbances in dementia. Cochrane Database Syst Rev. 2009;(4):CD003946.
- 19. Freeman MP, Fava M, Lake J, et al. Complementary and alternative medicine in major depressive disorder: The American Psychiatric Association Task Force report. J Clin Psychiatry. 2010;71(6):669-681.
- 20. Golden RN, Gaynes BN, Ekstrom RD. The efficacy of light therapy in the treatment of mood disorders: A review and meta-analysis of the evidence. Am J Psychiatry. 2005;162(4):656-662.
- 21. Holsten F, Bjorvatn B. Phototherapy. An alternative for seasonal affective disorders or sleep disorders. Tidsskr Nor Laegeforen. 1997;117(17):2484-2488.
- 22. Honory A. Winter depression and light therapy. Psychiatr Pol. 1998;32(5):605-619.
- 23. Howland RH. Somatic therapies for seasonal affective disorder. J Psychosoc Nurs Ment Health Serv. 2009;47(1):17-20.
- 24. Institute for Clinical Systems Improvement (ICSI). Major depression in adults for mental health care providers. ICSI Health Care Guidelines. Bloomington, MN: ICSI; September 2003.

- 25. Institute for Clinical Systems Improvement (ICSI). Major depression in adults in primary care. ICSI Health Care Guidelines. Bloomington, MN: Institute for Clinical Systems Improvement (ICSI); May 2006.
- 26. Janas-Kozik M, Krzystanek M, Stachowicz M, et al. Bright light treatment of depressive symptoms in patients with restrictive type of anorexia nervosa. J Affect Disord. 2011;130(3):462-465.
- 27. Joffe RT, Moul DE, Lam RW, et al. Light visor treatment of seasonal affective disorder. Psych Res. 1993;46(1):29-39.
- 28. Kaplan HI, Sadock BJ. Comprehensive Textbook of Psychiatry. Baltimore, MD: Williams & Wilkins; 1995.
- 29. Khan SA, Heussler H, McGuire T, et al. Therapeutic options in the management of sleep disorders in visually impaired children: A systematic review. Clin Ther. 2011;33(2):168-181.
- 30. Knapen SE, van de Werken M, Gordijn MC, Meesters Y. The duration of light treatment and therapy outcome in seasonal affective disorder. J Affect Disord. 2014;166:343-346.
- 31. Koorengevel KM, Gordijn MC, Beersma DG, et al. Extraocular light therapy in winter depression: A double-blind placebo-controlled study. Biol Psychiatry. 2001;50(9):691-698.
- 32. Kopp BT, Hayes D Jr, Ghera P, et al. Pilot trial of light therapy for depression in hospitalized patients with cystic fibrosis. J Affect Disord. 2016;189:164-168.
- 33. Krasnik C, Montori VM, Guyatt GH, et al. The effect of bright light therapy on depression associated with premenstrual dysphoric disorder. Am J Obstet Gynecol. 2005;193(3):658-661.
- 34. Kwan I, Onwude JL. Premenstrual syndrome. In: BMJ Clinical Evidence. London, UK: BMJ Publishing Group; updated November 2006.
- 35. Lam RW, Levitt AJ, Levitan RD, et al. The Can-SAD study: A randomized controlled trial of the effectiveness of light therapy and fluoxetine in patients with winter seasonal affective disorder. Am J Psychiatry. 2006;163(5):805-812.
- 36. Lam RW, Tam EM, Shiah IS, et al. Effects of light therapy on suicidal ideation in patients with winter depression. J Clin Psychiatry. 2000;61(1):30-32.
- 37. Lam RW, Terman M, Wirz-Justice A. Light therapy for depressive disorders: Indications and efficacy. Mod Probl Pharmacopsychiatry. 1997;25:215-234.
- 38. Lande RG, Williams LB, Gragnani C, Tsai A. Effectiveness of light therapy for depression among active duty service members: A nonrandomized controlled pilot trial. Complement Ther Med. 2011;19(3):161-163.
- 39. Lee TM, Chan CC. Dose-response relationship of phototherapy for seasonal affective disorder: A meta-analysis. Acta Psychiatr Scand. 1999;99:315-323.
- 40. Leibenluft E, Turner EH, Feldman-Naim S, et al. Light therapy in patients with rapid cycling bipolar disorder: Preliminary results. Psychopharmacol Bull. 1995;31(4):705-710.
- 41. Leppamaki SJ, Partonen TT, Hurme J, et al. Randomized trial of the efficacy of bright-light exposure and aerobic exercise on depressive symptoms and serum lipids. J Clin Psychiatry. 2002;63(4):316-321.
- 42. Lurie SJ, Gawinski B, Pierce D, Rousseau SJ. Seasonal affective disorder. Am Fam Physician. 2006;74(9):1521-1524.
- 43. Magnusson A, Boivin D. Seasonal affective disorder: An overview. Chronobiol Int. 2003;20(2):189-207.
- 44. Martensson B, Pettersson A, Berglund L, Ekselius L. Bright white light therapy in depression: A critical review of the evidence. J Affect Disord. 2015;182:1-7.
- 45. Mersch PP, Middendorp HM, Bouhuys AL, et al. Seasonal affective disorder and latitude: A review of the literature. J Affect Disord. 1999;53(1):35-48.
- 46. Montgomery P, Dennis J. Bright light therapy for sleep problems in adults aged 60+. Cochrane Database Syst Rev. 2002;(2):CD003403.
- 47. Montgomery P, Dunne D. Sleep disorders in children. In: BMJ Clinical Evidence. London, UK: BMJ Publishing Group; updated September 2006.
- 48. No authors listed. Light therapy for winter depression. If you suffer from seasonal affective disorder, you don't need to wait for longer days to get some relief. Harv Womens Health Watch. 2005;12(6):6-7.
- 49. Nowak L, Davis J. Qualitative analysis of therapeutic light effects on global function in Alzheimer's disease. West | Nurs Res. 2011;33(7):933-952.

- 50. Nussbaumer B, Kaminski-Hartenthaler A, Forneris CA, et al. Light therapy for preventing seasonal affective disorder. Cochrane Database Syst Rev. 2015;(11):CD011269.
- 51. Pail G, Huf W, Pjrek E, et al. Bright-light therapy in the treatment of mood disorders. Neuropsychobiology. 2011;64(3):152-162.
- 52. Partonen T, Lonnqvist J. Seasonal affective disorder. Lancet. 1998;352(9137):1369-1374.
- 53. Poon SH, Sim K, Sum MY, et al. Evidence-based options for treatment- resistant adult bipolar disorder patients. Bipolar Disord. 2012;14(6):573-584.
- 54. Pracka D. Phototherapy in the clinic. Postepy Hig Med Dosw. 1999;53(3):517-523.
- 55. Rastad C, Ulfberg J, Lindberg P. Light room therapy effective in mild forms of seasonal affective disorder -- a randomised controlled study. J Affect Disord. 2008;108(3):291-296.
- 56. Riemann D, Baglioni C, Bassetti C, et al. European guideline for the diagnosis and treatment of insomnia. J Sleep Res. 2017;26(6):675-700.
- 57. Rohan KJ, Roecklein KA, Tierney Lindsey K, et al. A randomized controlled trial of cognitive-behavioral therapy, light therapy, and their combination for seasonal affective disorder. J Consult Clin Psychol. 2007;75(3):489-500.
- 58. Rutten S, Vriend C, Smit JH, et al. Bright light therapy for depression in Parkinson disease: A randomized controlled trial. Neurology. 2019;92(11):e1145-e1156.
- 59. Saeed SA, Bruce TJ. Seasonal affective disorders. Am Fam Physician. 1998;57(6):1340-1346, 1351-1352.
- 60. Sit DK, McGowan J, Wiltrout C, et al. Adjunctive bright light therapy for bipolar depression: A randomized double-blind placebo-controlled trial. Am J Psychiatry. 2018;175(2):131-139.
- 61. State of Minnesota, Health Technology Advisory Committee (HTAC). Light therapy for seasonal affective disorder (SAD). Technology Assessment. St. Paul, MN: HTAC; 2001.
- 62. Strong RE, Marchant BK, Reimherr FW, et al. Narrow-band blue-light treatment of seasonal affective disorder in adults and the influence of additional nonseasonal symptoms. Depress Anxiety. 2009;26(3):273-278.
- 63. Swedish Council on Technology Assessment in Health Care (SBU). Light therapy for depression, and other treatment of seasonal affective disorder. A systematic review. Summary and Conclusions. SBU Report No. 186. Stockholm, Sweden: SBU; 2007.
- 64. Takeshima M, Utsumi T, Aoki Y, et al. Efficacy and safety of bright light therapy for manic and depressive symptoms in patients with bipolar disorder: A systematic review and meta-analysis. Psychiatry Clin Neurosci. 2020;74(4):247-256.
- 65. Tam EM, Lam RW, Levitt AJ. Treatment of seasonal affective disorder: A review. Can J Psychiatry. 1995;40(8):457-466.
- 66. Terman M, Amira L, Terman JS, et al. Predictors of response and nonresponse to light treatment for winter depression. Am J Psychiatry. 1996;153(11):1423-1429.
- 67. Tuunainen A, Kripke DF, Endo T. Light therapy for non-seasonal depression. Cochrane Database Syst Rev. 2004;(2):CD004050.
- 68. University of Michigan Health System. Depression. Guidelines for Clinical Care. Ann Arbor, MI: University of Michigan Health System; October 2005.
- 69. Wang S, Zhang Z, Yao L, et al. Bright light therapy in the treatment of patients with bipolar disorder: A systematic review and meta-analysis. PLoS One. 2020;15(5):e0232798.
- 70. Westrin A, Lam RW. Seasonal affective disorder: A clinical update. Ann Clin Psychiatry. 2007;19(4):239-246.
- 71. Wileman SM, Eagles JM, Andrew JE, et al. Light therapy for seasonal affective disorder in primary care: Randomised controlled trial. Br J Psychiatry. 2001;178:311-316.
- 72. Winkler D, Pjrek E, Praschak-Rieder N, et al. Actigraphy in patients with seasonal affective disorder and healthy control subjects treated with light therapy. Biol Psychiatry. 2005;58(4):331-336.
- 73. Wirz-Justice A. Beginning to see the light. Arch Gen Psychiatry. 1998;55(10):861-862.
- 74. Zhao X, Ma J, Wu S, et al. Light therapy for older patients with non-seasonal depression: A systematic review and meta-analysis. J Affect Disord. 2018;232:291-299.

75. Zhou TH, Dang WM, Ma YT, et al. Clinical efficacy, onset time and safety of bright light therapy in acute bipolar depression as an adjunctive therapy: A randomized controlled trial. J Affect Disord. 2018;227:90-96.

ND Committee Review

Internal Medical Policy Committee 7-22-2021 New Policy for ND *Effective September 06, 2021*Internal Medical Policy Committee 7-21-2022 Annual Review-no changes in criteria *Effective September 05, 2022*Internal Medical Policy Committee 7-26-2023 Annual Review-no changes in criteria *Effective September 04, 2023*Internal Medical Policy Committee 7-16-2024 Annual Review-no changes in criteria *Effective September 02, 2024*• *Added* Policy Application

Disclaimer

Current medical policy is to be used in determining a Member's contract benefits on the date that services are rendered. Contract language, including definitions and specific inclusions/exclusions, as well as state and federal law, must be considered in determining eligibility for coverage. Members must consult their applicable benefit plans or contact a Member Services representative for specific coverage information. Likewise, medical policy, which addresses the issue(s) in any specific case, should be considered before utilizing medical opinion in adjudication. Medical technology is constantly evolving, and the Company reserves the right to review and update medical policy periodically.