

Policy: MP105

Section: Medical Benefit Policy

Subject: Phototherapy for Seasonal Affective Disorder

I. Policy: Phototherapy for Seasonal Affective Disorder

II. Purpose/Objective:

To provide a policy of coverage regarding Phototherapy for Seasonal Affective Disorder

III. Responsibility:

- A. Medical Directors
- B. Medical Management

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment

Medical Necessity shall mean a service or benefit that is compensable under the Medical Assistance Program and if it meets any one of the following standards:

- (i) The service or benefit will, or is reasonably expected to, prevent the onset of an illness, condition or disability.
- (ii) The service or benefit will, or is reasonably expected to, reduce or ameliorate the physical, mental or development effects of an illness, condition, injury or disability.
- (iii) The service or benefit will assist the Member to achieve or maintain maximum functional

capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for members of the same age.

DEFINITION: Seasonal affective disorder (SAD) is defined as a history of major depressive episodes that recur regularly at a particular time of year, typically winter. SAD is associated with decrease in ambient light exposure during the winter season. Based on this theory, phototherapy delivered by a light box or light visor has been used as a treatment.

ALL BUSINESS SEGMENTS:

Members are eligible for coverage of phototherapy for the treatment of seasonal affective disorder when the following criteria are met:

- Phototherapy using a high intensity light box is prescribed by a licensed provider; and
- A diagnosis of bipolar disorder or recurrent major depression has been established; and
- The member meets DSM criteria for season affective disorder which includes:
 - A documented two-year history of a regular temporal relationship between the onset of symptoms and the time of year, (e.g., winter depression with onset in fall/winter and complete remission in the spring), and
 - increased number of depressive episodes in the fall/winter, as compared with any non-seasonal episodes; and
 - no association with any psychotic disorder

EXCLUSIONS:

Devices such as, but not limited to head mounted visors, dawn simulators, non-retinal photo-biomodulation with red and near-infrared light (aka, low-level light therapy), and tanning beds are considered experimental, investigational or unproven for the treatment of seasonal affective disorder and therefore, **NOT COVERED** because there is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this treatment on health outcomes when compared to established treatments or technologies.

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in **MP 15 - Experimental Investigational or Unproven Services or Treatment**.

CODING ASSOCIATED WITH: Phototherapy for Seasonal Affective Disorder

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

HCPCS/CPT Codes:

E1399 Durable medical equipment, miscellaneous
E0203 Therapeutic lightbox, minimum 10,000 lux, table top model
A4634 replacement bulb for therapeutic light box, table top model

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:

Hayes Inc. Online, Light Therapy for Seasonal Affective Disorder, August 31, 1999. Updated 03/20/05

Health Technology Advisory Committee, Light Therapy for Seasonal Affective Disorder (SAD), February 2001.
<http://www.health.state.mn.us/htac/sad.htm>.

Technology Evaluation Center, Phototherapy for the Treatment of Seasonal Affective Disorder. 14(4), May 1999.

Database of Abstracts of Reviews of Effectiveness, Treatment of Seasonal Affective Disorder: A Review, Vol.4, December 2002.

Database of Abstracts of Reviews of Effectiveness, Dose-response Relationship of Phototherapy for Seasonal Affective Disorder: A Meta-analysis. Vol.4, December 2002

Koorengevel KM, Gordijn MC, et.al."Extraocular light therapy in winter depression: A double-blind placebo-controlled study". *Biological Psychiatry*. 50(9):691-698, Nov. 2001.

Gaynes BN, Elstrom D, Harner RM, ET. Al. American Psychiatric Association. May 2003 Annual Meeting. Phototherapy: Systematic review of the evidence.

ECRI, HTAIS, Windows on Medical Technology. Light Therapy for Seasonal Affective Disorder. April 2004.

Nemecek D. Medical Director, Cigna Behavioral Health. Personal communication.

Golden RN, Gaynes BN, Ekstrom RD, Hamer RM, Jacobsen FM, Suppes T, Wisner KL, Nemeroff CB. "The Efficacy of Light Therapy in the treatment of Mood Disorders: A Review and Meta-Analysis of the Evidence" *AM J Psychiatry* 2005; 162: 656-662.

Lurie AJ, Gawinski B, Pierce D, Rousseau SJ. Seasonal Affective Disorder. *Am Fam Physican* 2006; 74:1521-24.

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.

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.

Melrose S. Seasonal Affective Disorder: An Overview of Assessment and Treatment Approaches. *Depress Res Treat*. 2015.

Rohan KJ, Mahon JN, Evans M, et al. Randomized Trial of Cognitive-Behavioral Therapy Versus Light Therapy for Seasonal Affective Disorder: Acute Outcomes. *Am J Psychiatry* 2015; 172:862.

Rohan KJ, Meyerhoff J, Ho SY, et al. Outcomes One and Two Winters Following Cognitive-Behavioral Therapy or Light Therapy for Seasonal Affective Disorder. *Am J Psychiatry* 2016; 173:244.

Danilenko KV, Ivanova IA. Dawn simulation vs. bright light in seasonal affective disorder: Treatment effects and subjective preference. *J Affect Disord* 2015; 180:87.

Uptodate. Seasonal affective disorder: Treatment. David Avery, MD August 2019.

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

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.

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*. Oct. 2018

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

This policy will be revised as necessary and reviewed no less than annually.

Devised: 10/13/95

Revised: 9/98, 3/03 (format); 9/04; 9/06; 12/15 (added Medicaid Segment and Exclusions); 10/17 (revised to include all business segments), 10/19 (add exclusion)

Reviewed: 9/05; 10/07; 10/08; 11/09; 11/10, 11/11, 11/12, 11/13, 11/14, 11/15, 11/16, 10/18