

Medical Policy



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***Current Policy Effective Date: 9/1/24**
(See policy history boxes for previous effective dates)

Title: Therapeutic Light Box for the Treatment of Major Depression With Seasonal Pattern

Description/Background

Major depressive disorder with seasonal pattern is a mood disorder subtype, characterized by a regular temporal relationship between the onset of major depressive episodes in major depressive disorder and a particular time of the year (ie, fall or winter). Full remission or change from major depression to mania or hypomania also occurs at a characteristic time of year, usually in the spring or summer. The pattern of onset and remission must have occurred during the past 2 years with two major depressive episodes that demonstrate the temporal seasonal relationship, and seasonal major depressive episodes that outnumber the nonseasonal major depressive episodes.

It is believed that major depression with seasonal pattern is associated with the rapid changes in the duration of sunlight exposure during the fall. Light therapy has been recommended as the first line treatment for seasonal mood disorder (SMD) by the American Psychiatric Association and the National Institute of Mental Health. The most commonly used form of light therapy involves the use of a light box, generally with an intensity of 10,000-lux, which administers bright light that mimics natural outdoor light. Light boxes are available with lower intensity.¹ Other treatment approaches include dawn simulators and light visors. Dawn simulators raise the intensity of a bedside lamp over 30 to 60 minutes, simulating the rising sun. The treatment is delivered before the individual leaves the bed.² The visor is a form of portable light therapy that consists of a baseball cap with a rechargeable LED device. It allows freedom of movement while receiving light therapy.

Patients using light boxes are instructed to select a consistent time of day, generally in the morning; and to remain a specified distance from the box for a certain length of time, usually 20-30 minutes. Light therapy or phototherapy is given for a period of days to weeks, until an antidepressive response is attained. The treatment interval can be titrated down to a maintenance dose until the spring when the rapid increase in the duration of light provides the relief of depression naturally. Treatment can be repeated in the case of a relapse.

Regulatory Status:

The U.S. Food and Drug Administration (FDA) has not given final approval to market light boxes for the treatment of seasonal mood disorder. Light boxes and light visors are commercially available and are marketed directly to consumers.

Medical Policy Statement

Light therapy using specialized delivery devices has not been proven to be more effective in the peer-reviewed literature than natural light or conventional artificial light sources.

Light boxes are not an FDA approved method for the treatment of major depression with seasonal pattern and they do not meet the requirements for durable medical equipment (DME). Therefore, the therapeutic light box is not a covered benefit.

Inclusionary and Exclusionary Guidelines

N/A

CPT/HCPCS Level II Codes *(Note: The inclusion of a code in this list is not a guarantee of coverage. Please refer to the medical policy statement to determine the status of a given procedure)*

Established codes:

N/A

Other codes (investigational, not medically necessary, etc.):

E0203

A4634

Rationale

Golden et al (2005) performed a meta-analysis of 173 studies, of which only 13% met the criteria for inclusion.³ They researched bright light treatment and dawn simulation in seasonal affective disorder, and bright light treatment in nonseasonal depression. The reviewers reported that in seasonal affective disorder, a significant reduction in depression symptom severity was associated with bright light treatment (8 studies, effect size = 0.73, 95% CI=0.37 to 1.08) and dawn simulation (5 studies; effect size=0.53, 98% CI=0.18 to 0.89). The reviewers concluded that light treatment for seasonal affective disorder is efficacious, with effect sizes equivalent to those of most antidepressant pharmacotherapy trials. They also stated that many reports of the efficacy of light therapy are not based on rigorous study designs.

Pjrek et al (2020) aimed to perform an updated systematic review of the available literature, to summarize the current evidence for the efficacy of bright light therapy in adult seasonal affective disorder patients, and to assess the methodological quality of the available studies.⁴ They selected 151 abstracts for review; 49 were selected for full-text analysis. Of the 49 studies, 19 met the inclusion criteria. All studies used light boxes to deliver bright light therapy, except 1, which used light visors. The reviewers found that bright light therapy was superior to placebo with a standard mean deviation of -0.37 (95% CI: -0.63 to -0.12) based on a random-effects model with 18 studies and 610 patients ($z=-2.89$, $p=0.004$). Bright light therapy in seasonal affective disorder had response rates similar to those shown for conventional antidepressants in nonseasonal major depressive disorder. The subgroup analysis of the studies which used bright light therapy monotherapy versus studies which allowed psychotropic medication showed lower effect sizes for studies that used bright light therapy as an add-on treatment. There were some limitations noted. The meta-analysis only included trials investigating short-term effects; and, some studies were of limited methodological quality or had fairly small sample sizes. The reviewers recommended that larger placebo-controlled trials using state-of-the-art methodology are necessary. Evidence for the long-term efficacy of bright light therapy and its potential in the prevention of further SMD episodes is limited, and recommendations on treatments are lacking.

The FDA has not approved the marketing of light boxes/therapy for the treatment of seasonal mood disorder; therefore, light boxes/therapy do not meet the criteria of durable medical equipment.

Government Regulations

National:

There is no national coverage policy related to this topic.

Local:

There is no local coverage policy related to this topic.

CGS Jurisdiction B DMEPOS Fee Schedule 2024: codes E0203 and A4634 are not found.

(The above Medicare information is current as of the review date for this policy. However, the coverage issues and policies maintained by the Centers for Medicare & Medicare Services [CMS, formerly HCFA] are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. For the most current information, the reader should contact an official Medicare source.)

Related Policies

Transcranial Magnetic Stimulation as a Treatment of Depression and Other Psychiatric/Neurologic Disorders

References

1. Faedda GL, Tondo L, Teicher MH, Baldessarini RJ, Gelbard HA, Floris GF. Seasonal Mood Disorders: Patterns of Seasonal Recurrence in Mania and Depression. *Arch Gen Psychiatry*. 1993;50(1):17–23. doi:10.1001/archpsyc.1993.01820130019004 assessed 4/17/24.
2. Phelps, J. The lowly dawn simulator. *Psychiatric Times*. December 8, 2016 <https://www.psychiatrytimes.com/view/lowly-dawn-simulator> Accessed 3/26/24.
3. Golden, R N, Gaynes BN, Ekstrom RD, et al. 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.
4. Pjrek E, Friedrich M-E, Cabioli L, et al. The efficacy of light therapy in the treatment of seasonal affective disorder: a meta-analysis of randomized controlled trials. *Psychother Psychosom*. 2020;89:17-24.

The articles reviewed in this research include those obtained in an Internet based literature search for relevant medical references through 3/26/24, the date the research was completed.

Joint BCBSM/BCN Medical Policy History

Policy Effective Date	BCBSM Signature Date	BCN Signature Date	Comments
12/19/03	12/19/03	1/16/04	Joint policy established
12/30/05	1/7/05	12/22/04	Routine maintenance
7/1/08	N/A	6/27/08	Routine maintenance
11/1/08	8/19/08	9/23/08	Review of status
11/1/09	8/18/09	8/18/09	Routine maintenance
11/1/10	8/28/10	8/28/10	Routine maintenance
3/1/12	12/13/11	1/31/12	Routine maintenance
1/1/14	10/17/13	10/25/13	Routine maintenance
11/1/15	8/24/15	9/14/15	Routine maintenance
11/1/16	10/20/16	10/11/16	Routine maintenance Updates to following sections: <ul style="list-style-type: none"> • Title • Description/Background • Regulatory Status • Medical Policy Statement • Rationale • References
11/1/17	8/15/17	8/15/17	Routine maintenance
9/1/18	6/19/18	6/19/18	Routine maintenance
9/1/19	6/18/19		Routine maintenance
9/1/20	6/16/20		Routine maintenance
9/1/21	6/15/21		Routine maintenance; added ref 2,3,5
9/1/22	6/21/22		Routine maintenance
9/1/23	6/13/23		Routine maintenance (jf) Vendor Managed: Northwood: A4634 & E0203. Aligned, not covered.
9/1/24	6/11/24		Routine maintenance (jf) Vendor Managed: Northwood: A4634 & E0203. Edit to description and FDA section of policy removed affective and

			replaced with mood. Seasonal Mood Disorder (SMD)
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Next Review Date: 2nd Qtr, 2025

Pre-Consolidation Medical Policy History

Original Policy Date	Comments
BCN: 3/14/01	Revised: N/A
BCBSM: N/A	Revised: N/A

BLUE CARE NETWORK BENEFIT COVERAGE

POLICY: THERAPEUTIC LIGHT BOX FOR THE TREATMENT OF MAJOR DEPRESSION WITH SEASONAL PATTERN

I. Coverage Determination:

Commercial HMO (includes Self-Funded groups unless otherwise specified)	Not Covered
BCNA (Medicare Advantage)	See Government Regulations section
BCN65 (Medicare Complementary)	Coinsurance covered if primary Medicare covers the service.

II. Administrative Guidelines:

- The member's contract must be active at the time the service is rendered.
- Coverage is based on each member's certificate and is not guaranteed. Please consult the individual member's certificate for details. Additional information regarding coverage or benefits may also be obtained through customer or provider inquiry services at BCN.
- The service must be authorized by the member's PCP except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Services must be performed by a BCN-contracted provider, if available, except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Payment is based on BCN payment rules, individual certificate and certificate riders.
- Appropriate copayments will apply. Refer to certificate and applicable riders for detailed information.
- CPT - HCPCS codes are used for descriptive purposes only and are not a guarantee of coverage.