Medical Policy

Blue Care Network of Michigan

A nonprofit corporation and independent licensee of the Blue Cross and Blue Shield Association

BCN Medical Policies are a source for BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information.

BCN Policy Effective Date: 8/15/12
(See policy history boxes for previous effective dates)

Title: Ultraviolet Light Therapy in the Home or Office Setting for the Treatment of Skin Conditions

Description / Background

Ultraviolet (UV) light has been used for decades to treat a variety of skin conditions. UV radiation is known to suppress the immune system and reduce inflammatory responses. UV light was used initially as an effective treatment for acute atopic dermatitis. Since then, UV light has been used for recalcitrant skin diseases. One of the most severe skin conditions treated with UV light is psoriasis.

Ultraviolet light causes the activated T cells in the skin to die, a process called apoptosis. Apoptosis reduces inflammation and slows the overproduction of skin cells which causes the scaling associated with many skin conditions. Brief, non-burning daily exposure to sunlight clears or improves skin conditions in many people.

Ultraviolet A (UVA) is the most commonly encountered type of UV light. UVA exposure has an initial pigment-darkening effect (tanning) followed by erythema (redness) if the exposure is excessive. UVA is needed by humans for synthesis of vitamin D; however, overexposure to UVA has been associated with toughening of the skin, suppression of the immune system and cataract formation. UVA light is often called black light. Most phototherapy and tanning booths use UVA lamps.

Some artificial sources of ultraviolet B (UVB) light are similar to sunlight. Newer sources, called narrow-band UVB, emit the part of the ultraviolet spectrum band that is most helpful in treating severe skin conditions.

UVB phototherapy is also used to treat widespread psoriasis and lesions that resist topical treatment. This type of phototherapy is normally administered in a doctor's office by using a

light panel or light box, although some patients can use UVB light boxes at home with a doctor's guidance. Generally, at least three treatments per week for two or three months are needed. UVB phototherapy may be combined with other treatments as well.

Health care providers administer UV light therapy with a variety of tools. Options range from full-body units, such as light beds, to small handheld lights. Other tools include small light cabinets for the hands or feet, combs that emit light from the tines for reaching the scalp and lasers, which can focus a high-intensity beam of UV light on a small area.

UV therapy sessions may last from a few seconds to an hour. Consistency is one of the keys to successful treatment, and some patients may need therapy two to seven days a week. Multiple sessions may be needed to achieve an adequate response. Once the condition has improved, patients may switch to a less-frequent maintenance schedule.

Psoriasis is a chronic, recurring skin disease characterized by raised red patches with silvery scales and a distinct border between the patch and normal skin. The patches of psoriasis occur because of an abnormally high rate of growth of skin cells. The reason for the rapid cell growth is unknown, but immune system dysfunction is thought to play a role.

There are two types of UVB treatment for psoriasis, broad band UVB and narrow band UVB. The major difference between them is that narrow band UVB light bulbs release a smaller range of ultraviolet light. Both types are effective in clearing psoriasis.

Unlike UVB, UVA is not very effective unless used with a light-sensitizing medication, such as psoralen. By combining psoralen and UVA (PUVA), the excessive cell growth of psoriasis is slowed. PUVA is normally used when more than ten percent of the skin is affected by psoriasis or when rapid clearing is desired because the disease interferes with a person's occupation or activities of daily living.

Compared with UVB treatment, PUVA treatment is taken two to three times a week and clears psoriasis more consistently and with fewer treatments. It is, however, associated with an increase in more short-term side effects including nausea, headache, fatigue, burning and itching. Long-term treatment is associated with an increased risk of squamous cell and melanoma skin cancers. Because psoralen enters the lens of the eye, UV-resistant sunglasses must be worn for at least twelve hours after undergoing PUVA therapy.

Vitiligo is a pigmentation disorder in which melanocytes in the skin, the mucous membranes and the retina are destroyed. As a result, white patches of skin appear on different parts of the body. The hair that grows in areas affected by vitiligo usually turns white. The cause of vitiligo is not known.

PUVA is the most beneficial treatment for vitiligo available in the United States. The goal of PUVA therapy is to re-pigment the white patches. Treatment is time-consuming and care must be taken to avoid side effects, which can sometimes be severe. Psoralen contains chemicals that react with ultraviolet light to cause darkening of the skin. The treatment involves taking

psoralen orally or topically, depending on the severity of the vitiligo, followed by carefully timed exposure to UVA light from a UV lamp or sunlight.

Atopic Dermatitis (Eczema) is a chronic skin condition characterized by a dry, itchy rash on the face, elbows, hands, knees and/or feet. In addition to skin care and avoidance of substances that might irritate the skin, topical ointments, creams and oral corticosteroids are standard treatment options. For severe cases in adults, immunosuppressants may be prescribed. If medication is ineffective, phototherapy and photochemotherapy (i.e., UVA, UVB and PUVA) are alternative treatments.

Mycosis Fungoides (MF) is a type of lymphoma (cancer the immune system) that first appears on the skin. Mycosis fungoides can spread to various parts of the body including the blood and internal organs with varying degrees of severity. It is characterized by the development of red, itchy skin lesions that progress to involve the lymph nodes.

In the early stages of MF, known as stages IA, IB and IIA, narrow band UVB therapy has been shown to be an effective treatment. Psoralen and ultraviolet A radiation (PUVA) has also been shown to have a therapeutic effect on lesions caused by MF.

Regulatory Status:

The oral psoralen products Oxsoralen-Ultra (methoxsalen soft gelatin capsules) and 8-MOP (methoxsalen hard gelatin capsules) have been approved by the U.S. Food and Drug Administration (FDA); both are made by Valeant Pharmaceuticals. Topical psoralen products have also received FDA approval e.g., Oxsoralen (Valeant Pharmaceuticals).

In 2001, an XeCl excimer laser (XTRAC™ by PhotoMedex) received 510(k) clearance from the U.S. Food and Drug Administration (FDA) for the treatment of mild to moderate psoriasis. The 510(k) clearance has subsequently been obtained for a number of targeted UVB lamps and lasers, including newer versions of the XTRAC system including the XTRAC Ultra™, the VTRAC™ lamp (PhotoMedex), the BClear™ lamp (Lumenis), and the European manufactured Excilite™ and Excilite µ™ XeCl lamps.

Medical Policy Statement

The use of an ultraviolet cabinets or light panels is established as safe and effective in the home or office settings for the treatment of generalized intractable psoriasis, vitiligo, atopic dermatitis (eczema) and stage IA, IB or IIA mycosis fungoides. Ultraviolet light therapy may be considered a useful therapeutic option for patients meeting the patient selection criteria.

Inclusionary and Exclusionary Guidelines (Clinically based guidelines that may support individual consideration and pre-authorization decisions)

Inclusions:

An ultraviolet light panel or cabinet is covered for the treatment of **psoriasis** under the following conditions:

- The member has a diagnosis of generalized intractable psoriasis.
- The physician must document the medical need for home treatment of psoriasis as opposed to treatment in an outpatient or office setting.
- There must be physician documentation of clinical improvement as a response to this treatment prior to institution of home therapy.
- There must be documentation by the physician of a member's ability to learn and comply with the therapeutic regimen.

An ultraviolet light cabinet is covered for the treatment of **vitiligo** under the following conditions:

- For topical PUVA therapy:
  - Patients with a small number of depigmented patches (affecting less than 20 percent of the body), or
  - Patients two years old and older who have localized patches of vitiligo.

- For oral PUVA therapy:
  - Patients with more extensive vitiligo (affecting greater than 20 percent of the body) or
  - Patients who do not respond to topical PUVA therapy.

In addition:

- The physician must document the medical need for home treatment of vitiligo as opposed to treatment in an office or outpatient setting.
- There must be physician documentation of clinical improvement as a response to this treatment prior to institution of home therapy.
- There must be documentation by the physician of a member's ability to learn and comply with the therapeutic regimen.

An ultraviolet light cabinet is covered for the treatment of **atopic dermatitis (eczema)** under the following conditions:

- The member has a diagnosis of intractable atopic dermatitis (eczema).
- The physician must document the medical need for home treatment of atopic dermatitis (eczema) as opposed to treatment in an outpatient or office setting.
- There must be physician documentation of clinical improvement as a response to this treatment prior to institution of home therapy.
- There must be documentation by the physician of a member's ability to learn and comply with the therapeutic regimen.

An ultraviolet light cabinet is covered for the treatment of stage IA, IB or IIA **Mycosis fungoides** under the following conditions:

- The member has a diagnosis of stage IA, IB or IIA mycosis fungoides.
- The physician must document the medical need for home treatment of mycosis fungoides as opposed to treatment in an outpatient or office setting.
- There must be physician documentation of clinical improvement as a response to this treatment prior to institution of home therapy.

- There must be documentation by the physician of a member's ability to learn and comply with the therapeutic regimen.

Exclusions:
- Members not meeting the above guidelines
- For home ultraviolet light therapy, members without DME coverage (e.g., Personal Plus or Non-Group certificates)

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:

E0691 E0692 E0693 E0694

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

N/A

Rationale

Use of ultraviolet light therapy, UVA or UVB, is standard of care for the treatment of patients with psoriasis, vitiligo, atopic dermatitis (eczema) and stage IA, IB or IIA mycosis fungoides who meet specific guidelines. Additionally, the clinical literature has shown that phototherapy at home is equally effective and equally safe as phototherapy in an office setting.

Government Regulations

National:

There is an NCD titled "Treatment of Psoriasis" (250.1):

Indications and Limitations of Coverage

Psoriasis is a chronic skin disease, for which several conventional methods of treatment have been recognized as covered. These include topical application of steroids or other drugs; **ULTRAVIOLET LIGHT** (actinotherapy); and coal tar alone or in combination with ultraviolet B light (Goeckerman treatment).

A newer treatment for psoriasis uses a psoralen derivative drug in combination with ultraviolet A light, known as PUVA. PUVA therapy is covered for treatment of intractable, disabling psoriasis, but only after the psoriasis has not responded to more conventional treatment. The contractor should document this before paying for PUVA therapy.

In addition, reimbursement for PUVA therapy should be limited to amounts paid for other types of photochemotherapy; ordinarily, payment should not be allowed for more than 30 days of treatment, unless improvement is documented.

Medicare National Coverage Determinations Manual, Chapter 1, Part 4 (Sections 200 – 310.1) Coverage Determinations
280.1 - Durable Medical Equipment Reference List (Effective May 5, 2005)
Ultraviolet Cabinet: Covered for selected patients with generalized intractable psoriasis. Using appropriate consultation, the contractor should determine whether medical and other factors justify treatment at home rather than at alternative sites, e.g., outpatient department of a hospital.

Local:

There is no LCD for this topic.

Michigan Department of Community Health:

Medicaid has no information for codes E0691-E0694.

(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

N/A

References

1. Blue Cross Blue Shield Association, "Light Therapy for Psoriasis," *Medical Policy Reference Manual,* Policy #2.01.47, Issue 2:2012, original policy date February 2012.
2. Blue Cross Blue Shield Association, "Light Therapy for Vitiligo," *Medical Policy Reference Manual,* Policy #2.01.86, Issue 3:2012, original policy date March 2012.
3. Blue Cross Blue Shield Association, "Psoralens with Ultraviolet A," *Medical Policy Reference Manual,* Policy #2.01.07, Issue 1:2012, original policy date 12/1/95, last review date 1/12/12.
4. Gambichler, T., et al., "Medium-dose Ultraviolet (UV) A1 vs. Narrowband UVB Phototherapy in Atopic Eczema: A Randomized Crossover Study," *British Journal of Dermatology,* Vol. 160, No. 3, 2009, pp. 652-658.
5. Gettler, Samuel L. MD, and Maxwell Fung, MD, "Efficacy of Treatments for Mycosis Fungoides and Sézary Syndrome: Nationwide Survey Responses," *Dermatology Online Journal,* Vol. 1, No. 3, 2005.
6. Hanifin, Jon M., MD, et al., "Guidelines of Care for Atopic Dermatitis," *Journal of the American Academy of Dermatology*, Vol. 50, No. 3, March 2004, pp. 391-404.

7. Koek, Mayke B.G., et al, “Home Versus Outpatient Ultraviolet B Phototherapy for Mild to Severe Psoriasis: Pragmatic Multicentre Randomized Controlled Non-inferiority Trial (PLUTO study),” *British Medical Journal,* Vol. 338, 2009, pp. 1-11.
8. Majoie, I.M. Leonie, MD, et al., “Narrowband Ultraviolet B and Medium-dose Ultraviolet A1 Are Equally Effective in the Treatment of Moderate to Severe Atopic Dermatitis,” *Journal of the American Academy of Dermatology*, Vol. 60, No. 1, January 2009, pp. 77-84.
9. Medicare National Coverage Determinations (National Coverage Decisions) (PUB. 100-03) Chapter 1 - Coverage Determinations, Section 280.1 - Durable Medical Equipment.
10. Menter, Alan, MD, et al., “Guidelines of Care For The Management Of Psoriasis And Psoriatic Arthritis: Section 5: Guidelines of Care For The Treatment Of Psoriasis With Phototherapy And Photochemotherapy, *Journal of the American Academy of Dermatology,* Vol. 62, No. 1, January 2010.
11. The Merck Manual of Diagnosis and Therapy, Seventeenth Edition, Section 10: Dermatologic Diseases, Chapter 117: *Psoriasis*, <http://www.merckmanuals.com/professional/sec10/ch116/ch116b.html>, (May 30, 2012).
12. The Merck Manual of Diagnosis and Therapy, Seventeenth Edition, Section 10: Dermatologic Diseases, Chapter 123: Pigmentation Disorders, <http://www.merckmanuals.com/professional/sec10/ch123/ch123c.html>, (May 30, 2012).
13. National Cancer Institute website, “Stage I Mycosis Fungoides/Sézary Syndrome,” <http://www.cancer.gov/cancertopics/pdq/treatment/mycosisfungoides/HealthProfessional/page5>, (May 30, 2012).
14. National Psoriasis Foundation website, http://www.psoriasis.org/home.
15. NIAMS (National Institute of Arthritis and Musculoskeletal and Skin Diseases) website, http://www.niams.nih.gov/hi/topics/vitiligo/vitiligo.htm.
16. NIAMS (National Institute of Arthritis and Musculoskeletal and Skin Diseases), *Atopic Dermatitis,* May 2009, <http://www.niams.nih.gov/Health_Info/Atopic_Dermatitis/default.asp> (May 30, 2012).
17. NIAMS (National Institute of Arthritis and Musculoskeletal and Skin Diseases), “Questions and Answers about Vitiligo,” *Vitiligo*, May 2001, <http://www.niams.nih.gov/Health_Info/Vitiligo/default.asp> (May 30, 2012).
18. Nolan, Brigett V., et al., “A Review of Home Phototherapy for Psoriasis,” *Dermatology Online Journal,* Vol. 16, No. 2, February 2010.
19. Xiao, Ting, et al., “Narrow-band Ultraviolet B Phototherapy For Early Stage Mycosis Fungoides,” *European Journal of Dermatology*, Vol. 18, No. 6, 2008, pp. 660-662.

The articles reviewed in this research include those obtained in an Internet based literature search for relevant medical references through 5/31/12, the date the research was completed.

BCN Medical Policy History

Date	Rationale
5/13/91	BCN policy established
3/4/05	Routine maintenance, addition of diagnosis of vitiligo
8/27/05	Routine maintenance; policy retired
2/16/11	Policy unretired; addition of atopic dermatitis (eczema) and early stage mycosis fungoides diagnoses; references updated
8/15/12	Routine maintenance

Next Review: 3rd Qtr, 2013

MEDICAL POLICY TITLE: ULTRAVIOLET LIGHT THERAPY IN THE HOME OR OFFICE SETTING FOR THE TREATMENT OF SKIN CONDITIONS
BCN BENEFIT ADMINISTRATION

I. Coverage Determination

Commercial HMO (includes Self-Funded groups unless otherwise specified)	Covered; appropriate durable medical equipment copayments will apply.
BCNA (Medicare Advantage)	Covered following Medicare guidelines.
BCN65 (Medicare Complementary)	Coinsurance covered if primary Medicare covers the service.
Blue Cross Complete of Michigan	Covered

II. Administrative Guidelines

- The member's contract must be active at the time the service is rendered.
- 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 benefits 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.
- *Duplicate (back-up) equipment is not a covered benefit.*