



Louisiana

Light Therapy for Psoriasis

Policy # 00131

Original Effective Date: 03/25/2002

Current Effective Date: 11/21/2018

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the "Company"), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: Dermatologic Applications of Photodynamic Therapy is addressed separately in medical policy 00098.

When Services Are Eligible for Coverage

Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:

- *Benefits are available in the member's contract/certificate, and*
- *Medical necessity criteria and guidelines are met.*

Based on review of available data, the Company may consider psoralen plus ultraviolet A (PUVA) for the treatment of severe, disabling psoriasis, which is not responsive to other forms of conservative therapy (e.g., topical corticosteroids, coal/tar preparations, and ultraviolet light), to be **eligible for coverage**.

Based on review of available data, the Company may consider the use of targeted phototherapy to be **eligible for coverage** for the treatment of moderate to severe psoriasis comprising less than 20% body area for which narrowband ultraviolet B (NB-UVB) or psoralen plus ultraviolet A (PUVA) are indicated.

Based on review of available data, the Company may consider the use of targeted phototherapy to be **eligible for coverage** for the treatment of mild to moderate psoriasis comprising less than 20% body area that is unresponsive to conservative treatment.

When Services Are Considered Investigational

Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers targeted phototherapy as first line treatment of mild psoriasis to be **investigational**.*

Based on review of available data, the Company considers targeted phototherapy for the treatment of generalized psoriasis or psoriatic arthritis to be **investigational**.*

Policy Guidelines

Disease severity is minimally defined by body surface area (mild psoriasis affects <5% of body surface area, moderate psoriasis affects 5%-10%, and severe disease affects >10% body surface area). However, lesion characteristics (eg, location and severity of erythema, scaling, induration, pruritus) and impact on quality of life are also taken into account (see references 1-3). For example, while a handprint is equal to approximately 1% body surface area, lesions on the hands, feet, or genitalia that cause disability may be

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classified as moderate-to-severe. The Psoriasis Area and Severity Index may be used as an outcome measure in clinical research. Clinical assessment of disease severity is typically qualitative.

Established treatments for psoriasis include the use of topical ointments and ultraviolet light (“light lamp”) treatments. Lasers and targeted ultraviolet B lamps are considered equivalent devices; targeted ultraviolet devices are comparable with ultraviolet light panels for treatment purposes. First-line treatment of ultraviolet-sensitive lesions may involve around 6 to 10 office visits; treatment of recalcitrant lesions may involve around 24 to 30 office visits. Maintenance therapy or repeat courses of treatment may be required.

During psoralen plus ultraviolet A therapy, the patient needs to be assessed on a regular basis to determine the effectiveness of the therapy and the development of adverse effects. These evaluations are essential to ensure that the exposure dose of radiation is kept to the minimum compatible with adequate control of disease. Therefore, psoralen plus ultraviolet A is generally not recommended for home therapy.

Background/Overview

PSORIASIS

Psoriasis is a common chronic immune-mediated disease characterized by skin lesions ranging from minor localized patches to complete body coverage. There are several types of psoriasis; most common is plaque psoriasis, which is associated with red and white scaly patches on the skin. In addition to being a skin disorder, psoriasis can negatively impact many organ systems and is associated with an increased risk of cardiovascular disease, some types of cancer, and autoimmune diseases (eg, celiac disease, Crohn disease). Although disease severity is minimally defined by body surface area (mild psoriasis affects <5% of body surface area, moderate psoriasis affects 5%-10%, and severe disease affects >10% of body surface area), lesion characteristics (eg, location and severity of erythema, scaling, induration, pruritus) and impact on quality of life are also taken into account.

Treatment

Topical therapy (eg, corticosteroids, vitamin D analogues) is generally considered first-line treatments of psoriasis, especially for mild disease. Phototherapy and systemic therapy are treatment options for patients with more extensive and/or severe disease and those who fail conservative treatment with topical agents. Phototherapy is available in various forms including exposure to natural sunlight, use of broadband ultraviolet B (BB-UVB) devices, narrowband ultraviolet B (NB-UVB) devices, targeted phototherapy, and psoralen plus ultraviolet A (PUVA). NB-UVB is an established treatment for psoriasis, based on efficacy and safety. This evidence review addresses 2 alternative treatments: targeted phototherapy, which uses ultraviolet light that can be focused on specific body areas or lesions, and PUVA.

Targeted Phototherapy

Potential advantages of targeted phototherapy include the ability to use higher treatment doses and to limit exposure to surrounding tissue. BB-UVB devices, which emit wavelengths from 290 to 320 nm, have been largely replaced by NB-UVB devices. NB-UVB devices eliminate wavelengths below 296 nm, which are considered erythemogenic and carcinogenic but not therapeutic. NB-UVB is more effective than BB-UVB, and approaches PUVA in efficacy. Original NB-UVB devices consisted of a Phillips TL-01 fluorescent bulb

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with a maximum wavelength (λ_{max}) at 311 nm. Subsequently, an excimer (excited dimer) laser using xenon chloride (XeCl) and lamps were developed as targeted NB-UVB treatment devices; they generate monochromatic or very narrow band radiation with a λ_{max} of 308 nm. Targeted phototherapy devices are directed at specific lesions or affected areas, thus limiting exposure to the surrounding normal tissues. They may, therefore, allow higher dosages compared with a light box, which could result in fewer treatments to produce clearing. The original indication of the excimer laser was for patients with mild-to-moderate psoriasis, defined as involvement of less than 10% of the skin. Newer XeCl laser devices are faster and more powerful than the original models, which may allow treatment of patients with more extensive skin involvement (10%-20% body surface area).

Psoralen Plus Ultraviolet A

PUVA uses a psoralen derivative in conjunction with long wavelength ultraviolet A (UVA) light (sunlight or artificial) for photochemotherapy of skin conditions. Psoralens are tricyclic furocoumarins that occur in certain plants and can also be synthesized. They are available in oral and topical forms. Oral PUVA is generally given 1.5 hours before exposure to UVA radiation. Topical PUVA therapy refers to the direct application of the psoralen to the skin with subsequent exposure to UVA light. Bath PUVA is used in some European countries for generalized psoriasis, but the agent used (trimethylpsoralen) is not approved by the Food and Drug Administration (FDA). Paint PUVA and soak PUVA are other forms of topical application of psoralen and are often used for psoriasis localized to the palms and soles. In paint PUVA, 8-methoxypsoralen in ointment or lotion form is put directly on the lesions. With soak PUVA, the affected areas of the body are placed in a basin of water containing psoralen. With topical PUVA, UVA exposure is generally administered within 30 minutes of psoralen application.

PUVA has most commonly been used to treat severe psoriasis, for which there is no generally accepted first-line treatment. Each treatment option (eg, systemic therapies such as methotrexate, phototherapy, biologic therapies) has associated benefits and risks. Common minor toxicities associated with PUVA include erythema, pruritus, irregular pigmentation, and gastrointestinal tract symptoms; they generally can be managed by altering the dose of psoralen or ultraviolet light. Potential long-term effects include photoaging and skin cancer, particularly squamous cell carcinoma and possibly malignant melanoma. PUVA is generally considered more effective than targeted phototherapy for the treatment of psoriasis. However, the requirement of systemic exposure and the higher risk of adverse reactions (including a higher carcinogenic risk) have generally limited PUVA therapy to patients with more severe disease.

FDA or Other Governmental Regulatory Approval

U.S. Food and Drug Administration (FDA)

In 2001, XTRAC™[‡] (PhotoMedex, Willow Grove, PA), an XeCl excimer laser, was cleared for marketing by FDA through the 510(k) process for the treatment of mild-to-moderate psoriasis. The 510(k) clearance was subsequently obtained for a number of targeted UVB lamps and lasers, including newer versions of the XTRAC system (eg, XTRAC Ultra™[‡]), the VTRAC™[‡] lamp (PhotoMedex), the BClear™[‡] lamp (Lumenis, Israel), and the European manufactured Excilite™[‡] and Excilite μ™[‡] XeCl lamps. FDA product code: FTC.

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In 2010, the Levia Personal Targeted Phototherapy^{®†} UVB device (Daavlin, Bryan, OH; previously manufactured by Lerner Medical Devices, Los Angeles, CA) was cleared for marketing by FDA through the 510(k) process for home treatment of psoriasis.

The oral psoralen products Oxsoresalen-Ultra (methoxsalen soft gelatin capsules) and 8-MOP (methoxsalen hard gelatin capsules) have been approved by FDA; both are made by Valeant Pharmaceuticals. Topical psoralen products have also received FDA approval (eg, Oxsoresalen; Valeant Pharmaceuticals).

Centers for Medicare and Medicaid Services (CMS)

Ultraviolet light treatment is covered; targeted phototherapy is not specifically mentioned. There is no national coverage determination on psoralen plus ultraviolet A.

Rationale/Source

Evidence reviews assess the clinical evidence to determine whether the use of a technology improves the net health outcome. Broadly defined, health outcomes are length of life, quality of life, and ability to function—including benefits and harms. Every clinical condition has specific outcomes that are important to patients and to managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcome is balance of benefits and harms.

To assess whether the evidence is sufficient to draw conclusions about the net health outcome of a technology, 2 domains are examined: the relevance and the quality and credibility. To be relevant, studies must represent one or more intended clinical use of the technology in the intended population and compare an effective and appropriate alternative at a comparable intensity. For some conditions the alternative will be supportive care or surveillance. The quality and credibility of the evidence depend on study design and conduct, minimizing bias and confounding that can generate incorrect findings. The randomized controlled trial (RCT) is preferred to assess efficacy; however, in some circumstances, nonrandomized studies may be adequate. RCTs are rarely large enough or long enough to capture less common adverse events and long-term effects. Other types of studies can be used for these purposes and to assess generalizability to broader clinical populations and settings of clinical practice.

The most appropriate comparator for targeted therapy is narrowband ultraviolet B (NB-UVB), which is an established treatment for psoriasis and can be administered in the home. The efficacy of psoralen plus ultraviolet A (PUVA) has been compared with NB-UVB, which has fewer side effects, or with ultraviolet A (UVA) with placebo.

TARGETED PHOTOTHERAPY

Mild Localized Psoriasis

The original indication of the excimer laser was mild-to-moderate psoriasis, defined as involvement of less than 10% of the skin. Typically, this patient population has not been considered for light box therapy, because the risks of exposing the entire skin to the carcinogenic effects of ultraviolet B (UVB) light may

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outweigh the benefits of treating a small number of lesions. The American Academy of Dermatology does not recommend phototherapy for patients with mild localized psoriasis whose disease can be controlled with topical medications, including steroids, coal tar, vitamin D analogues (eg, calcipotriol, calcitriol), tazarotene, and anthralin.

Section Summary: Mild Localized Psoriasis

There is no evidence and no clinical recommendation for targeted phototherapy to treat patients with mild localized psoriasis whose disease can be controlled with topical medications.

Treatment-Resistant Mild Psoriasis

Several small studies have suggested that targeted phototherapy can be effective for treatment-resistant lesions. One 2003 patch comparison reported effective clearing (pre Psoriasis Area and Severity Index [PASI] score, 6.2; post-PASI score, 1.0) of treatment-resistant psoriatic lesions; six of the patients had previously received topical treatment, five had received conventional phototherapy, and three had received combined treatments including phototherapy. In 2004, the same investigator group reported that 12 of 13 patients with “extensive and stubborn” scalp psoriasis (ie, unresponsive to class I topical steroids used in conjunction with tar and/or zinc pyrithione shampoos for at least 1 month) showed clearing following treatment with the 308-nm laser. In a 2006 open trial from Europe, 44 (81%) of 54 patients with palmoplantar psoriasis resistant to combined phototherapy and systemic treatments were cleared of lesions with a single NB-UVB lamp treatment weekly for 8 weeks.

Section Summary: Treatment-Resistant Mild Psoriasis

Several nonrandomized studies have found that targeted phototherapy can improve health outcomes in patients with treatment-resistant psoriasis.

Moderate-to-Severe Localized Psoriasis

There are several systematic reviews of the literature on targeted phototherapy. Reviews differed in the type of study selected and the comparison interventions. A 2015 systematic review by Almutawa et al considered only RCTs; PUVA was the comparison intervention. Reviewers identified 3 RCTs comparing the efficacy of targeted UVB phototherapy with PUVA for treatment of plaque psoriasis. Two of the 3 trials used an excimer laser (308 nm) as the source of targeted phototherapy, and the third used localized NB-UVB light. There was no statistically significant difference between the techniques in the proportion of patients with at least a 75% reduction in psoriasis. The pooled odds ratio (OR) was 3.48 (95% confidence interval [CI], 0.56 to 22.84).

In 2012, Mudigonda et al published a systematic review of controlled studies (RCTs and non-RCTs) on targeted vs nontargeted phototherapy for patients with localized psoriasis. Reviewers identified 3 prospective nonrandomized studies comparing the 308-nm excimer laser with NB-UVB. Among these studies was a 2006 study by Goldinger et al that compared the excimer laser with full-body NB-UVB in 16 patients. At the end of 20 treatments, PASI scores were equally reduced on the 2 sides, from a baseline of 11.8 to 6.3 for laser and from 11.8 to 6.9 for nontargeted NB-UVB. A 2005 study by Kollner et al included 15 patients with stable plaque psoriasis. The study compared the 308-nm laser, the 308-nm excimer lamp, and

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standard TL-01 lamps. One psoriatic lesion per patient was treated with each therapy (ie, each patient received all 3 treatments). Investigators found no significant differences in the efficacy of the 3 treatments after 10 weeks. The mean number of treatments to achieve clearance of lesions was 24.

Section Summary: Moderate-to-Severe Localized Psoriasis

Systematic reviews of small RCTs and non-RCTs in patients with moderate-to-severe psoriasis have found that targeted phototherapy has efficacy similar to whole body phototherapy or PUVA. Targeted phototherapy is presumed to be safer or at least no riskier than whole body phototherapy, due to risks of exposing the entire skin to the carcinogenic effects of UVB light.

PSORALEN PLUS ULTRAVIOLET A

A number of RCTs and systematic reviews of RCTs have compared PUVA with other light therapies or with placebo. A 2013 Cochrane review assessed light therapy for psoriasis. However, that review is less useful for this evidence evaluation because reviewers combined results of studies using PUVA and broadband (BB) UVB, rather than reporting outcomes separately for these treatment modalities.

PUVA vs NB-UVB

A 2012 industry-sponsored systematic review by Archier et al focused on studies comparing PUVA to NB-UVB in patients with chronic plaque psoriasis. Pooled analysis of 3 RCTs found a significantly higher psoriasis clearance with PUVA than with NB-UVB (OR=2.79; 95% CI, 1.40 to 5.55). In addition, significantly more patients remained cleared at 6 months with PUVA than with NB-UVB (OR=2.73; 95% CI, 1.18 to 6.27).

PUVA vs Topical Steroids

In 2012, Amirnia et al published a trial in which 88 patients with moderate plaque psoriasis were randomized to PUVA or topical steroids. Treatment was continued for 4 months or until clearance was achieved. Clearance was defined as disappearance of at least 90% of baseline lesions. All patients in both groups achieved clearance within the 4-month treatment period. Recurrence (defined as a resurgence of at least 50% of the baseline lesions) was reported significantly more often in the topical steroid group (9/44 [20.5%]) than in the PUVA group (3/44 [6.8%]; p=0.007).

PUVA vs UVA Without Psoralens

In 2014, El-Mofty et al published an RCT comparing PUVA with BB-UVA in 61 patients with psoriasis affecting at least 30% body surface area. Clinical outcomes were significantly better in the PUVA group than in the BB-UVA groups. For example, complete clearance was obtained by 23 (77%) of 30 patients in the PUVA group, 5 (31%) of 16 patients in the 10 J/cm² UVA group, and 5 (33%) of 15 patients in the 15 J/cm² UVA group (p=0.020).

In 2009, Sivanesan et al published a double-blind RCT evaluating the efficacy of 8-methoxypsoralen PUVA treatment in patients with moderate-to-severe psoriasis affecting at least 10% body surface area. The trial included 40 patients randomized to PUVA (n=30) and or UVA plus placebo psoralens (n=10). Patients were treated 3 times weekly for 12 weeks. The primary outcome was a 75% or greater improvement in PASI 75

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score. At 12 weeks, 19 (63%) of 30 patients in the PUVA group and 0 (0%) of 10 patients in the UVA plus placebo group achieved the primary outcome measure ($p < 0.001$). There were no serious adverse effects.

Section Summary: Psoralen Plus Ultraviolet A

RCTs and systematic reviews of RCTs have found that PUVA is more effective than NB-UVB, topical steroids, or UVA without psoralens in patients with moderate-to-severe psoriasis. Due to side effects, PUVA is typically restricted to more severe cases.

SUMMARY OF EVIDENCE

For individuals who have mild localized psoriasis who receive targeted phototherapy, there is little evidence. Relevant outcomes are symptoms, change in disease status, quality of life, and treatment-related morbidity. Evidence is lacking on the use of targeted phototherapy as first-line treatment of mild psoriasis. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have mild psoriasis that is resistant to topical medications who receive targeted phototherapy, the evidence includes small within-subject studies. Relevant outcomes are symptoms, change in disease status, quality of life, and treatment-related morbidity. The available pre-post studies have shown that targeted phototherapy can improve mild localized psoriasis (<10% body surface area) that has not responded to topical treatment. Targeted phototherapy is presumed to be safer or at least no riskier than whole body phototherapy, due to risks of exposing the entire skin to the carcinogenic effects of UVB light. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have moderate-to-severe localized psoriasis who receive targeted phototherapy, the evidence includes RCTs and systematic reviews of RCTs. Relevant outcomes are symptoms, change in disease status, quality of life, and treatment-related morbidity. Systematic reviews of small RCTs and non-RCTs in patients with moderate-to-severe psoriasis have found that targeted phototherapy has efficacy similar to whole body phototherapy and supports the use of targeted phototherapy for the treatment of moderate-to-severe psoriasis comprising less than 20% of body surface area for which narrowband UVB or phototherapy with PUVA are indicated. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have generalized psoriasis who receive PUVA, the evidence includes RCTs and systematic reviews. Relevant outcomes are symptoms, change in disease status, quality of life, and treatment-related morbidity. RCTs and systematic reviews of RCTs have found that PUVA is more effective than narrowband UVB, topical steroids, or UVA without psoralens in patients with generalized psoriasis. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

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Policy History

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03/21/2002 Medical Policy Committee review

03/25/2002 Managed Care Advisory Council approval.

06/24/2002 Format revision. No substance change to policy

03/08/2004 Medical Director review

03/16/2004 Medical Policy Committee review. Format revision. Phototherapy medical policy deleted. Policy specific to ultraviolet light and laser treatment of skin conditions formulated.

03/29/2004 Manage Care Advisory Council approval

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03/01/2005	Medical Director review
03/15/2005	Medical Policy Committee review
04/04/2005	Managed Care Advisory Council approval
11/02/2005	Medical Director review
11/15/2005	Medical Policy Committee review. Format revision. FDA approval information added. Updated coverage eligibility to include use of UVB in treatment of psoriasis.
01/26/2006	Quality Care Advisory Committee approval
05/03/2006	Medical Director Review
05/17/2006	Medical Policy Committee Review. UVB has been removed from policy.
04/04/2007	Medical Director review
04/18/2007	Medical Policy Committee approval. Coverage eligibility unchanged.
11/07/2007	Medical Director review
11/15/2007	Medical Policy Committee approval. Replaced policy including title changed from Ultraviolet Light, Including Laser Therapy, for Skin Conditions.
11/05/2008	Medical Director review
11/18/2008	Medical Policy Committee approval. Targeted phototherapy for the first line treatment of mild psoriasis and generalized psoriasis or psoriatic arthritis is now considered to be investigational.
11/12/2009	Medical Policy Committee approval
11/18/2009	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
11/04/2010	Medical Policy Committee review
11/16/2010	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
11/03/2011	Medical Policy Committee review
11/16/2011	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
11/01/2012	Medical Policy Committee review
11/28/2012	Medical Policy Implementation Committee approval. Title changed from Targeted Phototherapy for Psoriasis to Light Therapy for Psoriasis. Added new eligible for coverage statement. "PUVA for the treatment of severe, disabling psoriasis, which is not responsive to other forms of conservative therapy (e.g., topical corticosteroids, coal/tar preparations, and ultraviolet light), is considered to be eligible for coverage."
11/07/2013	Medical Policy Committee review
11/20/2013	Medical Policy Implementation Committee approval. No change to coverage.
11/06/2014	Medical Policy Committee review
11/21/2014	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
08/03/2015	Coding update: ICD10 Diagnosis code section added; ICD9 Procedure code section removed.
10/29/2015	Medical Policy Committee review
11/16/2015	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
11/03/2016	Medical Policy Committee review
11/16/2016	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
01/01/2017	Coding update: Removing ICD-9 Diagnosis Codes
11/02/2017	Medical Policy Committee review
11/15/2017	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
11/08/2018	Medical Policy Committee review
11/21/2018	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
Next Scheduled Review Date:	11/2019

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Coding

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CPT is a registered trademark of the American Medical Association.

Codes used to identify services associated with this policy may include (but may not be limited to) the following:

Code Type	Code
CPT	96900, 96910, 96912, 96913, 96920, 96921, 96922
HCPCS	No codes
ICD-10 Diagnosis	L40.0-L40.9

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

- A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
- B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
 - 1. Consultation with the Blue Cross and Blue Shield Association technology assessment program (TEC) or other nonaffiliated technology evaluation center(s);
 - 2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or
 - 3. Reference to federal regulations.

**Medically Necessary (or "Medical Necessity") - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

- A. In accordance with nationally accepted standards of medical practice;
- B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and

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Louisiana

Light Therapy for Psoriasis

Policy # 00131

Original Effective Date: 03/25/2002

Current Effective Date: 11/21/2018

- C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and 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 that patient's illness, injury or disease.

For these purposes, "nationally accepted standards of medical practice" means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

‡ Indicated trademarks are the registered trademarks of their respective owners.

NOTICE: Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Company recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.

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