



*The Use of Light
To Treat Skin Disease*

Phototherapy Guidebook

to the Benefits of Adding Phototherapy to Your Practice

Reviving Hope for Patients with Skin Disorders

Psoriasis and vitiligo can be as problematic for physicians as they are distressing for their patients. These conditions can make a patient feel depressed, socially isolated and embarrassed, which can also be frustrating and time consuming for their physician.

As a result, these patients become adept at hiding their physical condition and personal suffering. Unsightly spots and plaques can be unbearable and emotionally devastating, damaging a patient's quality of life. These diseases can be isolating to children and teenagers who avoid social activities due to the condition of their skin. When disease is present on the hands, feet, face, genitals or scalp, patients often retreat into a world without hope.

Medical and psychiatric comorbidities complicate effective psoriasis patient management. These patients have higher incidence levels of Crohn's disease, multiple sclerosis, metabolic syndrome and cardiovascular disease. Psoriasis is also well documented to have a profound correlation to higher rates of mental health psychopathologies such as major depression, anxiety, sexual dysfunction and poor self-esteem.¹


With no cure, psoriasis and vitiligo patients can feel helpless and drop out of treatment. Yet hope can be revived with phototherapy as physicians can partner with their patients to improve long-term quality of life.^{2,3}

Living Clear With Phototherapy

Phototherapy (the use of light to treat the skin) has been shown to be notably safe and effective in controlling psoriasis and vitiligo. Its long-term side-effect profile is very favorable when compared to steroids, the known and unknown side effects of systemic drugs, and the newer biologics. Researchers have found that 52% of patients with psoriasis and 45% of patients with psoriatic arthritis are dissatisfied with their treatment. Of patients that discontinued biologic treatments, 25% said it didn't work, and 17% reported negative side effects; 30% remain untreated due to fear of injection.⁴




20-40%
of patients on biologics
don't respond adequately.

 **30%**
of patients eligible for
biologics go untreated
due to injection fears.

Total Annual
Psoriasis Costs =

\$11.25 billion⁴

 **20%**
are severe³
80%
are mild to
moderate

(1) Menter A, et al. Guidelines of care for the management of psoriasis and psoriatic arthritis. JAAD. 2008 May; 58(5): 826-50.
(2) Fowler JF, Duh MS, Rovba L, Buteau S, Pinheiro L, Lobo F, Sung J, Doyle JJ, Swensen A, Mallett DA, Kosicki G. The impact of psoriasis on health care costs and patient work loss. JAAD. 2008 Nov; 59(5): 772-80
(3) National Psoriasis Foundation. Survey panels, Spring 2007 through Fall 2007. <<http://www.psoriasis.org/research/foundation/survey_panel.php>>.

(4) Kevin McCaffrey: Rampant dissatisfaction with psoriasis drugs study; MMM-online; <<<http://www.mmm-online.com/rampant-dissatisfaction-with-psoriasis-drugs/article/309106>>>
(5) Yelverton CB, Kulkarni AS, Balkrishnan R, Feldman SR. Home ultraviolet B phototherapy: a cost-effective option for severe psoriasis. Manag Care Interface. 2006 Jan; 19(1):33-6.39.PMID: 16453993



Sadly, phototherapy has been consistently under-utilized relative to other therapies, with less than 5% of patients receiving it. Phototherapy has minimal side effects (erythema) compared to alternatives and does not require injections. Studies have shown that people who receive UVB phototherapy do not have increased rates of skin cancer, compared to the general population.⁵

Most commonly used in the treatment of psoriasis, phototherapy is the first line of treatment for many patients because of its efficacy, safety, and cost. It offers a safe and effective solution for patients, even children and pregnant

women who often can't be treated with other potentially harmful alternatives. Phototherapy brings an answer to many patients who are looking for a solution to fit their lifestyle.

Daavlin phototherapy devices are FDA cleared and provide an effective, non-drug solution for the treatment of psoriasis and vitiligo. With phototherapy, physicians can help more patients experience life free from their skin disease.

See For Yourself



*Psoriasis patients -
Before on left and after on right*



*Vitiligo patients -
Before on left and after on right*



Benefits to the Practice



Adding phototherapy to your practice can significantly increase the number of patients you treat and widen your scope of practice, while bringing an important service to patients with a variety of skin conditions including psoriasis, atopic dermatitis, and vitiligo.

Phototherapy is simple and easy to administer with your current staff, and doesn't require a physician's license. This allows you to assign appointments to support staff. The procedures for phototherapy are surprisingly straightforward. There are industry standard protocols for each skin type that make it easy to safely start a patient and to continue the process to clearance. Some devices come with these protocols pre-programmed, such as the Daavlin 3 Series with Smart Touch. Others come with an easy to follow chart to enter the protocol at the time of treatment.

Offering light therapy in your office provides patients with a solution that they may not otherwise have access to and allows them to be treated by you and your staff, professionals they already know and trust. Adding phototherapy to your practice can provide an additional revenue source that is quick to implement with little disruption to the practice.



Getting Started

There are many different types of phototherapy devices available, ranging from full-body cabinets to small hand-held or table top devices. Daavlin can help you select the device that is right for your practice using a number of factors, including anticipated patient volume, available space and the long term goals of your practice.

The typical phototherapy patient will require 2-3 treatment sessions per week, and most insurance carriers readily reimburse for phototherapy. For uninsured patients, a "cash payment" option is still profitable due to phototherapy's extremely low cost per treatment (approximately \$0.60 of consumables and electricity/treatment). This will also allow you to keep the treatment affordable for cash paying patients.

Return on Investment

Investing in phototherapy has an excellent return on investment based on the volume of patients you are serving. With as little as three patients being treated three times a week, your monthly revenue is estimated to be around \$3,000, meaning your investment can be recouped in 6 months or less. Daavlin offers attractive leasing plans to help with cash management while you are getting your phototherapy practice off the ground. A revenue calculator is available on our website at www.daavlin.com or we can provide you with a personalized cost of ownership report on any device Daavlin offers.



Reimbursement

Phototherapy is widely recognized as a safe, effective, non-drug treatment and, as such, is nearly always reimbursed by private insurers and Medicare under CPT code 96910. This code simply requires that the patient use a petrolatum/tar based product, such as mineral oil, before treatment with UVB light. Reimbursement varies by carrier but the published Medicare “non-facility” (in-office) payment rates on the cms.gov website lists the following rate for the national average:

CPT Code	Reimbursement rate National Average
96910 (non-targeted UVB phototherapy)	\$76.21 / treatment

Special Note for Targeted Therapy: The Levia NB Pro device delivers targeted Narrowband UVB phototherapy. Some medical policies, such as the Blue Cross Medical Policy (MP 2.01.47) Guideline, state: “Lasers and targeted UVB lamps are considered to be equivalent devices.” This type of medical policy statement may allow reimbursement using the laser CPT billing codes 96920, 96921 or 96922. This is beneficial because insurance carriers reimburse at higher levels for treatment with lasers (targeted phototherapy) than for non-targeted phototherapy. If this equivalency statement or one like it is not specifically present, the use of the non-targeted UVB CPT code of 96910 is always appropriate. (Pre-authorization is recommended for the targeted CPT codes.)

Targeted CPT Code	Reimbursement rate National Average
96920 Total area less than 250 sq. cm.	\$158.55 / treatment
96921 Area from 250 sq. cm. to 500 sq. cm.	\$174.54 / treatment
96922 Area over 500 sq. cm.	\$241.90 / treatment

When billing insurance, it is important that the billing codes are paired with the appropriate ICD 9 diagnosis code:

ICD 9 Codes	
696.1 Psoriasis / Other Psoriasis	692.9 Eczema, not otherwise specified
690.1 Seborrheic dermatitis	709.01 Vitiligo
690.10 Seborrheic dermatitis unspecified	

Protocols and Safety Information

Phototherapy is a safe and easy process for you to use, especially when compared to many other treatment modalities commonly used. In fact, in many countries, such as the United Kingdom and Canada, Narrow Band UVB phototherapy is an over-the-counter treatment, safely conducted without physician supervision. In the United States, the FDA MEDWATCH/MAUDE reporting data shows an average of less than 1 reported adverse event for phototherapy a year. Essentially, the most common side effect of phototherapy is transient erythema, which is generally mild and resolves quickly.

For new users of phototherapy, we recommend using the protocols outlined in Phototherapy Treatment Protocols by Michael D. Zanolli MD and Steven R. Feldman MD PhD. This text is readily available in both print and ebook format from Daavlin as well as from Amazon. To summarize the practical aspects involved in treating a new psoriasis patient with narrowband UVB phototherapy:

1) A Fitzpatrick Skin Type Determination should be made: Vitiligo patients are always a type I.

Skin Type	Skin Reaction	Examples	Initial NB UVB Psoriasis Dose
I	Tans little or not at all, always burns easily and severely, then peels; vitiligo	People most often with fair skin, blue eyes, freckles; white unexposed skin	300mj/cm ²
II	Usually burns easily and severely (painful burn); tans minimally and lightly; also peels	People with fair skin; blue or hazel eyes blonde or red hair; white unexposed skin	300mj/cm ²
III	Burns moderately gains average tan	Average Caucasian; white unexposed skin	500mj/cm ²
IV	Burns minimally, tans easily and above average with each exposure; exhibits IPD (immediate pigment darkening) reaction	People with light or brown skin; dark brown hair, dark eyes; unexposed skin is white or light brown (Orientals, Hispanics and Mediterraneans)	500mj/cm ²
V	Rarely burns, tans easily and substantially; always exhibits IPD reaction	Brown skinned persons; unexposed skin is brown (East Indians, Hispanics etc.)	800mj/cm ²
VI	Tans profusely and never burns; exhibits IPD reaction	Persons with black skin (e.g. African & American Blacks, Australian & South Indian Aborigines)	800mj/cm ²

2) Optional (Ideal): a Minimal Erythema Dose (MED) test is conducted to expose small areas of the patient's skin to increasing doses of UVB light. If this is done, then dosing starts at 70% of the MED. If not performing an MED, consult the above chart.

- 3) Treat the patient at least 2-3 times a week, increasing the dose by 10% if everything is normal.
- If patient was pink after last treatment and without pain: hold dose the same as previously.
 - If patient had mild erythema, but it has subsided, reduce dose by 20%.
 - If patient has erythema that has not subsided, withhold treatment and reduce next dose by 20%.

- If patient missed 1 week of treatment, hold same as previous dose.
 - If patient missed 2 weeks of treatment, reduce dose 25%
 - If patient missed 3 weeks of treatment, reduce dose 50%
 - If patient missed 4 or more weeks of treatment, restart at beginning dose

In psoriasis, progress will typically be seen within 10 treatments, and with good patient adherence, 75% improvement will be seen in only 4 to 5 weeks.

These treatment guidelines are provided only as an overview of the process and should not be taken as the complete procedure. This booklet includes a list of additional resources and training to provide you with a source for additional information.

How to Prescribe a Home Phototherapy Unit

Once you have determined that a patient is qualified, the process for prescribing a home unit is very easy. On-line at www.daavlin.com we offer the complete packet of forms needed to prescribe or we can send you a kit of patient handouts to provide to your patients. The process is as follows:

- 1) Complete the Doctor's Written Order only.
 - There is no need to write a letter of medical necessity. The Doctor's Written Order form replaces both the letter of medical necessity and the prescription.
 - The "Doctor's Written Order" allows you to document information such as the percentage of body surface affected and the patient's skin type.
- 2) Provide 5 to 10 pages of relevant chart notes for the patient.
- 3) Fax both sets of documents to Daavlin at 419-636-7916 or email to phototherapy@daavlin.com.
- 4) Provide the rest of the packet to the patient to fill out. The patient is able to complete the remaining information on-line or fill out and return the forms to Daavlin by fax or mail.
 - We keep all patient paperwork confidential and work directly with the patient to process their prescription from start to finish. We will assign each patient an Account Specialist to assist with the process.
 - We offer a Tech Support Team to assist with questions concerning their device and to assist with the operation of their device.

Once Daavlin receives your prescription for the patient, we will fill out a "Prescriber's Dosing Guide" and send it to you. This will have all the information needed to get the patient started on an industry standard protocol. Once the device has been placed with the patient, we will call you to confirm the prescription has been processed and received by the patient.

Phototherapy Training:

The degree required to deliver phototherapy varies from state to state, ranging from none to R.N. A well-trained phototherapist will be able to put patients at ease, educate them about phototherapy, and administer treatment following physician-directed protocols with a high level of safety.

Daavlin cosponsors the quarterly Joan Shelk Fundamentals of Phototherapy Workshop conducted by the Dermatology Nurses Association, provides training through our on-staff dermatology nurse, and offers experienced and professional field technicians to assist you with adding phototherapy to your practice.

With the sponsorship of the DNA Phototherapy Workshops, we have scholarships to offer to a nurse from a practice using Daavlin phototherapy. Submit candidates to Tracy McKelvey at tmckelvey@daavlin.com.

Daavlin's commitment to you starts now!

If you have any questions or need additional information, please give us a call at 800-322-8546 (International 001.419.636.6304) or email us at phototherapy@daavlin.com.

