



Position Statement
on
Cost-Effective Dermatologic Care
(Approved by the Board of Directors July 17-18, 1993)

The American Academy of Dermatology supports efforts to make quality health care available to all Americans. Dermatologists provide care of higher quality and lower cost than comparable services by other health care professionals. Quality and cost considerations mandate that dermatologists be the first contact, primary care physicians for cutaneous diseases. Policy-makers may be asked to determine who will provide primary care for skin diseases. Any health care plan should allow patients to self-refer to dermatologists based upon the following economic and quality considerations.

ECONOMIC IMPACT OF SKIN DISEASE

Significant skin disease deserving medical attention afflicts 31.2 percent of the population¹. Dermatologic disease accounts for seven percent of all patient visits to physicians², and skin diseases account for an economic loss to society of over \$2 billion annually¹. Furthermore, “skin disease is second only to trauma as a cause for occupational disability and accounts for approximately 40% of all non-traumatic illness. The exact incidence of occupational skin disease, however, may be from ten to fifty times greater than actually reported. Estimates of economic loss to society from occupational skin disease range from a low of \$34 million annually to a figure ten times that amount.”

DIRECT ACCESS TO DERMATOLOGY: A PRIMARY CARE SPECIALTY

Dermatology is and should be a “primary care” specialty. Unlike people with internal diseases, patients with skin disease are quite clearly aware of their conditions and do not need a non-dermatologist to tell them that they have a skin disease. Dermatologic care is both more cost efficient and of higher quality when provided by a dermatologist than by any other medical professional.

Ramsey and Fox³ studied “the ability of primary care physicians to diagnose correctly the 20 most common dermatologic diseases” and found “primary care physicians deficient in their ability to recognize common dermatoses.” Lichen planus, recognized by 93 percent of the dermatologists, was correctly diagnosed by only 16 percent of the non-dermatologists. Seborrheic dermatitis was correctly diagnosed by only 29 percent of non-dermatologists (vs. 93 percent of dermatologists); atopic dermatitis by 32 percent of non-dermatologists (vs. 97 percent of dermatologists); and pityriasis rosea was correctly recognized by only 44 percent of non-dermatologists (vs. 97 percent of dermatologists). Malignant basal cell carcinoma, correctly recognized by 100 percent of dermatologists, was misdiagnosed by 30 percent of non dermatologists. Seborrheic keratosis was correctly diagnosed by 100% of dermatologists, but only 33 percent of the non-dermatologists.

Pariser and Pariser⁴ studied errors made by non-dermatologists prospectively over a 20-month period. There were 319 errors in 260 patients. They found that 86 percent of the errors were in diagnosis. "There was a striking tendency to over-diagnose infectious dermatoses such as bacterial pyodermas, superficial mycoses, scabies, and herpes simplex and to under-diagnose inflammatory dermatoses such as contact dermatitis, nummular dermatitis, pityriasis rosea, and psoriasis."

Malignant melanoma is frequently a fatal disease if not recognized and treated in its early stages. Cassileth and colleagues⁵ found that of the non-dermatologists studied "only 12 percent identified at least five of six examples of melanoma as such, regardless of subtype attributed, and only 11 percent recognized both examples of dysplastic nevi. On the average, 25 percent of non-dermatologists chose "don't know" or "innocuous lesion" in response to malignant lesions...Dermatologists display significantly superior ability to correctly identify all lesions (p 0.005)."

Wagner and colleagues⁶ studied the training of dermatology and non-dermatology residents and found that "dermatology residents did significantly better in the diagnosis of malignant and benign skin disease than all other groups." Furthermore, they found that at a statistically significant level, dermatology residents were more able to determine when a skin biopsy should and should not be obtained, thus providing more cost-effective management. Dermatology residents receive three years of intensive study in dermatology, whereas, other physicians only get several weeks of training in dermatology.

Clark and Rietschel⁷ examined quality and cost-effectiveness of dermatologic care. "Overall, dermatologists correctly diagnosed cutaneous disease 98 percent of the time compared to 60 percent for family practitioners (p 0.01). Dermatologists treated 99 percent of all patients and referred only 1 percent compared to 69 percent and 31 percent for family practitioners. Ninety-nine percent (402/408) of dermatologists who treated did so for the correct disease compared to 72 percent (202/281) of family practitioners. Forty-nine percent of patients (202/410) initially seeing a family practitioner were treated by that physician for the correct disease. The other 51 percent (208/410) were either referred to another physician or treated for the wrong disease." When they studied the total average cost to begin therapy which included professional services, medications, laboratory tests, and referral fees, they found that there was no statistically significant difference in cost when patients were initially evaluated and treated by dermatologists.

McCarthy and colleagues⁸ studied the ability of internists "to appropriately diagnose, treat, and refer patients for specific dermatologic disorders." Fully 40 percent of the patients were incorrectly diagnosed. Of those patients for whom referral to a dermatologist was deemed appropriate, only 62 percent were made. Conversely, 33 percent of the referrals actually made were appropriate. McCarthy and colleagues concluded that "errors in diagnosis occurred frequently and when diagnoses were incorrect, there was a tendency to mismanage."

HMO groups have examined the cost and quality of care when rendered by dermatologists vs. non-dermatologists. In Northern California, Kaiser Permanente, the

largest HMO in America, examined its practice of permitting direct access to dermatologists in many of its facilities⁹. In a 1981 study, the authors concluded that “this direct access allows expedient, quality care for our members and that it is more economical, as an experienced dermatologist can diagnose and treat skin disorders in fewer patient visits. Our records show that a patient’s visit to a dermatologist is significantly less costly than a visit to another primary care physician, whether family practitioner, pediatrician, gynecologist, internist, or emergency room physician.” This approach was reexamined in 1989, and direct access continues to be permitted to dermatologists.

Other HMOs such as the Harvard Community Health Plan, the largest in Massachusetts and North Carolina’s Physician’s Health Plan have similarly found that direct access to dermatologists provides the most cost efficient, highest quality dermatologic care.

In summary, several studies have consistently shown that dermatologists provide cost-effective, better quality care for skin disease than do any other health professionals. Mandating direct access to dermatologists can facilitate better care at lower cost.

- ¹ Health Maintenance Organization (HMO) Review Committee: An analysis of the potential impact of health maintenance organizations upon the practice of dermatology (with recommendations). *J Amer Acad Derm* 1980;2:346-53.
- ² Stern RS, Johnson M, DeLosier J. Utilization of physician services for dermatologic complaints. *Arch Dermatol* 1977;113:1062-6.
- ³ Ramsay DL, Fox AB. The ability of primary care physicians to recognize the common dermatoses. *Arch Dermatol* 1981;117:620-2.
- ⁴ Pariser RJ, Pariser DM. Primary care physician’s errors in handling cutaneous disorders. *J Amer Acad Derm* 1987;17:239-45.
- ⁵ Cassileth BR, Clark WH, Lusk EJ, et al. How well do physicians recognize melanoma and other problem lesions? *J Amer Acad Derm* 1986;14:555-60.
- ⁶ Wagner RF, Wagner D, Tomich JM. Resident’s Corner: diagnosis of skin disease: dermatologists vs. non-dermatologists. *J Dermatol Surg Oncol* 1985;11:476-9.
- ⁷ Clark RA, Rietschel RL. The cost of initiating appropriate therapy for skin diseases: a comparison of dermatologists and family physicians. *J Amer Acad Derm* 1983;9:787-96.
- ⁸ McCarthy CM, Lamb GC, Russell TJ, et al. Primary care based dermatology practice: internists need more training. *J Gen Inter Med* 1991;6:52-56.
- ⁹ Engasser PG, Lyss RS. Direct Access in HMOs. *J Amer Acad Derm* 1981;4:740-1.