AMERICAN ACADEMY OF FAMILY PHYSICIANS

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Recommended Curriculum Guidelines for Family Medicine Residents

Conditions of the Skin

This document is endorsed by the American Academy of Family Physicians (AAFP).

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine residents. Attitudes, behaviors, knowledge, and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies defined by the Accreditation Council for Graduate Medical Education (ACGME), www.acgme.org. The family medicine curriculum must include structured experience in several specified areas. Much of the resident's knowledge will be gained by caring for ambulatory patients who visit the family medicine center, although additional experience gained in various other settings (e.g., an inpatient setting, a patient's home, a long-term care facility, the emergency department, the community) is critical for well-rounded residency training. The residents should be able to develop a skillset and apply their skills appropriately to all patient care settings.

Structured didactic lectures, conferences, journal clubs, and workshops must be included in the curriculum to supplement experiential learning, with an emphasis on outcomes-oriented, evidence-based studies that delineate common diseases affecting patients of all ages. Patient-centered care, and targeted techniques of health promotion and disease prevention are hallmarks of family medicine and should be integrated in all settings. Appropriate referral patterns, transitions of care, and the provision of cost-effective care should also be part of the curriculum.

Program requirements specific to family medicine residencies may be found on the ACGME website. Current AAFP Curriculum Guidelines may be found online at www.aafp.org/cg. These guidelines are periodically updated and endorsed by the AAFP and, in many instances, other specialty societies, as indicated on each guideline.

Please note that the term “manage” occurs frequently in AAFP Curriculum Guidelines. “Manage” is used in a broad sense to indicate that the family physician takes responsibility for ensuring that optimal, complete care is provided to the patient. This does not necessarily mean that all aspects of care need to be directly delivered personally by the family physician. Management may include appropriate referral to other health care providers, including other specialists, for evaluation and treatment.

Each residency program is responsible for its own curriculum. **This guideline provides a useful strategy to help residency programs form their curricula for educating family physicians.**

Preamble

Family physicians are on the front line of managing skin conditions. According to the Centers for Disease Control and Prevention’s (CDC’s) National Ambulatory Medical Care Survey (NAMCS), disorders of the skin accounted for more than 44 million office visits in the United States in 2015. Skin conditions remain among the top 20 leading reasons for office visits to family physicians. Due to their visibility, relatively innocuous skin conditions are a major concern for patients.

With skin complaints, pattern recognition is extremely important. Family physicians must develop keen observational skills and consistently use appropriate terminology to characterize skin lesions. The adage “a picture is worth a thousand words” remains key to dermatologic care.

The attitude of the physician in taking all complaints seriously and doing a methodical examination will lead to proper care and ease patient anxiety. A family physician must have knowledge of differential diagnoses associated with various lesion types and must know where to access appropriate, reliable information in a timely manner using textbooks or online resources. Family physicians are experts at treating patients holistically and are well suited to detecting systemic disease that may have dermatologic manifestations. Early diagnostic biopsy and definitive surgical or medical treatment are well within the scope of a family physician’s skills. Family physicians must be proficient on a systems level at providing timely, cost-effective, and cosmetically excellent skin surgery. Patients should be given realistic expectations on wound healing, cosmetic results, and possible complications.

Timely referral is key in challenging cases that require specialized treatment modalities more commonly performed by a dermatologist. Family physicians play a key role in promoting behaviors to prevent skin cancers and other skin diseases while ensuring the future health of the skin, the body’s largest organ.

This Curriculum Guideline provides an outline of the attitudes, knowledge, and skills that should be among the objectives of training programs in family medicine and that will lead to optimal care of skin conditions by future family physicians.

Competencies

At the completion of residency training, a family medicine resident should be able to:

- Provide compassionate and culturally appropriate patient care that recognizes the effect of skin problems on the patient and emphasizes the importance of comprehensive preventive care (Patient Care)
- Diagnose and treat common skin diseases proficiently and perform common dermatologic procedures adeptly (Medical Knowledge)
- Utilize diagnostic and evidence-based treatment guidelines, as well as maintain up-to-date knowledge and usage of evolving dermatologic treatment technology (Practice-based Learning and Improvement)
- Communicate effectively with the patient so that dermatologic diagnosis and treatment is provided in a nonjudgmental, caring manner (Interpersonal and Communication Skills, Professionalism)
- Incorporate knowledge of the dermatology specialty in order to determine which problems can be managed by a family physician and how to coordinate needed referrals to specialty providers (Systems-based Practice)

Attitudes and Behaviors

The resident should develop attitudes and behaviors that encompass:

- Confidence in managing the majority of skin conditions
- A positive approach to psychosocial needs of patients who have skin disorders
- Willingness to counsel patients who have skin conditions
- A desire to learn and perform common dermatologic procedures
- A constructive relationship with dermatologists, when appropriate

Knowledge

In the appropriate setting, the resident should demonstrate the ability to apply knowledge of the following:

1. Classification and terminology of skin disorders
    a. Description of primary and secondary lesions
    b. Differential diagnosis based on lesion type (e.g., papulosquamous)

2. Diagnosis of common dermatologic disorders based on history and clinical exam

3. Management of common skin disorders
    a. Actinic keratosis
    b. Bacterial skin infections
    c. Benign skin lesions/neoplasms (cysts, lipomas, skin tags)
    d. Bites and stings (mammals, spiders, reptiles, ticks, and insects)
    e. Bullous/vesicular diseases (bullous pemphigoid, pemphigus vulgaris, dermatitis herpetiformis)
    f. Disorders of sebaceous, eccrine, and apocrine glands (acne, rosacea, hidradenitis suppurativa)
    g. Infestations (lice, scabies, schistosome/cercarial dermatitis, myiasis)
    h. Contact dermatitis (allergic and irritant)
    i. Eczema and atopic dermatitis
    j. Fungal and yeast skin infections
    k. Hair disorders (including alopecia)
    l. Inflammatory skin conditions (pityriasis rosea, lichen planus, granuloma annulare)
    m. Keloids/scars
    n. Nail disorders
    o. Nevi
    p. Pigmentary disorders (hyperpigmentation and hypopigmentation)
    q. Psoriasis
    r. Skin ulcers and pressure sores
    s. Dermatologic manifestations of sexually transmitted infections (STIs)
    t. Dermatologic manifestations of systemic disease
    u. Seborrheic dermatitis
    v. Urticaria and drug eruptions
    w. Vascular skin lesions
    x. Vasculitic skin lesions
    y. Viral infections and exanthems (including warts and herpes zoster)

4. Prevention of skin diseases and photoprotection

5. Prevention, recognition, and management of common skin cancers (including basal cell carcinoma, squamous cell carcinoma, Kaposi sarcoma, and melanoma)

6. Pharmacology of skin medications

Skills

In the appropriate setting, the resident should demonstrate the ability to independently perform:

1. History and physical examination appropriate for skin conditions
2. Skin cancer screening examination
3. Biopsy of skin lesions
    a. Punch biopsy
    b. Shave biopsy
    c. Excisional biopsy
4. Scraping and microscopic examination (KOH)
5. Use of dermoscopy to complement physical examination
6. Injection
    a. Local anesthesia
    b. Steroids
7. Incision and drainage
8. Destruction of lesions
    a. Cryosurgery
    b. Electrodesiccation
    c. Curettage
9. Choice of suturing materials and skin surgery instruments
10. Skin closure techniques including: nonsuturing techniques (e.g., benzoin tincture and Steri-Strips, skin glues); simple interrupted; simple continuous; vertical and horizontal mattress; layered closures; and subcuticular suturing
11. Principles and practice of wound care, including use of occlusive and pressure dressings
12. Counseling and anticipatory guidance for dermatologic disorders

Implementation

Implementation of this curriculum should include longitudinal and focused structured experience in the form of workshops and skin procedure clinics throughout the residency program. Physicians who have demonstrated skill in caring for skin conditions should act as teachers and role models by advising residents in the management of their own patients. Attending physicians should demonstrate proper technique and allow residents to actively participate in procedures to achieve competence.

Resources

Cohen BA. *Pediatric Dermatology*. 4th ed. London, UK: Elsevier Mosby; 2011.

Connelly C, Bikowski J. *Dermatological Atlas of Black Skin*. Coral Springs, Fla.: Merit Publishing International; 2010.

Du Vivier A. *Atlas of Clinical Dermatology*. 4th ed. Philadelphia, Pa.: Saunders; 2012.

Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, Wolff K. *Fitzpatrick's Dermatology in General Medicine*. 8th ed. New York, NY: McGraw-Hill Education; 2012.

Habif TP. *Clinical Dermatology: A Color Guide to Diagnosis and Therapy*. 6th ed. Philadelphia, Pa.: Saunders; 2015.

Soyer HP, Argenziano G, Hofmann-Wellenhof R, Zalaudek I. *Dermoscopy: The Essentials*. 2nd ed. Philadelphia, Pa.: Saunders; 2012.

Wolff K, Johnson RA, Saavedra AP, Roh EK. *Fitzpatrick's Color Atlas and Synopsis of Clinical Dermatology.* 8th ed. New York, NY: McGraw-Hill Education; 2017.

Website Resources

American Academy of Dermatology. www.aad.org

American Osteopathic College of Dermatology. www.aocd.org

Dermoscopy. www.dermoscopy.org

Primary Care Dermatology Society. www.pcds.org.uk

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