Body System: Integumentary		
Session Topic: Dermoscopy		
Educational Format		**Faculty Expertise Required**
Clinical Procedural Workshop (CPW)		Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience teaching hands-on procedural workshops. The majority of the education must emphasize hands-on learning, with feedback from faculty.
OPTIONAL	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.

Professional Practice Gap	**Learning Objective(s) that will close the gap and meet the need**	**Outcome Being Measured**
• Physicians have knowledge gaps with regard to diagnosing and evaluating common skin diseases (e.g. acne, dermatitis, rosacea). • Suboptimal adherence to skin cancer screening recommendations. • Physicians have knowledge and practice gaps with regard to efficacious use of a dermatoscope • Knowledge gaps with regard to the evaluation of suspicious moles or growths. • Primary care physicians often receive inadequate dermatology training in medical school. • Physicians have knowledge gaps with regard to appropriate coding/billing for skin procedures.	1. Examine different skin lesions using dermatoscopes to determine typical pathologic patterns of types of skin cancer. 2. Utilize dermoscopy to differentiate seborrheic keratosis from melanocytic lesions. 3. Integrate checklists and evaluation tools into a dermoscopic examination of suspected skin lesions and melanoma to compile an accurate diagnosis and treatment plan. 4. Conduct a cost/benefit analysis of dermatoscopes in your practice.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement newly acquired skills to perform dermoscopy.

ACGME Core Competencies Addressed (select all that apply)			
X	Medical Knowledge		Patient Care
	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism		Systems-Based Practice

Faculty Instructional Goals
Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality,

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innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
    - Visit http://www.aafp.org/journals for additional resources
    - Visit http://familydoctor.org for patient education and resources
- Provide learners opportunities to examine different skin lesions using dermoscopy to determine typical pathologic patterns of types of skin cancer, and provide feedback to foster competence.
- Provide learners opportunities to utilize dermoscopy to differentiate seborrheic keratosis from melanocytic lesions, and provide feedback to foster competence.
- Provide learners with strategies to integrate checklists and evaluation tools into a dermoscopic examination of suspected skin lesions and melanoma to compile an accurate diagnosis and treatment plan.
- Provide learners with resources to conduct a cost/benefit analysis of dermatoscopes in practice.

Needs Assessment

As family physicians treat patients of all ages – from young children to the elderly – it is important to equip them with the tools to identify, diagnose and develop treatment plans for the diverse populations they see in practice. Skin problems and diseases have become a growing reason for which patients seek treatment (35 million patient visits to family physicians were for skin-related problems in 2009[1]) and as such, family physicians should be well equipped to handle some of the most common conditions, which may include everything from acne and eczema to skin cancer and aging.

Membership data from recent surveys conducted by the American Academy of Family Physicians (AAFP) indicates that over 73% of family physicians provide skin procedures (e.g. biopsies), and an additional 8.6% perform cosmetic procedures in their clinical practice.[2] When asked what procedures members would most like to provide, botulinum injections was the most frequently mentioned; however, lack of training was a strong factor for not offering the procedure.[3] The 2012 AAFP CME Needs Assessment Survey indicates that family physicians in general have statistically significant and meaningful gaps in medical knowledge and skill to perform aesthetic procedures/techniques, manage nail disorders, and provide optimal postoperative care for surgical procedures.[4] Additionally, CME outcomes data for the clinical procedural workshops (CPD) for integumentary procedures from the 2012 AAFP Scientific Assembly show that over 50% of learners engaging in those sessions indicated a need to pursue

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additional education, with several learners commenting that they had an interest in adding aesthetic skin procedures to their practice.[5] This suggests that family physicians require continuing medical education, in order to provide optimal care and management of integumentary procedures for their patients.

The AAFP Recommended Curriculum Guidelines for Family Medicine Residents indicates that family medicine residents should be able to perform the following skills related to conditions of the skin:[6]

- History and physical examination appropriate for dermatologic conditions
- Preventive skin examination
- Biopsy of skin lesions
    - Punch biopsy
    - Shave biopsy
    - Excisional biopsy
- Scraping and microscopic examination
- Injection
    - Local anesthesia
    - Steroids
- Incision and drainage
- Destruction of lesions
    - Cryosurgery
    - Electrodessication
    - Curettage
- Counseling for dermatologic disorders

Dermoscopy, which uses light and magnification to detect skin lesions (typically indicative of cancer). The tool has a reputation for increasing diagnostic accuracy for pigmented skin lesions and early invasive melanoma.[7-9]

Recent AAFP Needs Assessment Survey data indicate that the management of skin cancer is one of the top 5 practice gaps among integumentary topics for family physicians. The survey data indicates that the topic of skin cancer is statistically significantly higher than average and physician skill level to manage the condition is statistically significantly lower than average.[4] CME outcomes data from 2012-2014 AAFP Assembly: *Skin Cancer* sessions suggest that family physicians have a knowledge and competence gap related to screening; performing biopsies and dermoscopy for diagnosis; and timely and necessary referrals.[5,10,11] More specifically, CME outcomes data from 2014 Assembly and 2015 FMX: *Dermoscopy* sessions, suggest that physicians have knowledge and practice gaps with regard to efficacious use of a dermatoscope.[11,12]

Over the course of the past decade, the demand for aesthetic skin procedures has increased nearly five-fold, and family physicians have greater opportunities to perform minimally invasive procedures as requested by patients. In fact, minimally invasive procedures have become the principal modality for addressing age-related facial changes in patients. They are, according to one source, associated with high patient satisfaction due to the minimal recovery time, few side effects and relatively good outcomes.[13] This will continue to have significant implications on

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family physicians' practices as the population continues to age dramatically; in 20 years, the proportion of the U.S. population over the age of 65 is expected to double to more than 71 million older adults, or one in every five Americans, leading to a 25% increase in health care spending.[14] While family physicians may not provide extensive in-office procedures for aesthetic purposes, they should still be prepared to address patient questions and concerns, resources on appropriate options and requests for referrals when necessary.

To remain up to date on current best practices, family physicians require additional training and education on evidence-based guidelines in the prevention and management of skin cancer. Physicians may improve their screening and care of patients with skin cancer by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:[8,15-18]

- Dermoscopy aids clinical examination in differentiating melanoma and basal cell carcinoma from benign skin lesions.
- The first step in the two-step algorithm for dermoscopy is intended to help differentiate melanocytic lesions from nonmelanocytic lesions; however, its main objective is to prevent clinicians from missing melanomas.
- The second step in the two-step algorithm for dermoscopy is intended to help differentiate nevi from melanoma.
- Because of the increased risk of melanoma, patients with atypical moles should be screened for melanoma, typically yearly, although the optimal methods and timing have not been determined.
- Biopsy of all atypical moles is neither clinically valuable nor cost-effective.
- Total excision of atypical moles with narrow margins is the preferable biopsy method when feasible.
- Treatment of basal cell carcinoma with Mohs micrographic surgery has the lowest recurrence rate, although it is best considered for tumors greater than 2 cm in size, for more invasive histologic subtypes (micronodular, infiltrative, and morpheaform), or for tumors at sites with higher risk of recurrence.
- Systematic review of recurrence rates of basal cell carcinoma with different therapies; review with multiple sources
- Because it is more difficult to control recurrent basal cell carcinoma, incomplete excision of the primary tumor, with pathology demonstrating tumor at the surgical margin, should be followed by immediate reexcision or Mohs micrographic surgery.
- Cryotherapy is an appropriate treatment for nodular and superficial basal cell carcinoma, but is not indicated for tumors more than 3 mm deep.
- Use of topical imiquimod (Aldara) or fluorouracil for the treatment of basal cell carcinoma should be limited to patients with small tumors in low-risk locations who are unwilling or unable to undergo treatment with better-established therapies.
- There is no statistically significant difference in survival for narrow vs. wide surgical margins for treatment of cutaneous malignant melanoma.
- Sentinel node biopsy in persons with melanoma with a Breslow depth of 1.0 mm or greater is useful for determining staging and prognosis.
- Melanoma survivors should receive annual clinical skin examinations and be counseled about using sun protection and recognizing potentially malignant skin lesions.

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These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

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