



Body System: <i>Integumentary</i>		
Session Topic: <i>Electrosurgery and Cryosurgery</i>		
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 <u>teaching a PBL on your proposal form.</u>
Professional Practice Gap	Learning Objective(s) that will close the gap and meet the need	Outcome Being Measured
<p>Data from a recent AAFP CME Needs Assessment survey indicates that family physicians have a statistically significant and meaningful gap in the knowledge and skill to effectively and efficiently perform aesthetic procedures/techniques, manage nail disorders, and provide optimal postoperative care for surgical procedures.</p> <p>CME outcomes data from 2014 AAFP Assembly and 2015 AAFP FMX <i>Electrosurgery and Cryosurgery</i> sessions, indicate that physicians have knowledge and skill gaps performing common cryotherapy techniques; biopsies; and selecting appropriate electrosurgical and cryosurgery equipment.</p>	<ol style="list-style-type: none"> 1. Practice electrosurgery and cryosurgery techniques. 2. Explore electrosurgery and cryosurgery as methods for destroying benign and malignant lesions, controlling bleeding, or cutting/excising tissue. 3. Evaluate the uses, risks, benefits and complications of both electrosurgery and cryosurgery. 4. Assess education and training you may need to competently perform electrosurgery and/or cryosurgery procedures. 	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement newly acquired skills to perform common electrosurgery and cryosurgery procedures.
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, 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 a review of fundamental principles of electrosurgery.
- Provide a review when and how to use these techniques.
- Provide an overview of risks, benefits, complications.
- Provide demonstrations the clinical uses of electrosurgery with real cases.
- Provide a hands-on learning experience for learners to become familiar with equipment used in electrosurgery.
- Provide a hands-on learning experience for learners to practice electrosurgical techniques for treating skin lesions.

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 2009¹) 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.²

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:³

- 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
 - Electrodesiccation
 - Curettage
- Counseling for dermatologic disorders

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.⁴ This will continue to have significant implications on 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.⁵ 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.

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.⁶ 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.⁷ 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.⁸

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 additional education, with several learners commenting that they had an interest in adding aesthetic skin procedures to their practice.⁹ This suggests that family physicians require continuing medical education, in order to provide optimal care and management of integumentary procedures for their patients.

Electrosurgery and cryosurgery, which are used to destroy benign and malignant lesions (usually in hairless areas of the body), to control bleeding, and to cut or excise tissue.¹⁰⁻¹² CME outcomes data from 2014-2016 AAFP FMX (formerly Assembly) *Electrosurgery and Cryosurgery* sessions, indicate that physicians have knowledge and skill gaps performing common



cryotherapy techniques; biopsies and excisions; and selecting appropriate electrosurgical and cryosurgery equipment.¹³⁻¹⁵

Faculty should consider the following evidence-based clinical practice recommendations:¹²

- Malignant skin lesions should not be treated using the dipstick method because of inadequate depth of freezing.
- Cryosurgery is more effective than salicylic acid or observation for the cure of common warts, but not plantar warts.
- Cryosurgery is highly effective for actinic keratosis and is the treatment of choice for most patients.

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.

References

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4. Small R. Aesthetic procedures in office practice. *American family physician*. 2009;80(11):1231-1237.
5. Centers for Disease Control and Prevention. The State of Aging and Health in America, 2007. 2007; http://www.cdc.gov/aging/pdf/saha_2007.pdf. Accessed August, 2013.
6. American Academy of Family Physicians (AAFP). AAFP Member Census Results. Leawood KS: AAFP; 2012.
7. AAFP. 2010 Practice Profile I. American Academy of Family Physicians; 2011:31.
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2018 AAFP FMX Needs Assessment

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