



Body System: Hematologic-Immune		
Session Topic: Lung Cancer		
Educational Format		Faculty Expertise Required
REQUIRED	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
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. <u>Please describe your interest and plan for 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
<ul style="list-style-type: none"> Family physicians have knowledge gaps with regard to differentiating patients with risk factors for lung cancer. There exist conflicting screening recommendations. There is poor adherence to guidelines for evaluating pulmonary nodules for cancer. Physicians are often unprepared to counsel patients to quit smoking, especially those who have additional risk factors for lung cancer. Physicians are often ill-prepared to coordinate care for patients with lung cancer who require referral to sub-specialists for enhanced evaluation, testing and/or treatment. Physicians are ill-prepared to provide end-of-life care and hospice referral and coordination for patients with terminal lung cancer. 	<ol style="list-style-type: none"> Identify patients, based on risk factors, who should be tested for lung cancer. Counsel patients on the benefits of smoking cessation in order to avoid developing lung cancer and other harmful respiratory conditions. Formulate plans to coordinate care for patients with lung cancer who require referral to sub-specialists. Integrate cultural competency skills in communicating with patients and family members about treatment, recovery and palliative care options. 	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.



ACGME Core Competencies Addressed (select all that apply)		
X	Medical Knowledge	Patient Care
X	Interpersonal and Communication Skills	Practice-Based Learning and Improvement
	Professionalism	Systems-Based Practice
Faculty Instructional Goals		
<p>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.</p> <ul style="list-style-type: none"> • 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 <u>References</u> section below are a good place to start <ul style="list-style-type: none"> ○ Visit http://www.aafp.org/journals for additional resources ○ Visit http://familydoctor.org for patient education and resources • Provide tools, resources, and strategies to foster the implementation of evidence-based lung cancer management guidelines into practice • Provide specific strategies and resources to assist physician-learners in developing collaborative care plans for smoking cessation • Provide specific strategies and resources for coordinating referral and follow-up care of patients with lung cancer 		

Needs Assessment:

Lung cancer is the leading cause of cancer-related deaths in both men and women in the U.S. In 2010, more than 201,144 people were diagnosed with lung cancer, nearly 158,248 people died from lung cancer (27% of all cancer deaths), and an estimated 224,110 people are estimated to be diagnosed with cancer of the lung and bronchus in 2014.¹⁻³

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that while family physicians rate the relevance of lung cancer management in their practice as statistically significantly lower than average compared to other topics, the data also indicates that their knowledge relative to their role in the management of lung cancer is suboptimal to provide effective patient care for those with lung cancer. More specifically, CME outcomes data from 2011 AAFP Assembly: *Lung Cancer: The Primary Care Perspective*, and 2014 AAFP Assembly: *Lung and Bronchial Cancer* sessions suggest that family physicians have knowledge and practice gaps with regard to the role of the family physician in the management of patients with lung cancer; lung cancer screening recommendations; guidelines regarding diagnostic imaging; and counseling patients regarding risk reduction, screening, and treatment options.^{4,5}



Physicians may improve their efforts and lung cancer prevention, as well as their care of patients with lung 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:⁶

- Chest radiography should be performed in patients with signs and symptoms consistent with lung cancer, and contrast-enhanced computed tomography should be performed if a likely alternative diagnosis is not identified on the chest radiograph.
- The diagnosis of suspected lung cancer should be confirmed using the least invasive method possible.
- Endobronchial ultrasound and electromagnetic navigation can increase the diagnostic yield of bronchoscopy for mediastinal or peripheral lesions.
- Medically fit patients with infiltrative stage III non–small cell lung cancer should be offered chemotherapy and radiation therapy.
- Patients with stage III non–small cell lung cancer should receive chemotherapy and radiation therapy.
- Early limited stage small cell lung cancer is treated with chemotherapy and radiation therapy, and possibly surgery in the earliest stages.
- Early palliative care results in improved quality of life and a decreased incidence of depression in patients with newly diagnosed non–small cell lung cancer.
- Consider screening high-risk patients for lung cancer annually with low-dose computed tomography (number needed to screen of 312 to prevent one death).

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.

The American Academy of Family Physicians (AAFP) and the U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against screening of asymptomatic persons for lung cancer; however, primary care physicians frequently order lung cancer screening tests, even though expert groups do not recommend it.⁷⁻⁹ In a recent update, the USPSTF recommends annual screening for lung cancer with low-dose computed tomography (CT) in adults 55 to 80 years of age who have a 30 pack-year smoking history and currently smoke or quit within the past 15 years. However, pulmonary nodule evaluation is often inconsistent with guidelines, including cases with no workup and others with prolonged surveillance or unneeded procedures that may cause harm.¹⁰ It is important to note that effective Feb. 5, certain Medicare beneficiaries gained coverage for lung cancer screening with low-dose CT scans.¹¹ To qualify for the once-per-year benefit, patients must be 55 to 77 years old. Additionally, Medicare beneficiaries must:



- currently smoke tobacco products or have quit within the past 15 years,
- have smoked an average of one pack of cigarettes a day for 30 years, and
- have a physician or other health care professional's written order requesting the test.

Medicare coverage includes an office visit dedicated to patient counseling on tobacco-related issues and a conversation about the relative harms and benefits of lung cancer screening.

Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery. (B recommendation).¹² This USPSTF recommendation is at odds with a recent AAFP recommendation stating, "AAFP concludes that the evidence is insufficient to recommend for or against screening for lung cancer with low-dose computed tomography (LDCT) in persons at high risk for lung cancer based on age and smoking history."¹³ Additionally, Choosing Wisely[®] recommendations from the American College of Chest Physicians (ACCP) and the American Thoracic Society (ATS) advise against performing CT screening for lung cancer among patients at low risk for lung cancer.¹⁴ Family physicians require additional education about lung cancer screening, guidelines, potential harms, and costs. Physicians should also consider the American Cancer Society (ACS) Guideline on Screening for Lung Cancer with Low-Dose Computed Tomography, as well as the National Comprehensive Cancer Network (NCCN) guidelines on lung cancer.^{15,16}

Preexisting nonmalignant lung disease, exposure to asbestos, and smoking are the most common risk factors; therefore, family physicians should be aware of evidence-based strategies for smoking cessation, as well as strategies to identify patients with risk factors for developing lung cancer.⁹ While there exists some debate about screening for lung cancer in asymptomatic patients, over 90% of those diagnosed with lung cancer are symptomatic at the time of diagnosis; therefore, family physicians should be aware of common lung cancer manifestations and be prepared to follow evidence-based guidelines for testing.^{9,17} In patients screened for lung cancer using low-dose computed tomography (LDCT), more than 18% of all lung cancers found are slow-growing and will not cause symptoms or harm during an average 6.4 years of follow-up. This risk of over-diagnosis should be part of the discussion regarding whether to screen. (Level of Evidence = 1b).¹⁸ Family physician's decision to screen patients for lung cancer should be based on an individual's risk factors, and family physicians can educate patients about the risks and benefits of screening, including consideration for the cost-effectiveness of imaging tests and patients' access to screening services.

Patients who are receiving treatment from an oncologist frequently report that their family physician is not involved in the oncology team.¹⁹ Physicians can improve patient satisfaction with the referral process by using readily available strategies and tools such as, improving internal office communication, engaging patients in scheduling, facilitating the appointment, tracking referral results, analyzing data for improvement opportunities, and gathering patient feedback.^{20,21} Physicians should be aware of evidence-based guidelines for the diagnosis and management of patients with suspected or known lung cancer, and are especially encouraged to be active participants in the oncology team for better communication, collaboration, shared care, and follow-up.^{19,22,23} Physicians can improve long term management, patient adherence to prescribed therapies and smoking cessation by engaging patients in collaborative care plans,



providing health coaching to modify unhealthy behaviors, using motivational interviewing, and consider integrating a behavioral health specialist into practice.²⁴⁻²⁸

Family physicians, because they provide longitudinal care for many years often build close relationships, and as such are uniquely positioned to provide end-of-life care and hospice referral for patients with terminal lung cancer.²⁹ Physicians require additional education regarding prognosis to more easily transition goals in care, resulting in some patients benefiting from earlier hospice enrollment.^{30,31}

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Lung cancer: diagnosis, treatment principles, and screening⁶
- AAFP Clinical Preventive Services Recommendations: Lung Cancer⁷
- American Cancer Society lung cancer screening guidelines¹⁵
- NCCN Guidelines: Lung Cancer¹⁶
- Lung cancer: diagnosis and management⁹
- NICE Lung cancer. The diagnosis and treatment of lung cancer¹⁷
- Lung cancer. Practice organization Guidelines²²
- ACCP Epidemiology of Lung Cancer: Diagnosis and Management of Lung Cancer²³
- The role of the family physician in the referral and management of hospice patients²⁹
- AAFP Tobacco Prevention & Cessation²⁸
- Encouraging patients to change unhealthy behaviors with motivational interviewing²⁴
- Health Coaching: Teaching Patients to Fish²⁵
- Integrating a behavioral health specialist into your practice²⁶
- Engaging Patients in Collaborative Care Plans²⁷
- CDC Cessation Materials for State Tobacco Control Programs (patient education)³²
- FamilyDoctor.org. Tobacco Addiction | Overview (patient resource)³³
- FamilyDoctor.org. Cancer | Overview (patient resource)³⁴

References

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