

Original Research Article

Review Study On Physicians' Knowledge Of Lung Cancer Screening And Perceived Barriers

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INTRODUCTION

Lung cancer is the leading cause of cancer death for men and women in the United States, accounting for 24% of all cancer deaths. Early detection is essential since survival is based on the stage of diagnosis: 59.8% of patients survive for 5 years while the disease is localized, but only 6.3% do so when it has spread to other organs. Unfortunately, only 18% of lung cancer cases are found early on, while 56% are found after cancer has spread to other body parts. The National Lung Screening Trial compared annual low-dose computed tomography (LDCT) screening for lung cancer with chest radiograph (CXR) screening in 2002; in 2011, they observed a 20% reduction in lung cancer mortality and a 6.7% reduction in total mortality.^{1,2} In March 2013, the U.S. Preventive Services Task Force (USPSTF) published a grade B recommendation for annual LDCT screening in asymptomatic patients aged 55 to 80 with a 30-pack-year smoking history who are presently smoking or have quit smoking within 15 years, supported by this and another research. To fund preventive services under the Medicare program that met specific requirements, the Centers for Medicare and Medicaid Services introduced LDCT screening in February 2015. The age cutoff was lowered to 50, and the pack-year exposure to 20 in the USPSTF guideline, amended in March 2021. LDCT is highly effective but underutilized. Although LDCT screening has been known for more than ten years to reduce lung cancer mortality and has been advised for more than six years, utilization is still unacceptably low, with 19.2% of those eligible obtaining the test in 2018. Compared to colonoscopies, mammograms, and Papanicolaou testing, screening rates for other frequent cancer screenings are substantially higher, at about 80%, 70%, and 60%, respectively. The lesser use of LDCT relative to other cancer screening tests is due to several factors. Physicians might not be aware of the mortality benefit of LDCT screening. Both issues are false-positive results and following-up nodules in a healthcare system that does not support the practice. It's

common to point to the expense of LDCT screening and the cumbersome insurance authorization procedures as barriers, particularly for people without insurance.³

If money weren't an impediment, in one survey, LDCT would be advised by 70% of doctors. Understanding the perceived hurdles limiting primary care physicians from increased LDCT utilization is crucial, given doctors' essential role in involving patients in screening and ordering LDCT. This study will evaluate primary care physicians from around the country on their knowledge, attitudes, and screening barriers for lung cancer. As a result, it will assist professional practice associations and policymakers in enhancing the use of LDCT.⁴

These results reflect the most significant nationwide sample of 599 doctors in two important primary care specialties. Study about doctors' habits, perceptions, and knowledge of lung cancer screening is unknown to us. Although doctors' understanding of qualifying requirements was limited, their decision-making in various clinical settings was more encouraging: One-half to two-thirds accurately identified ineligible patients. At the same time, 86% correctly stated they would order LDCT screening for a qualified patient. Most doctors said they had called an LDCT in the previous year and talked with patients about risks and benefits. Cost and patient knowledge were the two most commonly mentioned obstacles. These findings need to be evaluated in the context of several restrictions. First, even though our survey samples were randomly selected from a reputable list of American doctors, our analyses did not include weights to consider nonresponse. As a result, our results may not apply to all family medicine and internal medicine doctors in the U.S. Second; all data were self-reported and susceptible to response biases like social desirability bias. However, this is less of an issue for knowledge-based questions (such as lung cancer screening criteria), and it is unlikely that misreporting would vary by important physician characteristics like medical specialty. Another drawback was the need for more analysis of the geographic and institutional variation in services provided. Finally, data gathering came before the USPSTF recommendations were revised in 2021. Physician awareness of the most recent recommendations may differ from what we saw in our study.^{5,6,7}

Therefore, it is necessary to continue monitoring physicians' understanding, opinions, and practices about lung cancer screening. In conclusion, LDCT is becoming more widely accepted as a valuable screening technique for people at high risk of lung cancer.⁸

The awareness of using LDCT screening by primary care providers is growing. However, understanding some eligibility requirements is only moderate. It varies by physician demographics and training experience, and screening adoption in eligible populations is significantly lower than comparable malignancies. System-level obstacles remain and must be addressed at several levels, including professional societies, charitable organizations, and governmental organizations, as evidenced by the recent ratification of extended CMS criteria. These obstacles include financial worries and knowledge.⁹

COMPLIANCE WITH ETHICAL STANDARDS

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DISCLOSURE OF CONFLICT OF INTEREST

There are no conflicts of interest declared by the authors.

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