

Lung Cancer Screening Discussions Between Patients and Providers in the United States

Lung cancer is the leading cause of cancer death in the United States (US). It is often detected at an advanced stage when treatment may be less effective, which is one reason that lung cancer has a higher mortality rate than most other cancers. Studies have shown that screening individuals at higher risk for lung cancer with low-dose CT (LDCT) scans can detect cancer at an earlier stage and substantially reduce lung cancer-related mortality. The US Preventive Services Task Force (USPSTF) currently recommends annual LDCT lung cancer screening for individuals between the ages of 50 and 80 who have at least a 20-pack-year smoking history and either currently smoke or have quit within the past 15 years.

Although lung cancer screening can reduce lung cancer mortality, screening is not appropriate for everyone, and it also carries certain risks, such as false positives and overdiagnosis, so it is important to ensure that patients make informed decisions about screening. USPSTF guidelines recommend, and the Centers for Medicare & Medicaid Services require, that a shared decision-making discussion between patients and providers take place before lung cancer screening is initiated. Nevertheless, research suggests that relatively few screening-eligible patients are discussing lung cancer screening with their providers. For example, [a previous study examining HINTS data](#) found that, in 2014, only 10.4% of people between the ages of 55 and 80 with a history of current or former smoking reported discussing lung cancer screening with their health care provider.

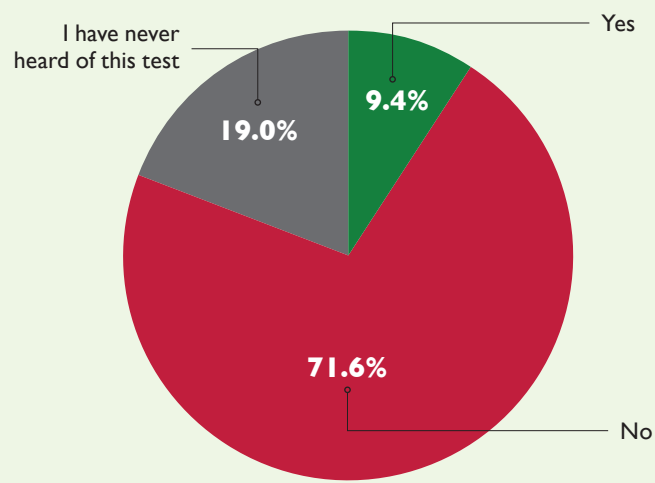
Prior research also points to differences in rates of lung cancer screening by factors such as race, annual income, and insurance coverage. It is therefore important to assess factors associated with screening discussions in order to ensure equity in the utilization of LDCT for lung cancer screening among those who may benefit.

Quick Facts

- Lung cancer is the leading cause of cancer death in the US.
- Annual lung cancer screening with LDCT is currently recommended for individuals aged 50-80 who have at least a 20-pack-year smoking history and either currently smoke or have quit within the past 15 years.
- USPSTF guidelines recommend, and the Centers for Medicare & Medicaid Services require, a shared decision-making discussion before lung cancer screening is initiated.
- Patient-provider discussions may help patients make informed decisions about lung cancer screening.
- In 2022, less than 10% of potentially eligible patients reported discussing lung cancer screening with their providers in the past year.

Reported Patient-provider Discussions about LDCT Lung Cancer Screening among Screening-eligible US Adults (2022)

At any time in the past year, did a doctor or other health professional talk with you about having a low-dose CT (LDCT) scan to check for lung cancer?



Source: Analysis of 2022 HINTS 6 data in Nourmohammadi et al. (2024)

Prevalence and Predictors of Lung Cancer Screening Discussions

A recently published analysis of HINTS 6 (2022) data showed that the prevalence of patient–provider lung cancer screening discussions is relatively low. Only 9.4% of potentially eligible individuals (defined as people aged 50 or older with no prior history of lung cancer who report current or former smoking) said they discussed LDCT lung cancer screening with their providers in the past year, 71.6% reported no discussion, and another 19.0% said they had never heard of LDCT for lung cancer screening.¹

Weighted logistic regression models indicated that among potentially screening-eligible individuals, people who reported current smoking were more likely to discuss lung cancer screening with their health care provider (compared to those who reported former smoking), and individuals who accessed an online patient portal in the past 12 months were more likely to have discussed screening with their provider compared to those who did not access their portal. Potentially screening-eligible individuals 65 years or older were more likely to have never heard of LDCT for lung cancer screening compared to those aged 50 to 64. Race and ethnicity were not found to be significant predictors of either having a discussion or having heard of LDCT for lung cancer screening.

¹ Note: HINTS data do not include smoking pack-years for current and former smokers; therefore, some individuals included in the analysis may not have met the full eligibility criteria for lung cancer screening.

How Can This Inform Your Work?

HINTS data show that rates of self-reported patient–provider discussions about lung cancer screening remain low among those who could potentially benefit, and additional efforts to facilitate these discussions may be needed. For example, the fact that 19% of potentially screening-eligible patients had never heard of LDCT for lung cancer screening indicates that targeted communication strategies to raise public awareness of screening recommendations could be helpful, particularly those focused on older individuals, who may be less aware of LDCT for lung cancer screening. Increasing access to and use of patient portals could also help increase awareness and improve engagement in screening discussions, as portals can alert patients to preventive services they might need.

Research suggests that provider-level barriers, such as variable knowledge regarding screening eligibility criteria, also contribute to low rates of lung cancer screening discussions. Increasing provider knowledge about screening could help providers accurately identify eligible patients and improve screening discussions. Better documentation of smoking history in patient charts could also improve rates of lung cancer screening discussions (particularly among those who formerly smoked) by enabling the automatic identification of eligible patients through electronic health records (EHR) and integrating this information into EHR-based clinical reminder systems that prompt providers to discuss screening with eligible patients.

Other barriers to patient–provider lung cancer screening discussions include time constraints, competing priorities, and difficulty explaining complex information to patients with different levels of health literacy. Efforts to prepare patients for these discussions ahead of their visit could help reduce the provider burden associated with these conversations. For example, interventions electronically delivered to patients ahead of their appointment or implemented in the waiting room could provide basic information regarding lung cancer screening and elicit patient preferences and concerns, thereby enabling subsequent patient–provider conversations to be more streamlined and efficient.

About HINTS

hints.cancer.gov

The National Cancer Institute (NCI) created the Health Information National Trends Survey (HINTS) to monitor changes in the rapidly evolving field of health communication. The survey data can be used to understand how adults use communication channels to obtain health information for themselves and their loved ones. HINTS data can also help practitioners create more effective health communication strategies. The HINTS survey has been fielded 17 times to date.

HINTS *Briefs* provide a snapshot of noteworthy, data-driven research findings. They introduce population-level estimates for specific questions in the survey and summarize significant research findings resulting from analyses of how certain demographic characteristics influence specific outcomes. Many *Briefs* summarize research findings from recent peer-reviewed journal articles that have used HINTS data.

For More Information on Cancer

- Call the NCI Cancer Information Service at 1-800-4-CANCER
- Visit <https://www.cancer.gov>
- Download NCI publications at <https://pubs.cancer.gov/ncipl/home.aspx>
- Visit [Facebook.com/cancer.gov](https://www.facebook.com/cancer.gov) and <https://www.youtube.com/ncigov>

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