

CHAPTER 4

CHAPTER 4 LUNG CANCER SCREENING CONTEXT, SETTING, BARRIERS, AND SOLUTIONS

Objectives:

- 1) Learn how lung cancer is different from other cancer screenings.
- 2) Consider ways for navigators to overcome challenges when working within the lung cancer screening context.
- 3) Examine barriers and proposed solutions for lung cancer screening at the patient, provider, and system levels.

Lung cancer screening is different than other cancer screenings

There are two main aspects of lung cancer screening that are different from other types of cancer screenings, eligibility and the requirement for shared decision-making/ tobacco cessation.¹ Being aware and understanding these differences will affect how best to conduct outreach, talk with individuals about screening, and facilitate the screening process.

When thinking about lung cancer screening with potential eligible it is very important to remember that eligibility is partially based on a lifestyle choice that is associated with stigma.² This is different from breast and colon cancer screening that bases eligibility on age and sex. See table 4-1 for a summary of US Preventive Services Task Force guidelines screening guidelines for lung, breast, and colon cancer screenings. Patient navigators need to aware of how lung cancer screening eligibility is different than these other common cancer screenings because it will affect how best to talk with potential candidates about screening.

Table 4-1 US Preventive Services Task Force Recommendations for Lung, Breast, & Colon Cancer Screenings

Increasing Decision Points for Screening Candidates

Cancer screening type	Breast cancer screening ³	Colon cancer screening ⁴	Lung cancer screening ⁵
Decision point for screening candidate	1) Deciding to be screened	1) Deciding to be screened 2) Modality (type) of screening that fits values (i.e., colonoscopy, sigmoidoscopy, fecal occult blood test)	1) Engaging in shared decision-making 2) Willing to be treated for lung cancer (if necessary) 3) Deciding to be screened 4) Deciding to accept tobacco cessation materials or resources
Gold standard screening modality & frequency	Mammography/ Biennial	Colonoscopy/ Every 10 years	Low dose CT*/ Annual
Age eligibility	50-75	50-75	50-80
Sex based eligibility	Female	Male, Female	Male, Female
Other eligibility	None	None	Cigarette Smoking History: 1) ≥ 20 pack years 2) Currently smoke cigarettes or quit within past 15 years

*USPSTF expanded screening guidelines on March 9, 2021, lowering eligibility to 50 years of age and tobacco exposure to 20 pack years

Another way that lung cancer screening is different from other cancer screening modalities is the Medicare requirements for completion of a shared decision-making visit and tobacco cessation.¹ These extra steps may increase burden on the patient and the provider that need to be considered when conducting lung cancer screening outreach as they may make individuals to talk about their smoking history. Completion of these screening aspects also require additional patient tracking for patient navigations.



See examples of tracking tables for different types of follow-up in the 'Individual Follow-up Tables' tool.



Visit Chapter 2 to learn more about the navigator role in the lung cancer screening process.

COMMON PATIENT NAVIGATION CHALLENGES IN LUNG CANCER SCREENING

Challenge #1

Talking with potentially eligible individuals may be difficult because of the stigma surrounding cigarette smoking.



See the 'Lung Cancer Screening Initial Outreach Tip Sheet' tool to learn more about person-first language and tips on how to reduce the stigma of cigarette smoking.



Visit the companion navigator training to learn more about using the OARS method to discuss lung cancer screening.

Challenge #2

Finding eligible patients and documenting an accurate smoking history may be difficult.



Use the 'Patient Eligibility Checklist and Tips to Collect an Accurate Smoking History' tool for suggested questions to ask during screening eligibility assessment.

Challenge #3

Eligible individuals may not want to be screened because of public perceptions, distrust of the medical system, or fear of a cancer diagnosis.



Use the 'Patient Barriers to Lung Cancer Screening Assessment' tool to guide patient discussions about lung cancer screening.

Challenge #4

Eligible individuals may think they need to quit smoking cigarettes to be eligible for screening.



See Chapter 5 to learn more about tobacco cessation in the context of lung cancer screening.

Challenge #5

The population eligible for lung cancer screening faces many health disparities and may require extra effort to engage in a conversation about screening.



Read more about lung cancer screening disparities in the 'Lung Cancer Screening Evidence Summary' tool.

Patient barriers and proposed solutions

Individuals eligible for lung cancer screening may face common barriers to preventive healthcare, such as difficulty with transportation or taking time off from work. They may also face barriers related to stigma or distrust of the medical system. Common patient barriers to lung cancer screening and proposed solutions are summarized in Table 4-2.



Table 4-2 Patient barriers to lung cancer screening and proposed solutions

Barrier	Proposed Solutions
<p>Lack of awareness and familiarity of eligibility^{6,7} <i>Individuals that are potentially eligible for lung cancer screening are often not aware that this tool exists and that being screened may be beneficial for their health.</i></p>	<ul style="list-style-type: none"> • Patient navigators can provide outreach to potentially eligible patients and the community to offer education about lung cancer screening. • Frame lung cancer screening as a normal preventive health care goal. • Be prepared with brochures or other materials that will allow interested individuals and parties to gain additional information.
<p>Patient perceptions^{6,7} <i>Eligible individuals may not want to be screened because of fear of a cancer diagnosis, fear of further stigmatization, or worry about radiation exposure.</i></p>	<ul style="list-style-type: none"> • Outreach to potentially eligible individuals should focus on the benefit of early detection and survival. Avoid stigmatizing language and shaming about cigarette smoking! • Work with providers in your organization to convey accurate information about lung cancer screening to patients. • Reassure that exposure to low levels of radiation does not cause any immediate health risks but may slightly contribute to one's overall cancer risk. The dose of radiation a person receives from a low dose CT scan is about the same amount receiving from the environment over one year.
<p>Concerns about costs^{6,7} <i>Screening candidates are often concerned about the potential costs of screening, including healthcare cost and travel costs or time off from work.</i></p>	<ul style="list-style-type: none"> • Offer education about how lung cancer screening is a preventive service under the Affordable Care Act and eligible patients should not have associated co-pays for the shared decision-making visit and the low dose CT scan. • Navigators can help uninsured individuals obtain insurance or Medicaid coverage if appropriate. • The cost of needed pulmonary nodule or incidental finding follow-up may still be problematic. Providers may need to consider only ordering additional imaging and/or procedures that are absolutely necessary.
<p>Inability to access screening^{6,7} <i>Distance to the screening facility, lack of public transportation, cost of parking, and language barriers may all be problems patients face when trying to access a screening CT.</i></p>	<ul style="list-style-type: none"> • Be familiar with cab vouchers, courtesy shuttles, and ride-sharing programs in your area. • Know which screening facilities close to you offer extended radiology facility hours for evening and weekend options. • Offer communications/ educational materials in other languages if possible.



Use the ‘Patient Barriers to Lung Cancer Screening Assessment’ tool to guide patient discussions about lung cancer screening.



Read about costs associated with lung cancer screening in Chapter 1.



See the ‘Lung Cancer Screening Initial Outreach Tip Sheet’ tool to learn more about person-first language and tips on how to reduce the stigma of cigarette smoking.



Visit the companion navigator training to learn more about using the OARS method and motivational interviewing to discuss lung cancer screening.

Provider barriers and possible solutions

Healthcare providers, particularly primary care providers, also face many barriers to utilizing and recommending lung cancer screening for their patients. They often have limited time with each individual patient and may not have adequate time to work lung cancer screening into a patient visit. Common patient barriers to lung cancer screening and proposed solutions are summarized in Table 4-3.

Table 4-3 Provider barriers to lung cancer screening and proposed solutions

Barrier	Proposed Solutions
Unfamiliarity with guidelines and evidence ^{6,7} <i>As a new type of cancer screening, primary care providers may be unaware or uneducated about the guidelines, eligibility, the evidence base, and the policy coverage of lung cancer screening.</i>	<ul style="list-style-type: none"> Healthcare organizations and providers can seek out educational opportunities in several modalities (Grand Rounds, continuing education in-person or online, etc.) to appeal to different learning styles.
Challenges identifying eligible patients ^{6,7} <i>Cigarette smoking history is often not captured correctly or accurately in the electronic medical record, making it harder to find potentially eligible individuals than other cancer screenings.</i>	<ul style="list-style-type: none"> Look for ways to enhance and track smoking history within and outside the electronic medical record. Use navigators or coordinators to provide in-reach and outreach to verify cigarette smoking history and find eligible individuals that are interested in discussing screening with their provider.
Difficulty conducting shared decision-making ^{6,7} <i>Primary care providers have limited time with patients and often need to discuss competing health concerns in the time they do have with patients. This may result in insufficient time to properly engage in shared decision-making and discuss lung cancer screening.</i>	<ul style="list-style-type: none"> If patient is eligible and interested in lung cancer screening providers can consider making a separate appointment devoting to shared decision-making. <ul style="list-style-type: none"> Give consideration to billing Medicare (if applicable) for the shared decision-making visit. Use navigators to provide patients with educational materials prior to shared decision-making so candidates can come prepared to discuss and engage with their preferences during the conversation. Provide providers with continuing education on how to conduct proper shared decision-making and engage patients in their health care decisions.
Unfamiliarity with managing abnormal and incidental findings ^{6,7} <i>Many primary care providers are unfamiliar with pulmonary nodule management and are not sure they can appropriately track and manager abnormal and incidental findings.</i>	<ul style="list-style-type: none"> Lung cancer screening CT scans should follow structured reporting and follow-up recommendations using Lung-RADS. These recommendations follow standardized pulmonary nodule algorithms meant to mitigate associated patient risk. Utilize navigators to help with tracking needed follow-up timing and procedures and help patients with make and reduce appointment barriers.



Use the 'Patient Eligibility Checklist and Tips to Collect an Accurate Smoking History' tool for suggested questions to ask during screening eligibility assessment.



Visit Chapter 6 to learn more about using Lung-RADs to manage screen detected pulmonary nodules.



Go to the Resources section to find suggested shared decision-making and training resources available for providers.

Healthcare system barriers and possible solutions

Implementation of lung cancer screening requires the support of healthcare organization administration to utilize the needed personnel and resources. Common system level barriers to lung cancer screening and proposed solutions are summarized in Table 4-4.



Go to Chapter 3 to read more about requirements to set-up a lung cancer screening program and learn more about program structure.

Table 4-4 System level barriers to lung cancer screening and proposed solutions

Barrier	Proposed Solutions
<p>Lack of support from leadership⁷ <i>As a new type of cancer screening, organizational leadership may be unaware or uneducated about the guidelines, eligibility, the evidence base, and the policy coverage of lung cancer screening.</i></p>	<ul style="list-style-type: none"> Healthcare organizations and providers can seek out educational opportunities in several modalities (Grand Rounds, continuing education in-person or online, etc.) to appeal to different learning styles.
<p>Limited or competing demands for resources and complex implementation⁷ <i>Organizations may lack appropriate personnel and equipment to effectively offer lung cancer screening.</i></p>	<ul style="list-style-type: none"> Consider if there are organized screening programs in your area where you can refer interested individuals. Develop business relationships with imaging facilities and pulmonary nodule management programs in your area that have the necessary personnel, equipment, and expertise.



Chapter 4 References

- 1) Centers for Medicare & Medicaid Services. Final National Coverage Determination on Screening for Lung Cancer with Low Dose Computed Tomography (LDCT). 2015. Available at: <https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAid=274>. Accessed May 2021.
- 2) Carter-Harris L, Davis LL, and Rawl SM. Lung Cancer Screening Participation: Developing a Conceptual Model to Guide Research. *Res Theory Nurs Pract*. 2016 Nov 1; 30(4): 333–352.
- 3) US Preventive Services Task Force. Screening for breast cancer. January 11, 2016. Available at: <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancer-screening>. Accessed May 2021.
- 4) US Preventive Services Task Force. Colorectal cancer: Screening. May 18, 2021. Available at: <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening>. Accessed May 2021.
- 5) US Preventive Services Task Force. Lung cancer: Screening. March 9, 2021. Available at: <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lung-cancer-screening>. Accessed May 2021.
- 6) Wang GX, Baggett TP, Pandharipande PV, et al. Barriers to Lung Cancer Screening Engagement from the Patient and Provider Perspective. *Radiology*. 2019 Feb;290(2):278-287.
- 7) Carter-Harris L and Gould MK. Multilevel Barriers to the Successful Implementation of Lung Cancer Screening: Why Does It Have to Be So Hard? *Ann Am Thorac Soc*. 2017 Aug;14(8):1261-1265.