





# Steps for Increasing Lung Cancer Screening: A Manual for Primary Care Practices

Led by the American Cancer Society National Lung Cancer Roundtable (ACS NLCRT)

# Acknowledgments

The American Cancer Society National Lung Cancer Roundtable (ACS NLCRT) is grateful for the financial support from our sponsors, which helped develop this important resource, and ACS, which strategically propels our work. We especially wish to thank members of the ACS NLCRT Provider Engagement and Outreach and Shared Decision-Making Task Groups, members of our executive leadership team, key partner organizations, and the ACS Medical Content team for their dedication, expertise, and the many hours that went into developing this resource.

The ACS NLCRT was established in 2017 and is a consortium of approximately 200 member organizations and leading experts. Our collective power and expertise enable us to take on challenges across the lung cancer continuum. We engage clinical, research, and public health experts, and patient and caregiver representatives to catalyze action to build and strengthen innovative solutions, and develop and disseminate evidence-based interventions and best practices.

By working together and striving to avoid duplication among member organizations, we will drive progress faster than working alone to overcome lung cancer challenges, accelerate change, and address the determinants of cancer-related health disparities to advance health equity across the lung cancer continuum. This is the unique role of the ACS NLCRT.

Katie Bathje, MA

**American Cancer Society** 

**Molly Black** 

**American Cancer Society** 

**Hannah Burson** 

ACS NI CRT

Ramon Cancino, MD, MBA, MS, FAAFP

UT Health San Antonio

Jan Eberth, PhD, FACE

Vice Chair, ACS NLCRT Provider Engagement and Outreach Task Group

**Drexel University** 

Vickie Fowler, MD, FAAFP

WakeMed

Korey Hofmann, MPH

**ACS NLCRT** 

**American Cancer Society** 

Thomas Houston, MD, FAAFP

Chair, ACS NLCRT Provider Engagement and

**Outreach Task Group** 

American Academy of Family Physicians

**Brittany Lovely** 

**American Cancer Society** 

**Nevada Cancer Coalition** 

Robert Smith, PhD, FSBI

ACS Chair, ACS NLCRT

American Cancer Society

Robert Volk, PhD

Chair, ACS NLCRT Shared Decision-Making Task Group

University of Texas MD Anderson Cancer Center

Vickie Beckler, MBA, RN

US Lung Ambition Alliance

AstraZeneca

**Kenly Burn** 

ACS NLCRT

**American Cancer Society** 

Maria Cabrera, MPH

American Cancer Society

Lisa Carter-Bawa, PhD, MPH, APRN, ANP-C, FAAN

Chair, ACS NLCRT Stigma and Nihilism Task Group

Hackensack Meridian Health

Heather Bittner Fagan, MD, MPH, FAAFP

ChristianaCare

Talia Henkle, PhD

**American Cancer Society** 

James Hotz, MD, MACP

Albany Area Primary Health Care

Ella Kazerooni, MD, MS, FACR, FACC, FSABI

Chair, ACS NLCRT

University of Michigan

**Michael Monroe** 

American Academy of Family Physicians

Lauren Rosenthal, MPH

**ACS NLCRT** 

**American Cancer Society** 

Jamie Studts, PhD

Vice Chair, ACS NLCRT Stigma and Nihilism Task Group

University of Colorado

Richard Wender, MD

University of Pennsylvania

# **Table of Contents**

•	Intr	oduction	4
	0	Background	
	0	How should primary care practices use this manual?	. 5
	0	LCS Recommendations and Guidelines	. 6
•	Step	o 1: Identify eligible patients	8
	0	Assess office strategies to document tobacco use histories	. 8
	0	Recognize and overcome challenges to documenting tobacco use histories	. 8
•	-	o 2: Determine your screening model	9
•	Step	o 3: Review and refine LCS workflows	10
	0	Establish a decision counseling workflow	10
	0	Prioritize tobacco cessation counseling	10
	0	Develop an LCS clinical workflow	
	0	Create or revise your patient education process	
•	Step	o 4: Build proficiency in LCS conversations	12
	0	Reduce lung cancer stigma, nihilism, and fatalism	
	0	Dos and Don'ts of LCS and Tobacco Cessation Conversations	
	0	Engage in SDM conversations	13
•	Ste	p 5: Get patients screened	14
	0	Review and confirm patient's insurance coverage	
	0	Prepare a list of covered LCS facilities and answers to common patient questions	
	0	Determine workflows for managing incidental findings and setting patient expectations	
•	Ste	o 6: Measure and improve performance	16
	0	Track important features	
	0	Implement LCS patient reminders	
	0	Understand loss of annual and short-term nodule follow-up	
	0	Improve performance	16
Αŗ	pen	dix	17
	0	Assign LCS tasks to team members	17
	0	Document and submit billing information	18
D.	esoui		19
K			
	0	Learn more about screening program models	
	0	LCS Decision Aids	
	0	Campaigns	
	0	Tobacco Cessation Counseling Resources for Providers	
	0	Tobacco Cessation Resources for Patients	
	0	Educational Materials About LCS for Patients	
	0	Resources to Improve Health Equity in LCS	
	0	Evidence-based Interventions for LCS Improvement	
	0	Guidebooks and Support Programs	
_			
Re	efere	nces	22

## Introduction

### Background

It's projected that there will be more than 226,000 new cases of lung cancer diagnosed in the United States in 2025.¹ Lung cancer is the leading cause of cancer death in both men and women in the US.¹ Lung cancer screening (LCS) using low-dose computed tomography (LDCT) has been shown to significantly reduce the odds of dying from lung cancer among high-risk individuals in two randomized controlled trials, the first and largest of which was performed in the US.²³ Yet, it is underutilized.⁴

Approximately 18% of eligible people reported undergoing LCS in the US in 2022, with substantial state-by-state variation.<sup>4</sup> This lags considerably behind the screening rates reported for breast and colorectal cancer screening, respectively.<sup>5,6</sup> Significant efforts, starting in the primary care setting, are important to increase screening among eligible people and ultimately improve lung cancer survival.

### LCS Challenges to Overcome

Annual LCS with LDCT is the greatest opportunity to detect lung cancer early when treatment is more likely to be successful. However, LCS is challenging due to four main factors:

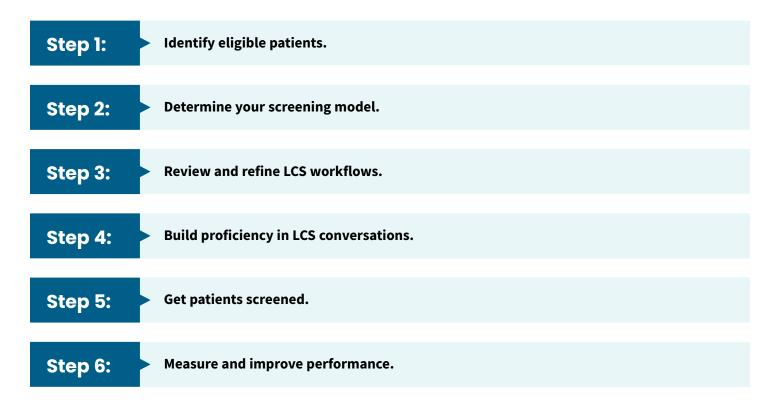
- LCS is not a widely used quality measure, which makes it less likely that health systems will prioritize LCS quality improvement interventions.
- Determining LCS eligibility can be challenging due to the lack of accurate tobacco use history assessments in the health record.
- There is a shared decision-making (SDM) requirement for insurance coverage by the Centers for Medicare & Medicaid Services (CMS) for the first time a patient undergoes LCS. Some regard this requirement to complete SDM as an impediment to LCS.
- LCS is recommended to be repeated annually for eligible patients. Similar to other screening tests, ongoing reminders are required to help patients adhere to regular screening.

### How should primary care practices use this manual?

The goal of this manual is to offer evidence-based, expert-endorsed recommendations for planning and implementing strategies to develop and optimize programs for the early detection of lung cancer.

You don't need a complete plan to begin making decisions or key changes – one step at a time is all it takes. We suggest that you use the manual by focusing on the topic pages that you need at any given time.

This guide is organized into six primary sections:



There is an **Appendix** and a **Resource section** that provide your practice with supplemental guidance on LCS.

### LCS Recommendations and Guidelines

The Affordable Care Act legislated that private insurance companies are required to cover the full cost of LDCT screening for eligible individuals in accordance with the US Preventive Services Task Force (USPSTF) LCS recommendation without deductibles or copays. Under this recommendation, approximately 14.3 million people in the US are eligible for screening, which represents about 32% of people who have ever smoked.<sup>7</sup>

Pack-years are a core component of determining risk and LCS eligibility.<sup>8</sup> A pack-year is equal to smoking 1 pack (or about 20 cigarettes) per day for a year. For example, a person could have a 20 pack-year history by smoking 1 pack a day for 20 years, 2 packs a day for 10 years, or a half pack a day for 40 years.



View **Groups Covered for LCS With No Copay** for more details.

### **USPSTF Lung Cancer Screening Recommendation<sup>6</sup>**

### The USPSTF 2021 recommendation for annual LCS with LDCT for people ages 50-80 who:

 Currently smoke or quit smoking cigarettes within the past 15 years

AND

Have a 20 pack-year or more smoking history

### A person should stop screening if they:

Have not smoked for 15 years or more

OR

 Develop a health problem that substantially limits life expectancy or the ability or willingness to have curative treatment

**Patients who meet these criteria should engage in SDM before screening.** The physician-patient conversation should include the potential benefits, limitations, and harms associated with screening.



View **Engage in SDM conversations** for detailed guidance.

### Other Organizations That Have Adopted the USPSTF LCS Recommendation

The American Academy of Family Physicians adopted the USPSTF LCS criteria in their guideline in 2021. Most state Medicaid expansion programs follow these criteria as well.<sup>9</sup>

CMS adopted the USPSTF criteria in their 2022 coverage decision with one exception – they use an upper age of 77 years for eligibility.<sup>10</sup>

### **American Cancer Society LCS Guideline**

The American Cancer Society (ACS) guideline, which was updated in 2023, recommends annual LCS with LDCT for people ages 50-80 who:11

Currently smoke or used to smoke cigarettes

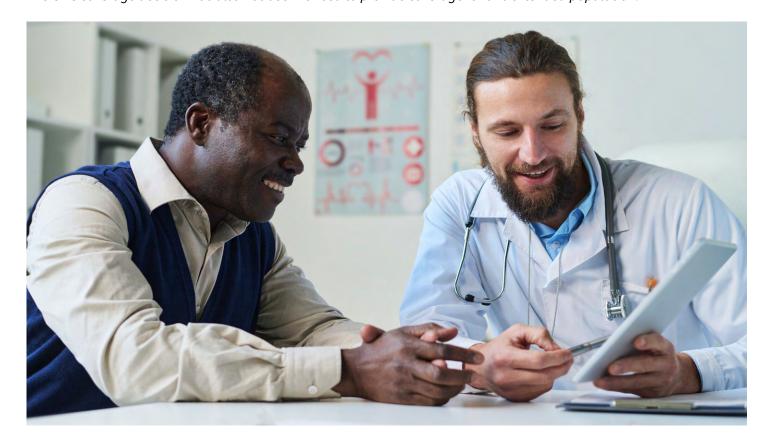
AND

Have a 20 pack-year or more smoking history

The ACS guideline also recommends that individuals should engage in an SDM conversation with a health professional prior to undergoing screening.

The ACS guideline eliminated the years-since-quit (YSQ) criterion, since new evidence showed rising lung cancer risk after cessation, just the opposite of what has been believed for years. Thus, at present, high-risk individuals are losing eligibility to LCS after 15 YSQ. Also, modeling revealed that this change would lead to a greater decline in lung cancer mortality and an increase in life-years-gained with no negative impact on screening efficiency. Patients who formerly smoked and have qualified for LCS should be counseled about continuing risk when they reach 15 YSQ. 12

Private payors are not required to provide coverage for the extended eligible population outlined by the ACS guideline. The CMS coverage decision has also not been revised to provide coverage for this extended population.



# Step 1: Identify eligible patients.

This step will help you design a workflow to take tobacco use histories to identify eligible patients for LCS.

### Assess office strategies to document tobacco use histories.

LCS eligibility is based on risk by looking at smoking history and age. Having a strategy to routinely assess patients' tobacco use histories is key to getting patients screened.



Review **Reduce lung cancer stigma** in step 4 to for guidance on how to approach taking tobacco use histories.

- Providers and other relevant health care professionals should know how to **document smoking histories in the electronic health record (EHR)** and how to make necessary adjustments if needed.
- Configure pre-visit checklists in the patient portal to help gather tobacco use history information.
- Leverage the EHR to prompt providers to discuss smoking status, start/quit dates, and pack-year history during patient visits and ensure providers know how to input data in a standardized way.
- Set up the EHR to alert providers if a patient's age and pack-year history make them eligible for LCS.
- When patients ages 50-80 check in, have medical assistants or nurses review and update their tobacco use and pack-year histories in the EHR. If the patient may be eligible or due for screening, or if their tobacco use history is not up to date, alert the provider before they see the patient.
- Educate nurses, medical assistants, and other relevant office staff in your practice on the importance of taking tobacco use histories to determine LCS eligibility. Education could occur during practice meetings or through written or digital mediums. Educational efforts should harness multiple strategies and be repeated, as guidelines and related evidence have changed over time.

### **Special Eligibility Considerations**

Patients with one or more comorbidities that will have a significant impact on their mortality in the next 5-10 years are generally not eligible for LCS. These may include cardiovascular disease, severe lung disease, moderate or advanced dementia, or other cancers. Some patients with an existing diagnosis of cancer (besides lung cancer) may be eligible for LCS if that cancer is early stage with a good prognosis or if they are disease free for five years or more and that cancer is not expected to have a significant impact on their mortality in the next 5-10 years.

### Recognize and overcome challenges to documenting tobacco use histories.

The inability of clinics to accurately and efficiently document tobacco use histories is a barrier to increasing LCS uptake. By recognizing obstacles and reviewing solutions, your practice will be better equipped to identify eligible patients for LCS and tobacco cessation interventions.

- Patients may report having "quit" smoking even though they smoke on occasion.
  - **POTENTIAL SOLUTION:** Ask the patient to report the last year that they smoked even one cigarette. Base their years-since-quit calculation on that year.
- The number of cigarettes someone smokes often varies throughout their lifetime. Very few people smoke the same number of cigarettes every day. Documenting a changing smoking history in discrete fields, such as an EHR, is often challenging.
  - **POTENTIAL SOLUTION:** Ask patients to estimate the number of years smoked and the average number of cigarettes or packs per day they've smoked through their lifetime. Enter that estimation in the EHR.

# Step 2: Determine your screening model.

There are many ways to implement LCS. Review the models below to determine which one will work best for your practice based on what is available in your vicinity.



For more information, see the **Learn more about screening program models** in the Resources section.

### Hybrid

**Hybrid LCS** is a clinical model where the responsibilities are divided between the primary care practice and a dedicated facility resource. External resources may include radiology practices, multispecialty practices, or other components of the health system. The primary care practice may manage aspects, such as eligibility assessment, smoking cessation counseling, SDM, and placing the LDCT orders. Test result follow-up and specialty referrals may be managed by a dedicated facility resource.

### Decentralized

<u>Decentralized LCS</u> is centered in the primary care practice. Eligibility assessment, tobacco cessation counseling, SDM, LCS LDCT orders, test result follow-up, and specialty referrals all occur here.

### Centralized

<u>Centralized LCS programs</u> engage primary care providers to refer potentially eligible patients to an LCS program. The program confirms eligibility, conducts tobacco cessation counseling, facilitates SDM, orders LDCT for LCS, and manages test result follow-up and specialty referrals.



# Step 3: Review and refine LCS workflows.

This step will help you design a comprehensive workflow to perform decision counseling, LCS, and provide patient education.

### Establish a decision counseling workflow.

LCS SDM and tobacco cessation counseling are key components of successful LCS programs. These processes can be completed by primary care providers, LCS program coordinators, and/or nurses. Take the time to consider when patients will engage in these processes and which team members will be responsible. See the <u>Assign LCS Tasks</u> to team members worksheet for support in delegating tasks.

### Prioritize tobacco cessation counseling.

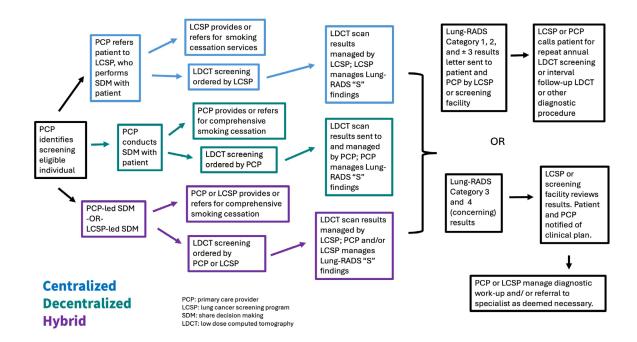
Tobacco cessation is a vital aspect of successful LCS programs. Discussing tobacco cessation with your patients who smoke and connecting them with tobacco cessation resources can help increase their odds of successfully quitting. Tobacco cessation counseling should be repeated at various intervals to increase success.<sup>13</sup> Several points in the screening journey lend themselves to tobacco cessation counseling: at the initial screening conversation, during the SDM discussion, at the LDCT appointment, during the review of results, and at follow-up for repeat screening. Ensure that you incorporate follow-up tobacco cessation counseling into your workflow.

### For more information:

- Review the <u>Dos and Don'ts of LCS and Tobacco Cessation Conversations</u> for script suggestions on how to approach these conversations.
- See <u>Engage in SDM conversations</u> for detailed guidance.
- Review the Resources section for <u>Tobacco Cessation Counseling Resources for Providers</u> and <u>Tobacco Cessation Resources for Patients</u>.
- Review <u>LCS Codes</u> for the codes used for SDM and tobacco cessation counseling.

### Develop an LCS clinical workflow.

Review the recommended processes for LCS and result management below, and adapt a workflow to fit your practice.



### Create or revise your patient education process.

There are many modes of LCS education that can help motivate patients to participate in LCS and follow-up screening.

Educational approaches should be tailored to help ensure patients' understanding of the importance of LCS. When designing your patient education process, consider individuals who may have a higher risk for lung cancer, such as people who smoke or who used to smoke. Additionally, consider the unique needs and challenges faced when educating individuals from diverse groups, such as people of color, residents of rural communities, people living with limited income, people who have limited reading literacy, or people who speak a primary language other than English.

Consider the following strategies:

### Optimize wellness visits.

Routine appointments and wellness visits are opportunities to speak directly to patients about lung cancer screening and answer questions. You can optimize this time with patients by:

- · Integrating a tobacco history assessment
- · Discussing eligibility for coverage
- Reviewing the steps involved in LCS, including:
  - Where LDCT LCS will occur
  - What the <u>LDCT scan procedure</u> entails
  - The importance of regular, annual screening
  - The importance of follow-up screening if the recommendation is to return in 3 or 6 months
- Reviewing all eligible cancer screening opportunities
- · Addressing tobacco cessation and treatment when appropriate

### Compile and distribute educational materials

Take time to distill a repertoire of educational materials that will be provided to patients who may be eligible for LCS. Ensure all relevant staff members are aware and familiar with the recommended materials. You can work to motivate LCS uptake by sending patient educational materials to patients through various mediums, like EHR, mail, or text messages. Consider a strategy for follow-up education each time information is provided.

View **Educational Materials About LCS for Patients** for a list of readily available materials.

# Step 4: Build proficiency in LCS conversations.

Educational interventions are necessary to ensure that all relevant staff members know the best practices to identify eligible patients for LCS and promote annual screening using patient-friendly, judgement-free, non-stigmatizing language.

### Reduce lung cancer stigma, nihilism, and fatalism.

Anyone can get lung cancer. Yet, people with lung cancer have reported feeling blamed and shamed for their cancer, regardless of whether they have a smoking history (currently smoke or formerly smoked). And, people at increased risk of lung cancer due to smoking have also reported feelings of stigma, shame, and self-blame. The stigma surrounding lung cancer can cause stress, anxiety, and hopelessness that nothing can be done if they have lung cancer. Lung cancer stigma, nihilism, and fatalism discourage people with a smoking history from seeking screening or tobacco cessation services and may cause people with symptoms of lung cancer to avoid or delay getting those symptoms checked. Demonstrating empathy and support will help navigate these concerns and facilitate an environment that is more likely to be conducive to introducing LCS, tobacco cessation services, or any other discussion about lung cancer risk reduction.

It is important to train staff to avoid perpetuating lung cancer stigma in interactions with people with lung cancer or during LCS and tobacco cessation discussions. <sup>15</sup> The <u>ACS NLCRT Lung Cancer Stigma Communications Assessment Tool (LCS-CAT)</u> can be used to review your LCS educational materials for language, imagery, and context, and offer suggestions on how to improve them.

Review the table below for guidance on using patient-first language. <sup>15</sup> Refer to the <u>International Association for the Study of Lung Cancer Language Guide</u> for more information.

### Dos and Don'ts of LCS and Tobacco Cessation Conversations

DO					
Actions	Statements to Try				
Provide rationale for asking smoking-related questions.	"We ask these questions to everyone, no matter what, to make sure we are providing high-quality care."				
Acknowledge the difficulty of quitting tobacco when promoting tobacco cessation.	"I realize it's very difficult to stop smoking, especially after all this time. Would you be interested in hearing about different ways I could help you quit?"				
Offer tobacco cessation resources.	"Stopping tobacco use has many health benefits. But, tobacco contains an addictive chemical called nicotine. Nicotine is one of the most difficult substances to quit using. People who get support have more success. Here are some materials for you to review. I'm here to help should you decide to work toward quitting."				
Acknowledge that smoking can cause lung cancer, as well as other risk factors.	"Cigarette smoking causes about 90% of lung cancers, but your risk diminishes if you quit. Genetic factors and exposure to certain toxic substances can increase lung cancer risk as well."				
Offer hope.	"Your smoking history puts you at high risk for getting lung cancer. Luckily, annual screening can help catch lung cancer in the early stages, when it may be easier to treat. Also, working towards quitting tobacco use can help lower your risk."				
DO NOT					
Actions	Statements to Avoid				
Impart blame.	"You really should stop smoking. That habit could kill you."				
Presume.	"It says here that you have a smoking history. You still smoke, right?"				
Threaten suboptimal care for patients who smoke.	"It's going to be harder to treat you if you keep smoking."				
Be nihilistic.	"You're going to die if you don't stop smoking."				
Use judgmental labels.	"You're a lifelong smoker, right?"				

### Engage in SDM conversations.

SDM is recommended prior to the first baseline LCS to meet CMS requirements for coverage.<sup>10</sup> However, research has revealed that the quality of these SDM discussions for LCS is often suboptimal, leaving patient values inadequately assessed.<sup>16-18</sup>

### Help patients make the most out of the SDM process.

- 1. Choose a decision aid that can be incorporated into the EHR which links SDM to smoking history and the LCS CT order. Alternatively, use a standalone video or printout. Build in a process that guarantees that the decision aid is provided to patients.
- 2. Ensure patients understand that the benefits of LCS outweigh the drawbacks and that LCS significantly reduces the risk of dying from lung cancer in high-risk individuals by detecting it early when treatment is more likely to be successful.<sup>1,2</sup>
- 3. Ensure that patients understand the pros and cons of LCS, particularly those related to incidental findings.
  - a. Discuss that lung nodules are very commonly found during LCS, but that few are cancer.
  - b. Discuss that some nodules require follow-up, which is most often a LDCT scan to determine if the nodule is growing or not, and for a very small number of patients it may include having a biopsy. Follow-up testing may have out-of-pocket expenses, depending on insurance coverage.
  - c. Some incidental findings may contribute to changes in a patient's medical care and others may not. For example, moderate or severe coronary arterial calcification may impact cardiovascular risk. Some findings may require follow-up testing to understand their significance.



Decision aids are written materials or videos made to facilitate health care discussions. Access **LCS Decision Aids** in the Resource section.

### CMS Requirements for SDM Coverage

- Determine eligibility.
- Use a decision aid to guide your SDM conversation.
- Counsel the patient on the importance of adherence to annual LCS.
- Discuss the patient's comorbidities and how they may impact their ability or willingness to undergo diagnosis and treatment.
- If they previously smoked cigarettes, counsel the patient on the importance of maintaining cigarette smoking abstinence.
- If they currently smoke cigarettes, provide information about tobacco cessation interventions.

### When to Engage

SDM should occur before the first baseline LCS is initiated. SDM regarding the benefits of LCS relative to life expectancy should be repeated if the patient develops comorbidities that impact their life expectancy.

SDM can be performed as part of the Evaluation and Management visit and billed as G0296, with a 25 modifier, or as a separate visit.

# Step 5: Get patients screened.

This step will help you identify where patients should be screened and help you develop clinical workflows for incidental finding follow-up.

### Review and confirm patient's insurance coverage.

The Affordable Care Act (ACA) requires private health insurers to cover USPSTF-recommended preventive services, like LCS, without any patient cost-sharing, such as copays and deductibles. However, follow-up testing may incur out-of-pocket costs, depending on the patient's insurance coverage. Primary care practices and providers should be able to help patients connect to covered LCS, if they have insurance, before they decide to screen.



Review the **USPSTF LCS Recommendation** and the **CMS Requirements for SDM Coverage**.

Groups Covered for LCS With No Copay					
Health Insurance	Medicare	State-based Medicaid <sup>c</sup> Expansion	Private <sup>d</sup> and State Marketplace Insurance Plans <sup>e</sup>		
Age	50-77 <sup>a</sup>	50-80	50-80		
Tobacco History	20 pack-years <sup>b</sup>	20 pack-years	20 pack-years		
Smoking Status	Currently smoking or stopped smoking the past 15 years	Currently smoking or stopped smoking the past 15 years	Currently smoking or stopped smoking the past 15 years		
Symptoms of Lung Cancer	Asymptomatic	Asymptomatic	Asymptomatic		
SDM	Required (face-to-face or telehealth) Billable	Required (face-to-face or telehealth) Billable	Required (face-to-face or telehealth) Billable by most		

Medicare Advantage plan holders may be covered up to age 80. Coverage and network requirements should be confirmed for those 78-80 before screening.

A pack-year is equal to smoking 1 pack (or about 20 cigarettes) per day for a year. For example, a person could have a 20 pack-year history by smoking 1 pack a day for 20 years, 2 packs a day for 10 years, or a half pack per day for 40 years. For standard Medicaid, LCS coverage is not required. Eligibility criteria and coverage information should be confirmed with each state before LCS.

<sup>&</sup>lt;sup>c</sup>For standard Medicaid, LCS coverage is not required. Eligibility criteria and coverage information should be confirmed with each state before LCS <sup>d</sup>Certain short-term plans and plans sold by farm bureaus of health ministries do not have to comply with these standards.

eGrandfathered plans do not need to comply with these standards.

# Prepare a list of covered LCS facilities and answers to common patient questions.

Assessing patient insurance coverage will help identify one or multiple covered screening locations. Consider having a team member create a list of which facilities your practice works with and prepare answers to common questions about health insurance coverage at each facility. Ensure that relevant staff members are aware of the list of LCS facilities and which insurance plans they work with for no-cost LCS.



Try to refer patients to LCS locations that can accommodate diverse patient needs, like short travel distance or culturally sensitive care. **Locate an LCS facility** on the ACR website.

### Some common patient questions are:

- 1. Does the screening or imaging facility charge a fee?
- 2. Will I have to pay any out-of-pocket costs?
- 3. Does a referral or preauthorization need to be submitted prior to LCS? How is that done?
- 4. What are the nearest LCS centers that are covered in my insurance network?
- 5. Does follow-up testing have any out-of-pocket costs?

# Determine workflows for managing incidental findings and setting patient expectations.

Incidental findings (IFs) are abnormalities that are unrelated to the purpose of LCS. IFs are common, and the possibility of them being found should be included in the SDM conversation. Understanding which ones are actionable or clinically significant is important, as some may require follow-up management of some kind (e.g., additional testing or imaging).



About 20% of LCS exams reported significant or potentially significant IFs.<sup>19</sup>

To aid in managing IFs consistently, the American College of Radiology (ACR) developed a **Quick Reference Guide for IFs** found on LCS LDCTs with appropriate follow–up recommendations for use by ordering clinicians and LCS program coordinators.



Work to develop a protocol for handling IFs in your practice.

# Step 6: Measure and improve performance.

It is important to properly document relevant data and assess outcomes to ensure that your LCS workflows are effective. Furthermore, implementing practices like LCS reminders or other evidence-based interventions can improve the success of your efforts.

### Track important features.

Organized tracking systems allow you to assess the success of your efforts and identify areas for improvement.<sup>20</sup> There are multiple ways to track LCS services whether you have a centralized LCS program that you refer patients to or not. Review the list of suggested actions below.

- Determine how results for an abnormal screening exam are flagged for action and how those actions are tracked for completion.
- Determine whether you can send your tracked information to a (voluntary) LCS registry.
- Consider setting up your EHR system to provide tracked information as a dashboard or report.
- Use standardized forms and/or unique local procedure codes for LCS orders and patient histores to ensure that your data are consistent and easily navigable.
- Consider tracking smoking status, start/quit dates, pack-year history, and smoking cessation counseling orders.

### Implement LCS patient reminders.

Consistent annual LCS is key to detecting lung cancers early and increasing lung cancer survival. However, annual screening adherence remains a challenge for many patients. Patients should be reminded before they are overdue for annual screening or for follow-up lung nodule surveillance.<sup>21-24</sup>

### Understand loss of annual and short-term nodule follow-up.

In US LCS programs, adherence to annual LCS and follow-up nodule LDCTs for lower-risk abnormal results is suboptimal.<sup>25</sup> In a study of the first million screens in the ACR LCS registry, being age 65 or older was associated with better adherence compared to younger individuals.<sup>26</sup> This may be related to Medicare coverage starting at this age. Younger patients and Medicaid patients are more likely to have out-of-pocket expenses for the interval nodule LDCTs until their annual deductible is reached. However, it's worth noting that lack of resources in primary care and LCS programs to effectively track patients and send reminders remains one of the principal barriers to improved LCS follow-up rates.<sup>27</sup>

Members of special populations, such as people who are marginalized or people who are historically excluded, often face additional LCS barriers. Review Resources to Improve Health Equity in LCS for more information in serving your specific patient demographic.

### Improve performance.

Once your practice has distilled key areas for LCS improvement through tracking data analysis or other means, use research-backed methods to work toward your goals. View **Evidence-based Interventions for LCS Improvement** in the Resources section for a comprehensive list of potential interventions.

# **Appendix**

## Assign LCS tasks to team members.

Take time to review the list of tasks below, and assign roles to appropriate team members. These steps may not be relevant to every practice or be all inclusive but are intended to serve as a launch point.

	Potential Tasks	Team Member Responsible
Preparation	Create or affirm there is an LDCT order in the EHR and that the order captures the LCS eligibility criteria as discrete items (e.g., age, pack-years, years-since-quit, etc.).	
	Default LCS orders in the EHR for the appropriate "reason for exam" (e.g., ICD 10 F17.210 for nicotine dependence, cigarettes, or Z87.891 history of nicotine dependence).	
	Set up EHR system to capture tobacco use histories and calculate pack-year histories.	
	Set up EHR to create clinician reminders, such as best practice alerts, overdue reminders, selecting diagnoses that will be covered by insurance, or a health maintenance activity for LCS.	
	Set up EHR for patient reminders.	
	Embed LCS and SDM guidelines in the EHR or use SDM tools in print or video format.	
	Identify which patient educational materials will be used in the clinical workflow, including the EHR patient portal or other mediums.	
	Identify tobacco cessation resources that fit your practice workflow for use by patients and the clinical care team.	
	Prepare answers to common questions about insurance.	
	Design staff education materials.	
	Coordinate staff LCS education sessions for all clinic staff and clinicians.	
	Create a list of LCS locations that can accommodate different patient needs and insurance coverage requirements.	

Intake	Provide patients with relevant LCS educational materials.	
	Determine LCS eligibility.	
	Select a decision aid for use. Where possible, embed it in the EHR for patients to review and clinicians to discuss with patients.	
	Decide if your practice will do SDM for the first baseline LCS only as required by CMS, or additionally in the future and at what frequency.	
	Engage patient in SDM and document SDM in the EHR. This may be a licensed independent practitioner (e.g., physician, NP, and PA) or auxiliary personnel incident to physician's professional services.	
	Decide if SDM will be performed as part of the Evaluation and Management (E&M) visit (billed with a 25 modifier) or separately (using CPT code G0296).	
	Provide or refer patients who are currently smoking for tobacco cessation counseling.	
	Order LCS or refer patients to a centralized LCS program.	
	Review patient insurance plan, and identify a screening facility that will be the most cost-effective.	
	Identify patient-related barriers to LCS, such as distance and transportation to the LCS facility. Then, schedule LCS at a facility that accommodates patient needs and preferences.	

Screening	Perform LDCT or other imaging tests.	
	Review and manage LCS results.	
	Notify patient of results.	
	Manage diagnostic work-up of abnormal screening results, and refer to specialist for the highest-risk results (LR 4B/X; 4A depending on your local referral practice).	
Follow-up	Manage scheduling follow-up LCS.	
	Identify and communicate insurance coverage of LCS follow-up procedures to patient.	
	Provide repeat patient education and tobacco cessation counseling, when appropriate.	
	Manage overdue screening reminders.	
Quality	Identify how to track completed LCS and follow-up exams (by order and/or exam CPT code).	
Control	Identify how to track when the next annual screening exam is due.	
	Identify how to track smoking cessation counseling orders.	
	Perform quality audits.	
	Assess barriers to further LCS program success in your patient population.	
	Determine evidence-based interventions to improve LCS based on performance metrics.	
	Report data to an ACR Lung Cancer Screening Registry.	

### Document and submit billing information.

It is important that LCS billing codes are documented on the LCS exam order within the EHR. Make sure each team member is aware of the **billing codes** relevant to their scope of work.

LCS Codes			
Follow-up	Codes		
SDM	G0296 with Z87.891 or F17.210		
CT Chest LCS	71271 with Z87.891 or F17.210		
Tobacco cessation counseling	99406 (>3min and <10min) 99407 (>10min)		
Diagnostic CT without contrast (>1 time per year)	71250		

### How much will Medicare pay for LDCT lung cancer screening?

The ACR recommends that the payment rate of CPT® code 71250 (CT, thorax; without contrast material) should serve as the reimbursement floor for LDCT LCS with additional relative value units assigned for the numerous quality criteria required of an effective LCS program and mandated in CMS's final coverage decision.

CY 2025 Medicare Physician Fee Schedule Codes and Payment Levels for LDCT Screening*				
Description	Code	Technical component	Professional component	Global payment
Counseling visit to discuss need for lung cancer screening using LDCT (service is for eligibility determination and SDM)	G0296	N/A	\$26.85	\$26.85
CT, thorax, LDCT for LCS, without contrast material(s)	71271	\$86.37	\$49.17	\$135.53

<sup>\*</sup>These totals have been calculated by multiplying the total relative value units for each code and multiplying them by the CY 2025 Medicare Physician Fee Schedule conversion factor (\$32.3465).

### Resources

### **Screening Program Models**

- Addressing Lung Cancer Screening Disparities: What Does It Mean to Be Centralized? | NIH
- Best Practice Guide for Building Lung Cancer Early Detection Programs | ACS NLCRT
- Lung Cancer Screening Models | GO2 EHD Healthcare Provider Portal
- Lung Cancer Screening: Development and Replication of a Decentralized Program to Increase Access | ONS
- LungPLAN Overview | ACS NLCRT

### **LCS Decision Aids**

- <u>Decision Precision+ | Epic Showroom</u>
- Lung Cancer Screening Patient Decision Guide | ACS
- Should I Screen: Lung Cancer Screening Decision Aid | University of Michigan
- Lung Cancer Screening Eligibility Quiz | American Lung Association
- Lung Cancer Screening Risk Calculator | Lung Decision Precision

### **Creating Stigma-free Lung Cancer Content**

- Lung Cancer Stigma Communications Assessment Tool (LCS-CAT) Auditing Suite | ACS NLCRT
- LCS-CAT Alternatives Suite | ACS NLCRT

### **Campaigns**

• National Lung Cancer Screening Day | ACS NLCRT

### **Tobacco Cessation Counseling Resources for Providers**

- Protocol for Identifying and Treating Patients Who Use Tobacco | HHS
- Tobacco Treatment and Cessation | AAFP
- Tobacco Smoking Cessation in Adults, Including Pregnant Persons: Interventions | USPSTF
- Smoking Cessation Interventions and Lung Cancer Screening | American Lung Association
- US Quitlines | North American Quitline Consortium

### **Tobacco Cessation Resources for Patients**

### **Cessation Programs**

- Empowered to Quit | ACS
- Great American Smokeout | ACS
- Join Freedom From Smoking | American Lung Association
- Quit Smoking, Vaping, and Tobacco With EX | becomeanex.org
- Lung HelpLine | American Lung Association
- Tools and Tips for Smoking Cessation | Smokefree
- quitSTART App for Smoking Cessation | Smokefree
- Helpful Tobacco Cessation Resources | QuitAssist®
- How to Quit Smoking | Quit Smoking | Tips From Former Smokers | CDC

#### **Handouts**

- How to Quit Using Tobacco | ACS
- How to Help Someone Quit Smoking | ACS
- Tobacco: What is it costing you? | ACS
- Smokeout Tools and Resources | ACS
- Tobacco Cessation Program | ACS
- Quitting Starts Here | ACS
- Quitting is Hard. But help is here. | familydoctor.org
- Why Quit Now? GO2

### **Videos**

- Smoking Cessation: Three Steps to Quitting | ACS
- Empowered to Quit Tobacco Cessation Program | ACS

### **Educational Materials About LCS for Patients**

### **Handouts**

- Guidelines on the Early Detection of Cancer | ACS
- Lung Cancer Causes, Risk Factors, and Prevention | ACS
- Finding Lung Cancer Early | American Cancer Society
- Do You Need Lung Cancer Screening? | ACS
- Lung Cancer Fact Sheet | Lung Cancer Research Foundation
- Understanding Lung Cancer Screening Booklet | GO2
- What Is Lung Cancer Screening? Brochure | GO2
- Understanding Lung Nodules | GO2
- Lung Cancer Screening | NCI
- Get Educational Materials | LUNGevity Foundation
- Guidelines for Patients: Lung Cancer Screening I NCCN

### **Videos and Animations**

- 3D Interactive Animation of Lung Cancer Screening Procedure | ACS
- ScreenYourLungs.org | Lung Cancer Screening
- Screening Saves Lives! | GO2
- Your Lung Cancer Screening Journey I Northwestern Medicine
- Do I qualify for Lung Cancer screening? | RSNA

### **Resources to Improve Health Equity in LCS**

### **Evidence Summaries**

- Work Must Persist to Further Lung Cancer Screening and Equity | ACS
- Health equity | LUNGevity Foundation
- State of Lung Cancer | Racial and Ethnic Disparities | American Lung Association

### **Videos and Podcasts**

- Achieving Health Equity in Lung Cancer Surgery | Cancer Network
- Reducing disparities in lung cancer screening | AACR
- Health Equity Considerations in LCS | ACS NLCRT

### Literature Reiews

- Disparities in Lung Cancer Screening: A Review
- The impact of income and education on lung cancer screening utilization, eligibility, and outcomes: a narrative review of socioeconomic disparities in lung cancer screening
- Racial and socioeconomic disparities in lung cancer screening in the United States: A systematic review

### **Evidence-based Interventions for LCS Improvement**

### **Guidebooks and Support Programs**

- Best Practice Guide for Building Lung Cancer Early Detection Programs | ACS NLCRT
- Lung Cancer Screening: Learning from Implementation | The Lung Cancer Policy Network
- LungPLAN Overview | ACS NLCRT
- Lung Cancer Screening Improvement Collaborative | American College of Radiology

### **Evidence Summaries**

- Lung Cancer Screening (PDQ®) | NCI
- Reduce the lung cancer death rate | health.gov
- <u>Identifying Best Practices and Gaps in Early-Stage Lung Cancer: From Screening and Early Detection Through</u>
  Resectable Disease Treatment | Journal of Oncology Navigation & Survivorship
- Evidence Summary: Lung Cancer: Screening | United States Preventive Services Taskforce
- Smoking Cessation Interventions and Lung Cancer Screening | American Lung Association

### **Literature Reviews**

- Interventions Designed to Increase the Uptake of Lung Cancer Screening: An Equity-Oriented Scoping Review
   PMC (nih.gov)
- Review of Interventions That Improve Uptake of Lung Cancer Screening | CHEST

### **Digital Interventions**

- Accelerating Uptake of Lung Cancer Screening Early Detection By Harnessing IT and Electronic Health Records
   Executive Summary | ACS NLCRT
- Electronic Health Record Prompt to Improve Lung Cancer Screening in Primary Care
- Digital Interventions to Support Lung Cancer Screening: A Systematic Review
- Improving Lung Cancer Screening Rates Through an Evidence-Based Electronic Health Record Smoking History
- <u>Lung Cancer Screening Before and After a Multifaceted Electronic Health Record Intervention: A Nonrandomized</u>
   Controlled Trial

### **Additional Studies**

- A multi-level system quality improvement project to reduce disparities in lung cancer screening: The Sylvester Lung Screening Project
- Patterns and Factors Associated With Adherence to Lung Cancer Screening in Diverse Practice Settings

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