



— NATIONAL —
MINORITY QUALITY
— FORUM —



Center for
Sustainable Health Care
Quality and Equity



DRIVING Equity in Lung Cancer Screening

Help your patients prolong their lives through early detection and treatment

Note to Health Equity Champion

- These slides can help you become familiar with lung cancer screening and strategies for increasing referral for your patients of color
- These slides also can serve as a presentation for your clinic and colleagues
- In addition, there are many links within this presentation to patient education resources and professional publications
- Thanks to Amgen for supporting this updated resource



Lung Cancer Is the Leading Cause of Cancer Deaths in the U.S.

- Most common cancer in the world, causing 1 in 5 cancer deaths
- More common and more deadly in men versus women
- The disease remains the leading cause of cancer deaths; however, over the past five years, the survival rate has increased by 26% nationally to 29.7%

229,410

Estimated New Cases in 2026

10.8% of all new cancer cases

124,990

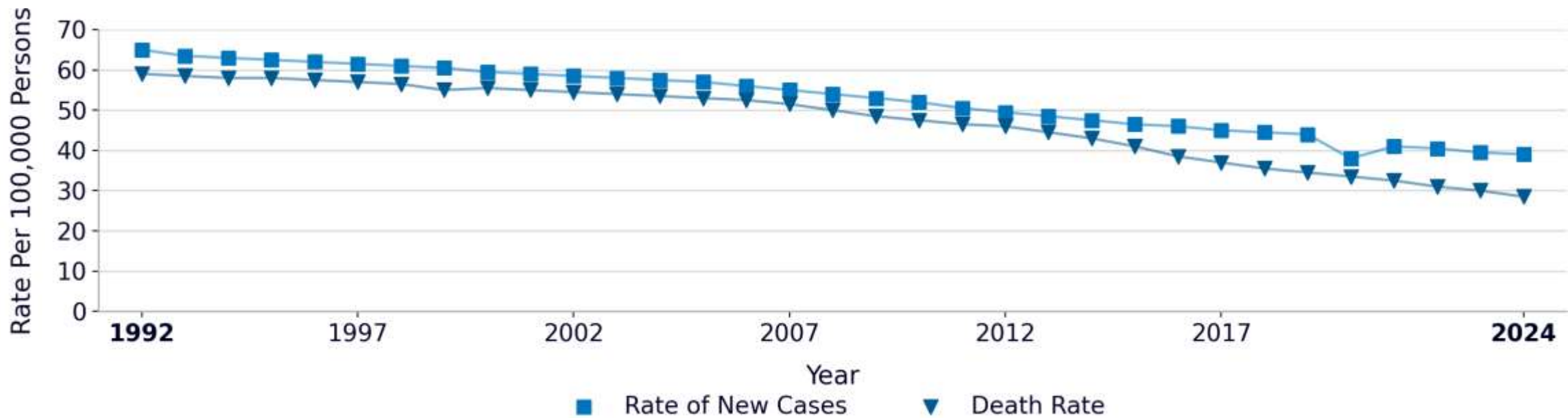
Estimated Deaths in 2026

20.0% of all cancer deaths

29.5%

5-Year Relative Survival

2016–2022



Source: Lung and Bronchus Cancer — Cancer Stat Facts, seer.cancer.gov

Understanding Lung Cancer Types and Stages

- There are many types of lung cancer
- Non-small cell lung cancer (NSCLC) is the most common type. About 85 out of every 100 cases of lung cancer are NSCLC
- There are several stages of NSCLC which guide treatment and provide information about prognosis



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Carcinoma/tumor in-situ — only in the top lining of the lung/bronchus; has not spread.

I

Divided into 1A and 1B by tumor size. Cancer has not spread to lymph nodes or elsewhere.

II

Divided into IIA/IIB. Tumor may be larger and/or have begun spreading to nearby lymph nodes, not to distant organs.

III

Divided into IIIA, IIIB, IIIC. Most commonly spread to lymph nodes in the mediastinum (between the lungs).

IV

Most advanced form of NSCLC — cancer has metastasized to the lining of the lung or other areas of the body.

Source: Lung Cancer Staging | American Lung Association

Risk Factors for Lung Cancer



Tobacco Smoke

80–90% of newly diagnosed smoke or have smoked



Age 65+



Radon



Family History



Asbestos & Other Carcinogens



Radiation Therapy



Air Pollution



Combined Risk

Risk climbs further when factors combine — e.g. tobacco use alongside asbestos or radon exposure

Source: Lung Cancer Prevention & Risk Factors | Memorial Sloan Kettering Cancer Center

Signs and Symptoms of Lung Cancer



Bronchitis and pneumonia that don't go away or keep coming back



Chest pain that is worse with deep breathing, coughing, or laughing



New onset of wheezing



Feeling tired or weak



Hoarseness



Shortness of breath



A cough that does not go away or gets worse



Weight loss and loss of appetite



Coughing up blood or rust-colored sputum (spit or phlegm)

Source: Lung Cancer | Pulmonary Associates (pasadocs.com)

Lung Cancer Treatment Overview

Lung cancer is treated in several ways, depending on the type of lung cancer and how far it has spread.

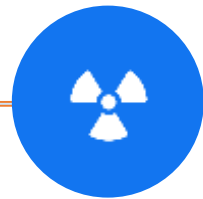
LOCAL TREATMENTS

Target the tumor directly



Surgery

An operation where doctors cut out cancer tissue

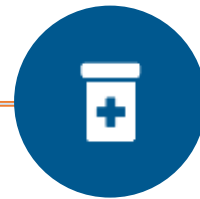


Radiation Therapy

High-energy rays (similar to X-rays) used to kill the cancer

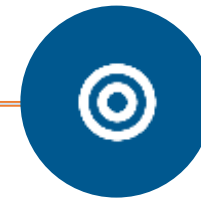
SYSTEMIC TREATMENTS

Treat cancer throughout the body



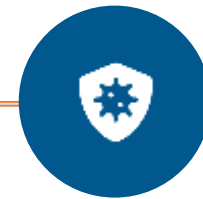
Chemotherapy

Special medicines to shrink or kill the cancer, given as pills or through the vein



Targeted Therapy

Drugs that block the growth and spread of specific cancer cells



Immunotherapy

Medicine that uses the body's own immune system to treat cancer

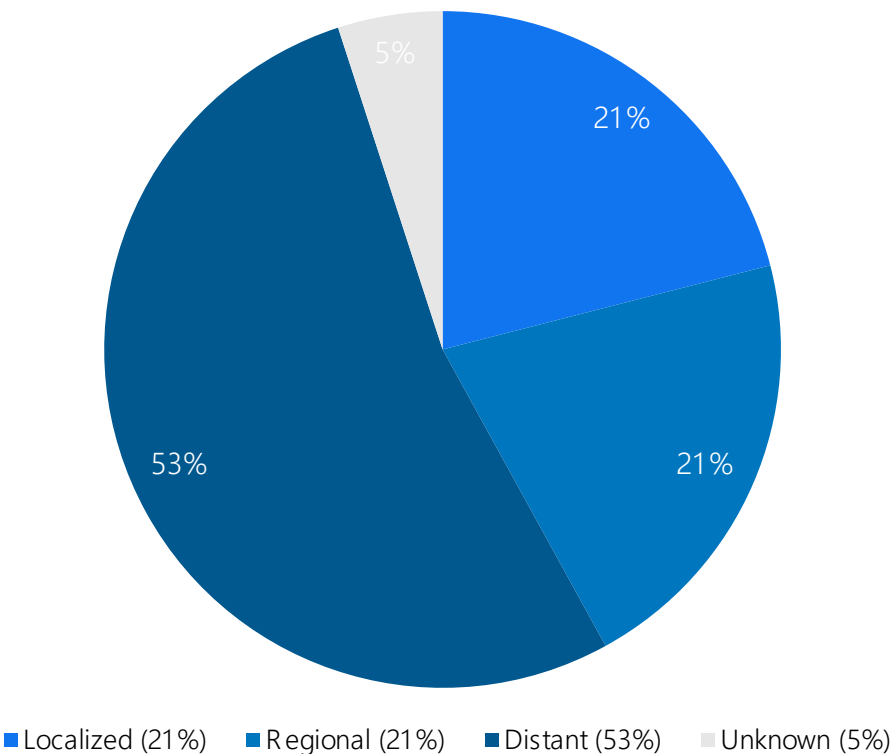
Doctors from different specialties often work together: pulmonologists, surgeons, thoracic surgeons, medical oncologists, and radiation oncologists.

Sources: How Is Lung Cancer Diagnosed and Treated? | CDC • What are the Types of Lung Cancer Treatment? | American Lung Association

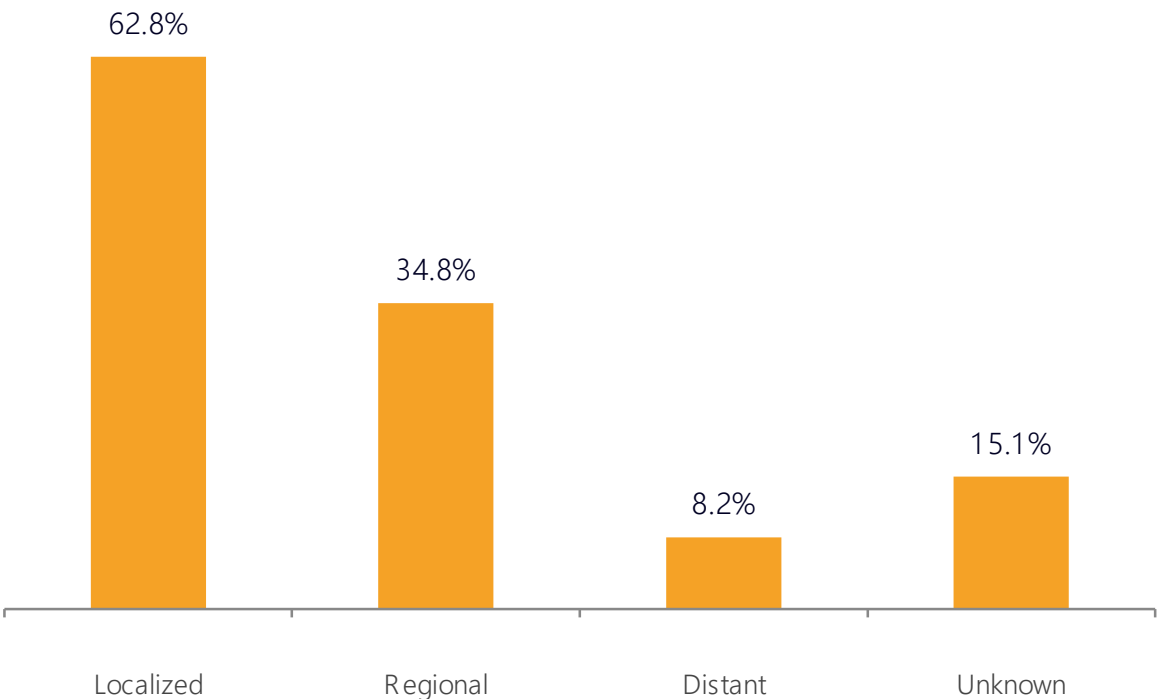
Most Lung Cancer Is Found After It Has Spread

Early Diagnosis Leads to a Much Greater Survival Rate

Percent of Cases by Stage at Diagnosis



5-Year Relative Survival by Stage



Source: Lung and Bronchus Cancer — Cancer Stat Facts, seer.cancer.gov

That's Why Lung Cancer Screening Is So Important

65%

improved likelihood of surviving 5 years or more if screened

Why Should You Get a Lung Cancer Screening Test?

Not Enough People Are Getting Screened

18%

of U.S. adults for whom screening is recommended have actually been screened

Sources: American Lung Association, Saved by the Scan; CDC, Lung Cancer Screening

What Is Screening?

- A low-dose CT scan is a special kind of X-ray that takes multiple pictures as you lie on a table that slides in and out of the machine. A computer then combines these images into a detailed picture of your lungs.
- Research has shown that early detection of lung cancer found with the low-dose CT can reduce mortality for those at high risk.
- When lung cancer is found early, treatment is often just surgery or radiation therapy alone — this can cure lung cancer for up to 9 out of every 10 people.

[About The New Low-Dose CT Lung Cancer Screening Test | American Lung Association](https://www.mskcc.org/cancer-conditions/lung-cancer#screening)

<https://www.mskcc.org/cancer-conditions/lung-cancer#screening>

Sources: About The New Low-Dose CT Lung Cancer Screening Test | American Lung Association; MSKCC

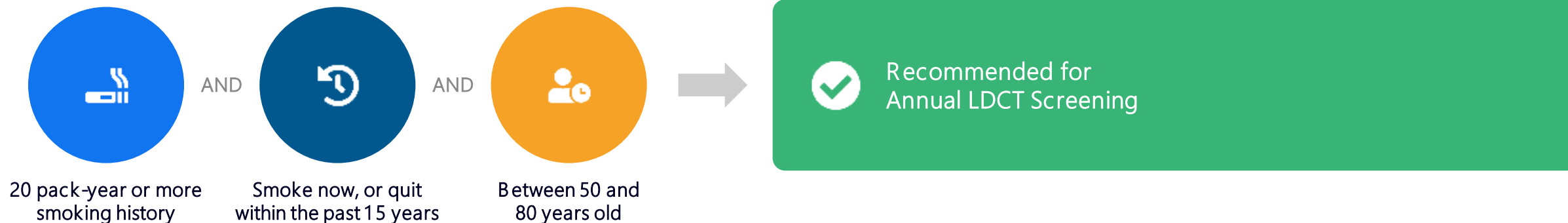


9 out of 10

people can be cured when lung cancer is found early

Who Should Be Screened?

The U.S. Preventive Services Task Force recommends yearly lung cancer screening with Low Dose CT (LDCT) for people who meet ***all three*** of the following:



Know the risks: screening can infrequently lead to false-positive results, unnecessary follow-up tests, diagnosis of cases that may never have caused a problem, and radiation exposure — that's why talking to your doctor is important.



Coverage: most insurance plans and Medicare help pay for recommended lung cancer screening. If a screening finds something abnormal, follow-up tests may have a cost, such as a co-pay or deductible.

Sources: Lung Cancer Screening - NCI; Screening for Lung Cancer | CDC

Lung Cancer Screening Clinician Summary: USPSTF



Ages 50–80
Eligible age range



20 pack-years
Minimum smoking history



Yearly — Grade B
Screening frequency



What does the USPSTF recommend?

Adults aged **50–80** with a **20 pack-year** smoking history who currently smoke or quit within the past 15 years: screen yearly with low-dose CT; stop once a person has not smoked for 15 years or has a health problem limiting life expectancy or ability to have lung surgery. **Grade: B**



To whom does this apply?

Adults aged 50–80 who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years.



What's new?

USPSTF expanded the recommended age range to 50–80 (previously 55–80) and reduced the pack-year history to 20 (previously 30).



How to implement?

1) Assess risk based on age and pack-year smoking history. 2) Screen — engage in shared decision-making, and refer to a center experienced in lung cancer screening. If the person currently smokes, offer smoking-cessation support.



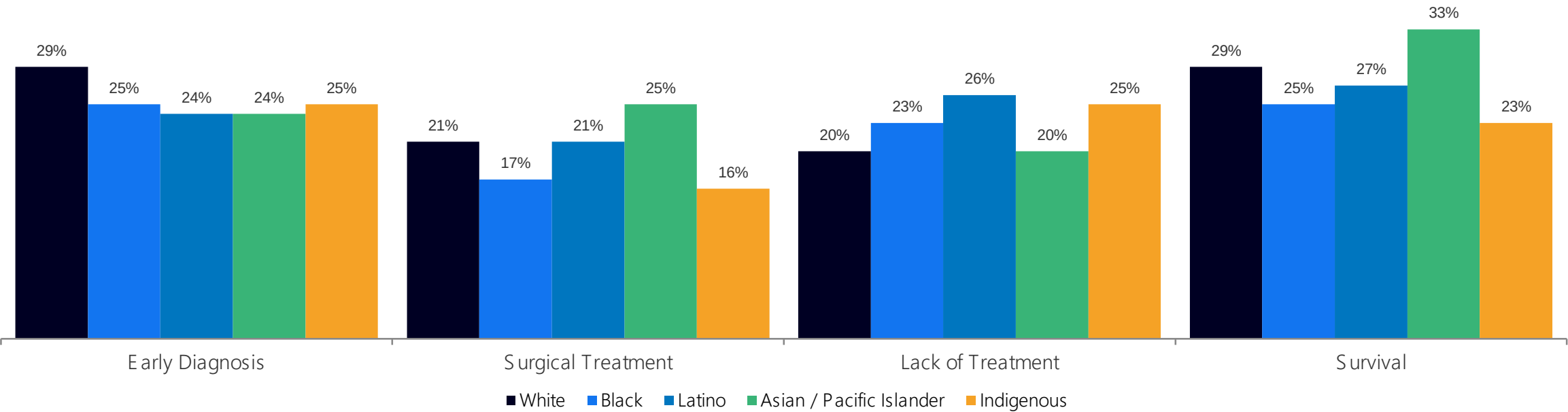
How often?

Screen every year with low-dose CT. Stop once a person has not smoked for 15 years or has a health problem limiting life expectancy or ability to have lung surgery.

Source: Recommendation: Lung Cancer: Screening | United States Preventive Services Taskforce

Racial and Ethnic Disparities in Lung Cancer Treatment and Outcomes

People of color diagnosed with lung cancer face worse outcomes than white individuals — they are less likely to be diagnosed early, less likely to receive surgical treatment, and more likely to receive no treatment at all. Close to two-thirds of the 25 million uninsured individuals in America are people of color.



Source: State of Lung Cancer | Racial and Ethnic Disparities | American Lung Association

Barriers to Lung Cancer Screening for People of Color

Systemic

- Geographic location of screening centers vs. need
- Variable Medicaid coverage; uninsured populations
- Screening eligibility criteria

Provider

- Coverage denials
- Time it takes for shared decision-making
- Knowledge gaps

Patient

- Knowledge; fears/hopelessness; cost
- Transportation; care coordination
- Receiving a recommendation



Overcoming these barriers starts with trust: shared decision-making conversations between patients and providers — especially with clinicians who reflect the communities they serve — help close gaps in referral, follow-through, and follow-up care.

Sources: Choi et al., JAMA Oncol. 2023; Eberth et al., Prev Med Rep. 2018; Navuluri et al., JAMA Netw Open. 2023

Strategies for Improving LDCT Screening Rates in Underserved Populations

Patient

- Educating patients on smoking cessation and screening eligibility
- Educating patients on screening risks vs. benefits
- Shared decision-making tailored to each patient

Provider

- Educating providers on screening criteria and level of evidence
- Educating providers on screening risks vs. benefits
- Encouraging actionable follow-up plans for positive tests

System

- Expanding new LDCT screening facilities in rural/underserved areas
- Developing and implementing mobile screening units
- Providing free screening services for the most vulnerable groups



Meeting people where they are: mobile screening units and community-based outreach — often through trusted local messengers — help close the access gap that geography and cost create for rural and underserved communities.

Sources: Toubat & David, Curr Chall Thorac Surg. 2023; Williams et al., Cancer Nurs. 2021

New Approaches to Early Detection of Lung Cancer

Emerging tools being studied alongside low-dose CT screening



1 Liquid biopsy (ctDNA, methylation, microRNAs)



2 Multi-omics biomarker testing



3 AI-enhanced low-dose CT screening



4 Breath-based biomarker testing



5 Protein-based risk models



6 Personalized risk-based screening



Future direction: combine LDCT, blood biomarkers, and AI to improve early detection and reduce false positives.

Source: Low-Dose Computed Tomography and Beyond: Advances in the Early Detection of Lung Cancer | LUNgevity Foundation



Leading Resources for Your Practice and Your Patients

American Lung Association: Screening Resources



Lung Cancer Screening Resources

Patient education resources available in multiple languages, to help you reach a diverse patient population.



Scan to visit

lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/screening-resources



Saved by the Scan

A patient-facing campaign and eligibility quiz that helps people who smoke (or used to) find out if a low-dose CT screening could save their life.



Scan to visit

lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/saved-by-the-scan

Additional Screening Resources for Your Practice



ScreenYourLungs.org

Educational video, a screening and reimbursement quiz, and educational resources for patients and the public — available in English, Spanish, and Chinese.



Scan to visit

www.screenyourlungs.org



LUNgevity Foundation

A library of medical and emotional support resources for people affected by lung cancer, including a peer-to-peer support line and caregiver resources.



Scan to visit

lungevity.org



National Lung Cancer Roundtable

A national coalition's featured resources, including the Lung Cancer Screening — Community Access Tool (LCS-CAT) auditing and alternatives tools.



Scan to visit

nlcrt.org



Let's DRIVE!

NMQF's Center for Sustainable Health Care Quality and Equity (SHC) has developed the **DRIVE program — Demonstrating Real Improvement in Value and Equity**. This program helps clinical teams enhance healthcare quality and equity using a rapid cycle improvement model that has been implemented in hundreds of practices and health systems.

For further information about DRIVE, contact us at shc@nmqf.org



Putting DRIVE Into Action

SHC's DRIVE program helps primary care teams promote high-quality, equitable care through a rapid cycle improvement model — a champion-led, patient-centered, team-based approach.

This module outlines six practical steps for increasing lung cancer screening for your patients of color.



STEP 1

ID Your Team: The Champions

- A health system leader often champions a DRIVE program, identifying practice sites to participate and connecting educational, IT, nursing, equity, specialty care, research, and communication resources
- For lung cancer screening, inclusion of pulmonology, radiology, surgery, and oncology can be important
- At the practice level — whether a clinic, FQHC, or residency program — champions are recruited to lead program implementation
- Practice-level champions typically include a physician or advanced practice clinician, along with a nurse, practice manager, patient navigator, pharmacist, and/or resident
- Practice champions develop the QI strategy and lead its implementation



STEP 2

Complete Your Practice Assessment

- A brief online survey helps you assess: your practice and patients; your current approaches to health equity and lung cancer screening; barriers you and your patients face; and what you'd like to work on in the QI activity
- One or more of the practice champions should complete one survey for a given clinic site
- This information will guide your project design
- Survey link: surveymonkey.com/r/LungCancerScreen



STEP 3

Learn More About Your Community

- Community health assessments help you tailor your DRIVE program to fit the needs of the community your clinic serves
- A community health assessment can provide information about demographics, health status, and social/economic factors impacting health, plus available health services and community resources
- Community data and reports are often available in your region — from hospitals, FQHCs, local foundations, health departments, and national surveys
- Research opportunities can be identified from national databases, patient advocacy organizations, and local clinical research leaders



Community Assessment Resources



State of Lung Cancer | American Lung Association

lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/screening-resources/state-lung-cancer-screening



State Cancer Profiles (NCI)

gis.cdc.gov/Cancer/USCS



Cancer Statistics Center

cancerstatisticscenter.cancer.org/types/lung-and-bronchus

STEP 4

Design Your Activity

- Plan-Do-Study-Act (PDSA) is a structured, straightforward approach to implementing quality improvement projects in practices
- This approach works for many types of changes — from improving a patient care process to executing a new workflow — and in practices of all sizes
- Start small and be VERY specific: timelines, level of improvement, and role of individuals
- Share your plan with overall staff and system leadership for input, resource suggestions, and buy-in
- Use this template to develop your plan: surveymonkey.com/r/PDSA



Ideas for QI Activities

1 Identify patients who fit criteria for lung cancer screening

3 Educate your clinical team about lung cancer screening

5 Develop a workflow for shared decision-making with at-risk patients

7 Identify patients who smoke and assess readiness to quit

9 Create a follow-up workflow for referred patients

2 Identify patients of color who fit criteria for lung cancer screening

4 Develop a strategy for informing eligible patients

6 Educate patients through posters and hand-outs

8 Create a workflow for connecting patients to the screening center

10 Work with community leaders to educate about screening

STEP 5

Put the Plan into Action

- Train staff participating in the activity — what is going to be done, and why
- Present in regular staff meetings, or host a breakfast/lunch presentation
- Track QI cycle efforts and results using a run chart
- Consider the impact of the QI cycle and next steps: Expand — it worked great. Adjust — impact was uneven. Try a new approach — it just didn't work



STEP 6

Communicate, Celebrate, Continue



Share the results of your work with the whole practice team



Acknowledge and celebrate those who contributed



Let leadership know about your success



Inform your patients and the whole community about your commitment to quality care



Continue cycles of health care quality and equity



Don't skip this step: celebrating wins, big and small, keeps your team engaged for the next improvement cycle. Share what changed, who it helped, and what's next — with your staff, your leadership, and your community.



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Have a Question?

Contact: shc@nmqf.org