Lung Cancer Screening Learning Session

Presented for McLaren Physician Partners August 30, 2023



Disclosure Statements

Speakers, planners and coordinators:

- <u>Julee Campbell, MPH, CPHQ</u>, has no relevant financial relationship(s) with ineligible companies to disclose.
- <u>Tesia Looper, MSA</u>, has no relevant financial relationship(s) with ineligible companies to disclose.
- James Mitchiner, MD, MPH, has no relevant financial relationship(s) with ineligible companies to disclose.
- Elise Wilson, MPH, has no relevant financial relationship(s) with ineligible companies to disclose.



Enter in Chat

- Your name (first and last)
- Your credentials
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Who is iMPROve Health?

QUALITY IMPROVEMENT



Evidence based, data-driven quality improvement insights

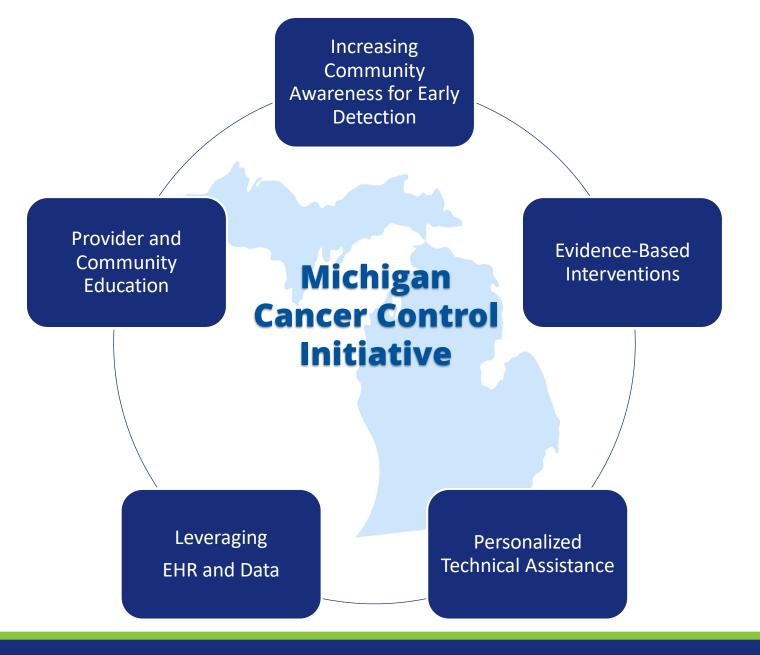
REVIEW SERVICES



Thoughtful, impartial utilization review and dispute resolution services



Michigan Cancer Control Initiative Objectives





Cancer Control Project Partners

This activity is supported in part by the Michigan Department of Health and Human Services.



Session Objectives

- Explain local prevalence of commercial tobacco use, lung cancer incidence and mortality, and the importance of early detection.
- Describe lung cancer screening recommendations, eligibility criteria, benefits, risks and costs.
- Understand how to identify eligible patients and conduct counseling and shared decision-making visits.
- Identify quality measures that will be impacted by referral processes for lung cancer screening.
- Find strategies and resources for promoting lung cancer screening and commercial tobacco cessation.



We Must Talk to Patients about Lung Cancer Screening



of respondents were not familiar with the availability of lung cancer screening for early detection of the disease.

73%

of adults have not spoken with their doctor about their risk for lung cancer and only 40% are concerned they might get the disease.





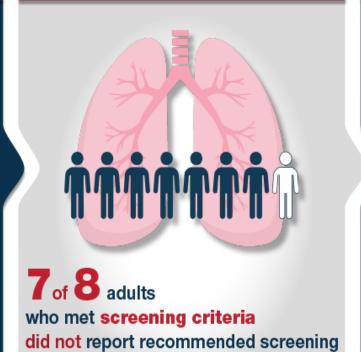
LUNG CANCER SCREENING SAVES LIVES

Lung Cancer is #1 Cause of Cancer Deaths



Screening with low dose CT* can detect lung cancer early and save lives

More Screening is Needed



Healthcare Providers:
Discuss Screening



With Adults

- **Age 55–80**
- Heavy smoking history**
- Smoke now or quit within the past 15 years

*Low-dose computed tomography (CT) is the only test recommended by the US Preventive Services Task Force.

**Heavy smoking is a smoking history of 30 pack-years or more. A pack-year is smoking an average of one pack of cigarettes per day for one year. Data from BRFSS, 10 states in 2017, as reported in Richards et al, MMWR 2020 Read the full report: bit.ly/CDCVA34

WWW.CDC.GOV





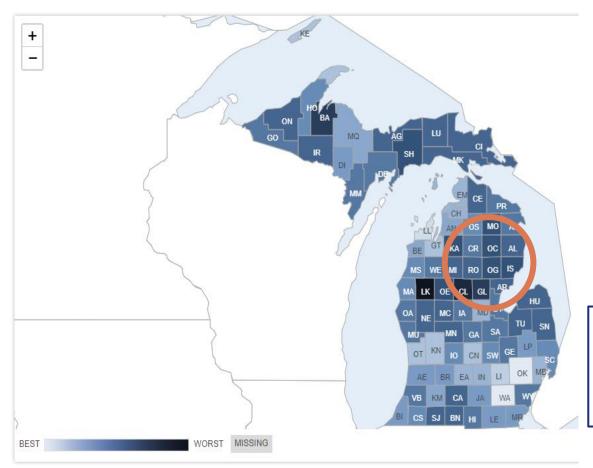
CS 14820-B



Tobacco Use & Lung Cancer in Michigan



Percent of Adults Who Are Current Smokers



Smoking is the leading cause of lung cancer.

Highest burden areas are shown in dark blue

Range in Michigan (min.-max.): 14-27%

Michigan overall: 19%

Adult Cigarette Use

2021: 17% 2011: 23.3%

Adult Smokeless Tobacco Use

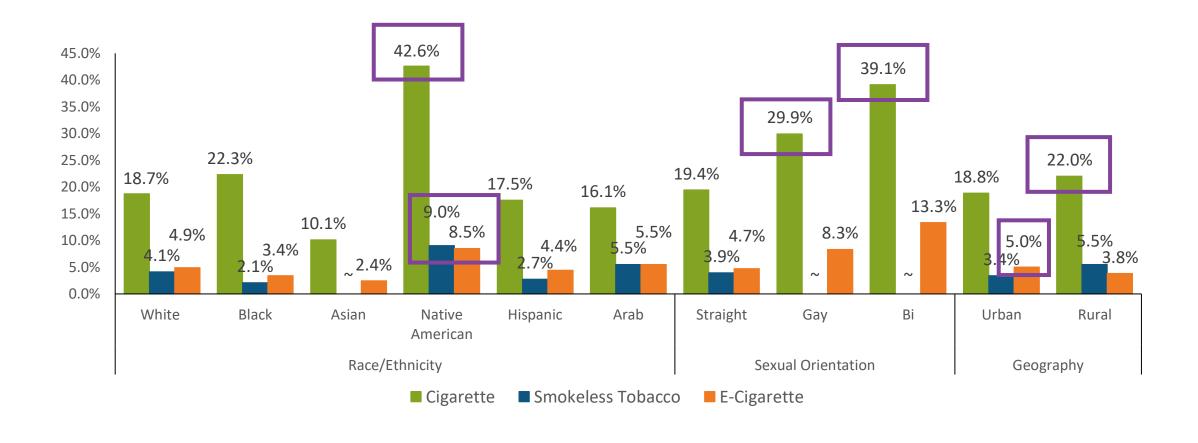
2021: 2.6% 2011: 4.4%

Adult E-Cigarette Use

2021: 7.6% 2016: 4.9%

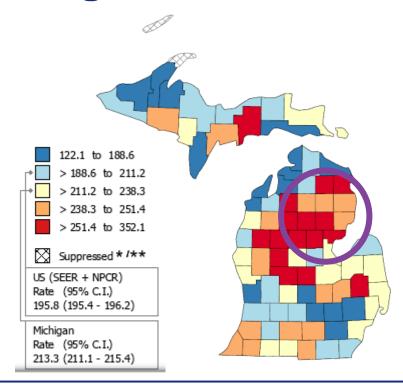


Disparities in Tobacco Use in Michigan





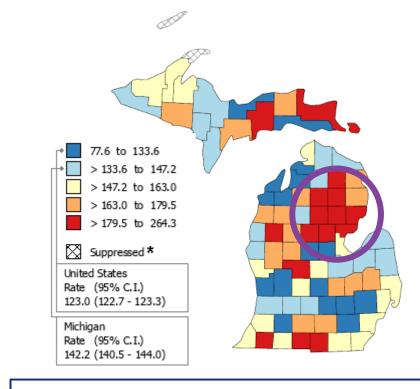
Lung Cancer Incidence and Mortality



State of Michigan Incidence Rate, Ages 50+:

213.3 per 100,000

(2015-2019 National Cancer Institute State Cancer Profiles)



State of Michigan Mortality Rate, Ages 50+: 142.2 per 100,000

(2016-2020 National Cancer Institute State Cancer Profiles)

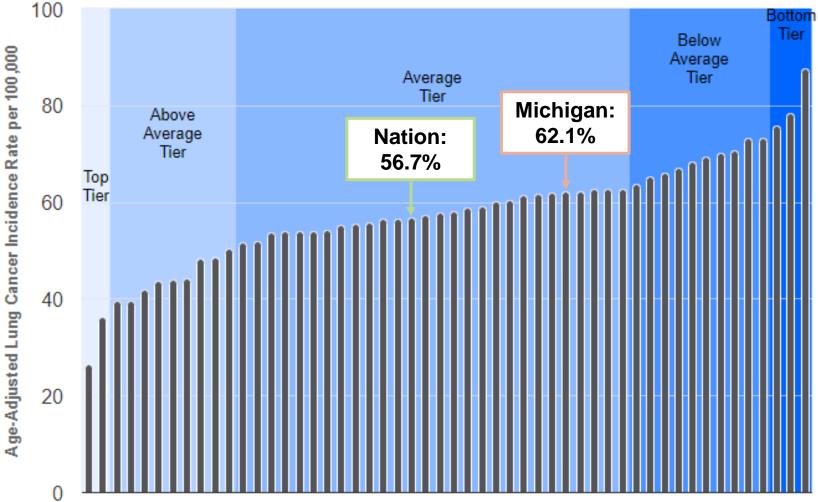


Rankings and Trends in New Cases

- MI's rate of new lung cancer cases is significantly higher than the national rate
- MI ranks 35th among all states (average tier)
- Our rate of new cases has improved by 9% over the last 5 years

State Rankings by Rate of New Cases





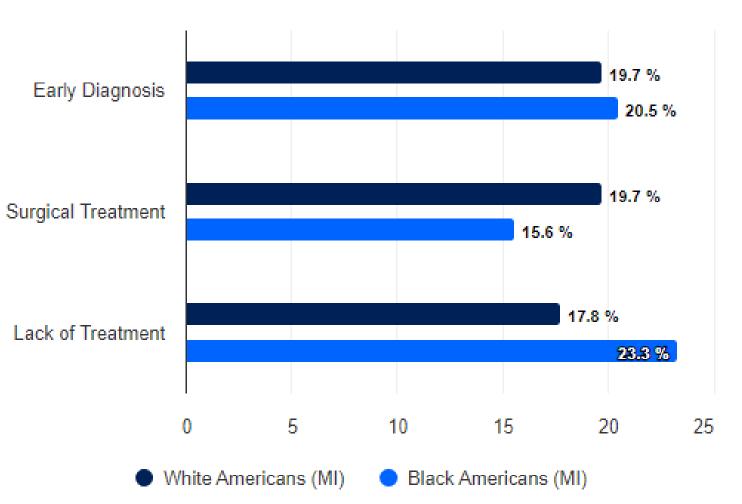


Lung Cancer Disparities among Black Americans

Health Disparities

New lung cancer cases and lack of treatment among Black Americans in Michigan were **significantly higher** compared to white Americans in Michigan (69 vs. 64 per 100,000, and 23% vs. 18%, respectively).

Lung cancer cases diagnosed at an early stage and the percentage of those with lung cancer who underwent surgery among Black Americans in Michigan were **significantly lower** when compared to white Americans in Michigan (19% vs 23%, and 16% vs. 20%, respectively).



Highcharts.com



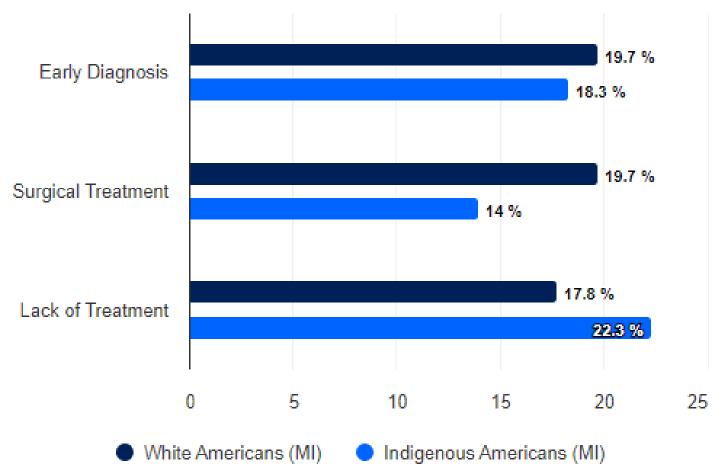
Health Disparities (cont.)

Lung Cancer Disparities among Indigenous Americans

≡

The rate of new lung cancer cases among Indigenous Peoples (American Indians/Alaska Natives) in Michigan was **significantly higher** compared to white Americans in Michigan (110 vs. 64 per 100,000).

Lung cancer cases diagnosed at an early stage and the percentage of those with lung cancer who underwent surgery among Indigenous Peoples (American Indians/Alaska Natives) in Michigan were significantly lower when compared to white Americans in Michigan (16% vs 23%, and 13% vs. 20%, respectively).



Highcharts.com



Lung Cancer Staging and Survival

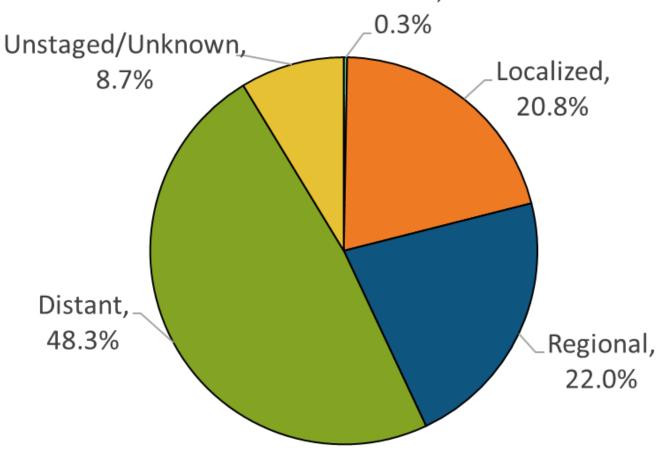
Lung Cancer Staging, 2014-2016

In Situ,

Early detection is key

Early detection increases rate of survival.

Currently, most lung cancers are detected at distant stages.

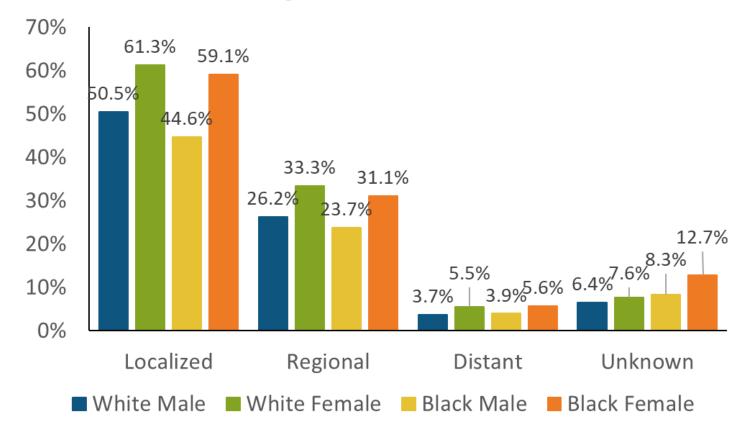




Lung Cancer Staging and Survival (cont.)

Survival rates increase when diagnosed at regional stages and are highest when diagnosed in localized stages

U.S. Five-Year Relative Survival Percentage by Stage at Diagnosis, SEER 2008-2014





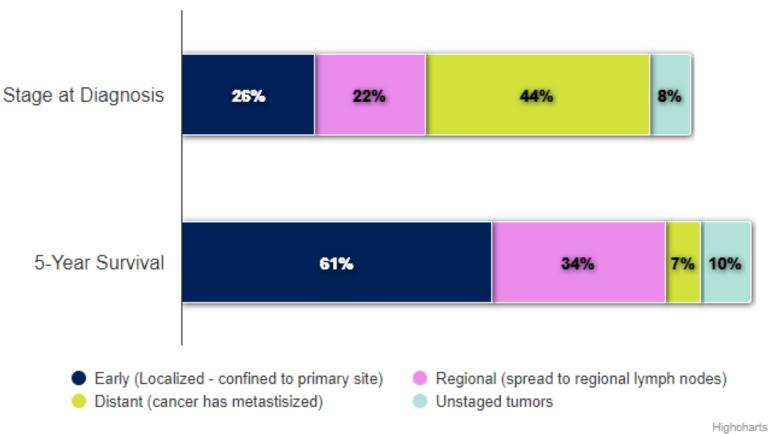
Lung Cancer Staging and Survival (cont.)

Stage at Diagnosis and 5-Year Survival Rate



Compare to Michigan data

- 23% of cases are caught at an early stage
- MI ranks 39th of the 49 states with data on diagnosis at an early stage (below average tier)
- In the past 5 years, the early diagnosis rate in MI improved by 41%



Highcharts.com



Early Detection Contributes to Increased Survival

- A health care system established a pulmonary nodule clinic (PNC) to review CT scans
- The PNC helped diagnose lung cancer at an earlier stage compared to patients not reviewed by lung nodule clinic and to national data
 - Lung nodule clinic: Diagnosed at stage 1: 54.3%
 - Non-lung nodule clinic: Diagnosed at stage 1: 28.4%
- Conclusions
 - Lung cancer survival is directly related to the stage at diagnosis
 - Earlier identification of malignant nodules → earlier diagnosis → increased survival



Early Detection Contributes to Increased Survival

(cont.)

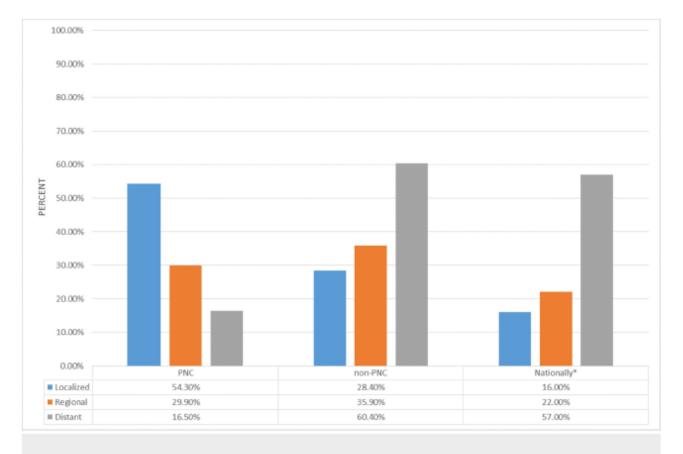
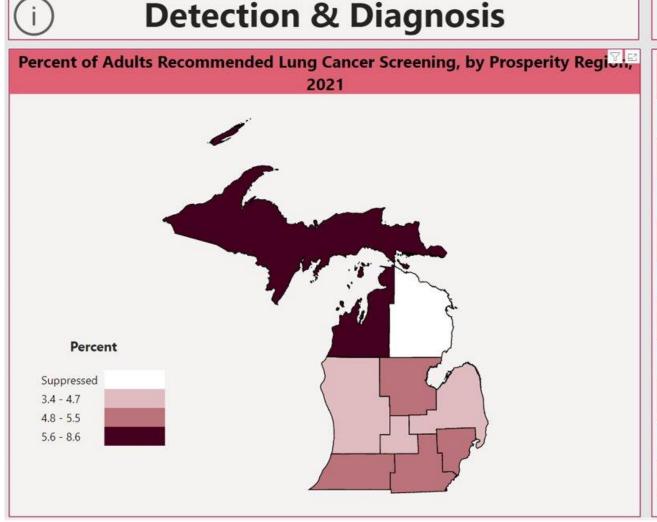


FIGURE 2: Stage at diagnosis for pulmonary nodule clinic (PNC) patients, non-PNC patients, and nationally



Populations in Need of Lung Cancer Screening

Identifying patients who are eligible is key in timely referral and screening



Data Source:Michigan Behavioral Risk Factor Survey

Prosperity Region	Percent		
Detroit Metro	5.3%		
East Central	5.5%		
East Michigan	4.7%		
Northeast			
Northwest	8.6%		
South Central	3.4%		
Southeast Michigan	5.3%		
Southwest	5.2%		
Upper Peninsula	8.6%		
West Michigan	4.7%		

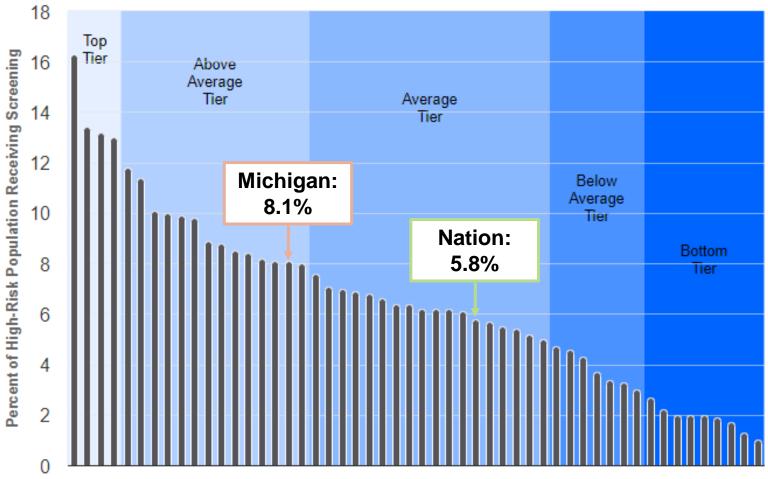


State Ranking by High-risk Screening Rate

- 8% of those at high risk were screened (significantly higher than national rate of 6%)
- MI ranks 11th among all states (above average tier)
- Early diagnosis rate in MI falls into the below average tier

We still have work to do to make sure that more of those at high risk for lung cancer are being screened to detect lung cancer earlier.

State Ranking by High-Risk Screening Rate







Low-dose Computed Tomography (LDCT) Screening for Lung Cancer

Screening test effectiveness, reimbursement and coverage

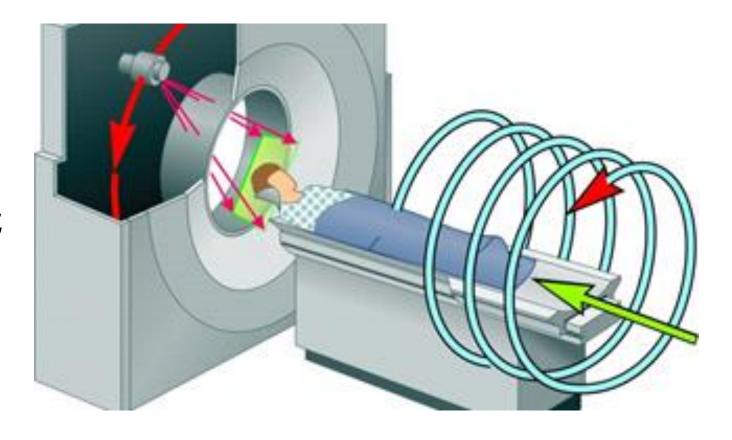


LDCT Lung Cancer Screening

A low-dose helical computed tomography (CT) lung cancer screening is a non-contrast CT scan exam performed on patients who are at risk of developing lung cancer.

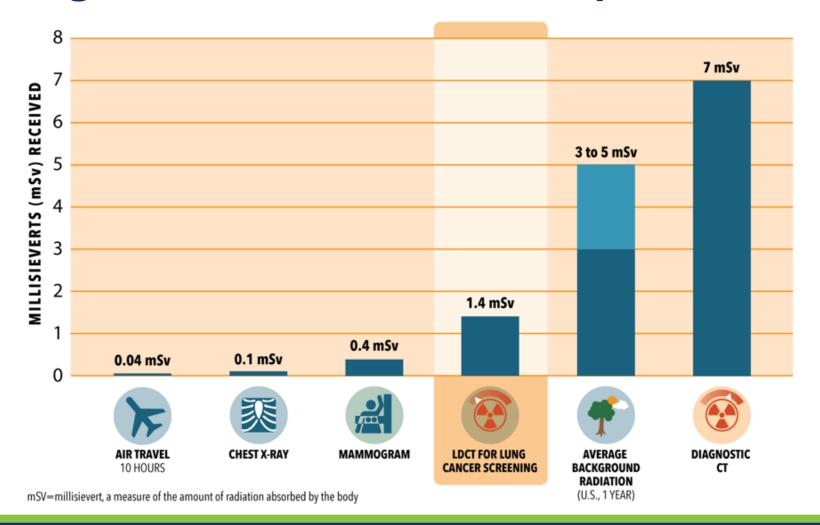
AKA: low-dose CT, helical CT, spiral CT, LDCT

LDCT uses X-rays to get multiple-image scan of the entire chest (7-15 seconds), while standard X-rays produce a single image of the whole chest where anatomic structures overlie one another.





Comparing Sources of Radiation Exposure





LDCT vs. Chest X-ray for Lung Cancer Screening

National Lung Screening Trial (NLST)

This study compared two ways of detecting lung cancer (LDCT vs. standard chest X-ray)

- 53,454 former or current heavy smokers (30 pack-years), ages 55-74
- Participants were randomly assigned to three annual screenings with either LDCT or standard chest X-ray

Results

- Participants who received LDCT scans had a 15-20% lower risk of dying from lung cancer than participants who received standard chest X-rays
- Adenocarcinomas and squamous cell carcinomas detected more frequently at the earliest stage by LDCT compared to chest X-ray



NELSON Trial

Nederlands-Leuvens Longkanker Screenings Onderzoek Trial

This study compared lung cancer screening with LDCT vs. no screening

- 15,792 participants ages 50-74, with a smoking history of:
 - More than 15 cigarettes per day for > 25 years, or
 - More than 10 cigarettes per day for > 30 years
- Participants in the screening group underwent initial screening and three subsequent screens at year one, year three, and year 5.5

Results

- 24% reduction in lung cancer mortality in the screening group compared to the no screening group
- At 10 years of follow-up:
 - Screening group: 2.50 deaths/1000 person-years
 - Control group (no screening): 3.30 deaths/1000 person-years



U.S. Preventive Services Task Force Recommendation

Final Recommendation Statement updated March 9, 2021

Final Recommendation Statement

Lung Cancer: Screening

March 09, 2021

Recommendations made by the USPSTF are independent of the U.S. government. They should not be construed as an official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.







Recommendation Summary

Population	Recommendation	Grade
Adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years	The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.	В



U.S. Preventive Services Task Force Recommendation

Final Recommendation Statement updated March 9, 2021

Recommendation finalized December 31, 2013	Recommendation finalized March 9, 2021
Adults ages 55-80 years	Adults ages 50-80 years
30 pack-year smoking history	20 pack-year smoking history

Currently smoke or have quit within the past 15 years

Screening should be discontinued when a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery



LDCT Lung Cancer Screening Cost

- Without insurance coverage, the out-of-pocket cost of an LDCT scan can range from \$100-\$400
- Contact local screening programs for specific pricing and details



Known Screening Coverage Details by Health Plan*

*Note: coverage dependent on patients meeting screening eligibility criteria and proper screening referral process

	Employer- Sponsored Plan	Medicare	State Health Insurance Marketplace Plan	Individual Plan	Michigan Medicaid (FFS)
Differences from USPSTF eligibility criteria	-	Ages 50-77	-	Contact plan for eligibility criteria	-
Expected cost sharing?	No* *May be co-pay for "out of network" facilities	No*	No*	No*	Covered without cost sharing under Medicaid expansion
Additional costs?	No** **May be facility fees, check that facility is "in network"	No**	No**	No**	No**
Notes:	If plan is "grandfathered" under ACA, not required to provide LCS coverage without cost sharing	Medicare Advantage plans may cover screening > age 78		Some plans may not cover LCS, contact the plan for coverage details	No prior authorization required. Coverage may vary between FFS & managed care plans





Identifying Eligible Patients

U.S. Preventive Services Task Force criteria, EHR use and documentation



Eligibility Criteria for Lung Cancer Screening with LDCT

To qualify for LDCT lung screening, patients must meet the following criteria

- 50-80 years of age (Medicare coverage includes 50-77)
- Be asymptomatic (no signs or symptoms of lung cancer)
- Have a tobacco smoking history of at least 20 pack-years
 - 1 pack-year = 1 pack per day for 1 year
 - 1 pack = 20 cigarettes
 - 20 pack-years = 1 pack/day for 20 years, 2 packs/day for 10 years, etc.
- Be a current smoker or have quit within the last 15 years



Calculating Pack-years

shouldiscreen.com
smokingpackyears.com

Pack year calculator

A pack-year is used to describe how many cigarettes you have smoked in your lifetime, with a pack for the last 20 years, or two packs a day for the last 10 years, you have 20 pack-years. In other wo taking into account how long you have smoked, and how much you have smoked. Currently, havi be met to be recommended for screening.

. For how many years have you smoked?									
20									
	_			_					

2. On average, how many cigarettes did you smoke per day? There are 20 cigarettes in a pack.

20

Calculate

Your smoking exposure is 20 pack-years.

← Causes of lung cancer



Documenting Smoking History in the EHR

- 1. Smoking status
- 2. Start & quit dates
- 3. Type of tobacco product
- 4. Packs/day
- 5. Number of years

Some EHRs may auto-calculate

'Pack Years'



Pack Years: 51



Tobacco Cessation Intervention Codes

Code	Code definition
Z71.6	Diagnosis code used to specify a diagnosis of tobacco abuse counseling.
99406	CPT code for smoking and tobacco use cessation counseling visit; intensive, more than 3 minutes, up to 10 minutes.
99407	CPT code for smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes.
4004F	CPT code for patient screened for tobacco use and received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (PV, CAD).



Tobacco Cessation Quality Measure

CMS Measure: "Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention"

Current performance McLaren ACO:

93.1% of patients who were identified as using tobacco received a cessation intervention.





Referring Patients to Lung Cancer Screening

Shared decision-making



Counseling and Shared Decision-making Visit

National Coverage Determination (NCD) released by CMS (February 2022) modifies shared decision-making (SDM) requirements.

- Removes specificity on type of provider able to furnish SDM visits
- Removes some specificity around documentation of information on patient eligibility criteria
- Removes requirement for a "written" order for LDCT

Intention to increase flexibility, reduce burden and broaden access to LDCT.



Counseling and Shared Decision-making Visit (cont.)

Shared decision-making includes

- Use of one or more decision aids
- Importance of adherence to annual lung cancer LDCT screening
- Impact of comorbidities and ability or willingness to undergo diagnosis and treatment
 - Benefits and harms of screening; follow-up diagnostic testing; chances of over-diagnosis and treatment
- Counseling on importance of beginning or maintaining tobacco smoking abstinence
- When appropriate, provide information about tobacco cessation interventions

SDM visit <u>must</u> occur before a person's **initial** lung cancer LDCT screening

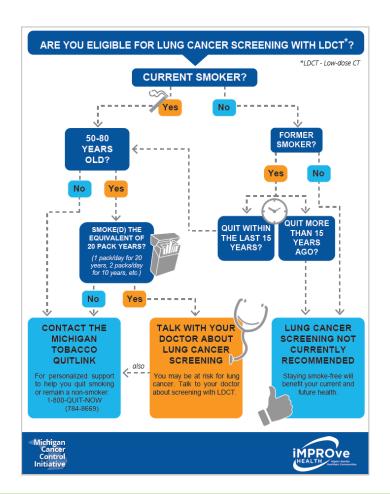
Consider:

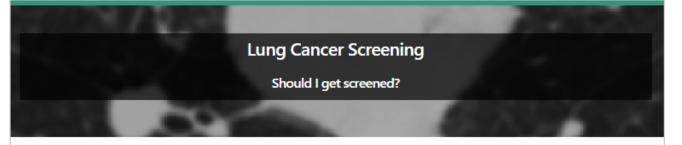
- Is your team providing a shared decision-making visit prior to lung screening?
- What are the barriers?



Resources: Talking with patients about eligibility

criteria for screening





We can help you.

Deciding whether or not to go through lung cancer CT screening is not easy. Here, there is up to date information provided by doctors to help you make an informed choice.

1. Why? 2. Cost 3. Other things to consider

Why should I be thinking about this?

Screening can help find lung cancer at an early stage, when more successful treatment can be offered. Without screening, lung cancer is usually found at a late stage.

Learn more →

What are the warning signs of lung cancer?

Symptoms like pain, unexpected or unplanned weight loss, coughing up blood, or a changing cough that won't go away are concerning for lung cancer, especially if you are a smoker. **But lung cancer screening is not for people with symptoms**. If you have any symptoms that concern you, please discuss them with your physician.



CPT Code – Counseling and Shared Decision-making Visit

- CPT code to bill: G0296
- G0296 definition
 - Counseling visit to discuss need for lung cancer screening using low dose CT scan
 - Service is for eligibility determination and shared decision-making
- May be billed on the same day as a medically necessary E/M visit or annual wellness visit with the -25 modifier
- Visit is not subject to coinsurance or deductibles
- G0296 is listed as <u>permanent telehealth code</u> and is payable in the facility and non-facility setting
- SDM visit is optional to provide for subsequent annual lung cancer screenings, but is reimbursable



ICD-10 Diagnosis Code – Tobacco Use

Counseling and Shared Decision-Making visit charge must be billed with ICD-10 diagnosis code to show personal history of tobacco use/nicotine dependence

- Z87.891 for former smokers
- F17.21_ for current smokers
 - F17.210, F17.211, F17.213, F17.218, F17.219
 - List of Current Smoking Diagnosis Codes



Elements of an Order for LDCT Lung Cancer Screening

- 1. Patient's date of birth
- 2. Calculated pack-year smoking history (number)
- 3. Current smoking status, and for former smokers, the number of years since quitting smoking
- 4. A statement that the patient is asymptomatic (no signs or symptoms of lung cancer)
- The National Provider Identifier (NPI) of the ordering practitioner



Lung Cancer Screening Rate

Lung cancer screening rate definition: Patients identified as eligible (ages 50-80 with a 20 pack-year smoking history who currently smoke or quit within the last 15 years) who received an order and completed lung cancer screening.

Current performance McLaren:

Number of eligible patients who completed lung cancer screening in the last 12 months: 8,552 (increase of 32.5% over the prior year)



American College of Radiology LCS Screening Locations

ACR-designated Lung Cancer Screening Centers & Lung Cancer Screening Centers:

https://www.acr.org/Clinical-Resources/Lung-Cancer-Screening-Resources/LCS-Locator-Tool







ACR – LCS Locator Tool

 Can search by zip code, can download CSV of all locations and filter by city

How to Use the Lung Cancer Screening Locator Tool

1. To find a lung cancer screening program near you: 1) Click in the Search By box, select ZIP Code, 2) In the ZIP Code box, enter your ZIP Code, 3) In the Within box, select your preferred travel distance, 4) Click the Find Locations button to create the list.

The list will include an address and telephone number for the lung cancer screening programs available within the distance you select. Call the telephone number for the location you select to schedule an appointment.

Dark blue markers indicate ACR Designated Lung Cancer Screening Centers™ that exceed basic equipment, personnel, and imaging performance requirements for providing lung cancer screening services.

2. To obtain a statewide listing of lung cancer screening programs: 1) Click in the Search By box, select State, 2) In the State box, select a state, and 3) If you want a printout of the statewide programs, click the download icon to create a CSV file. Note: some browsers may require turning off pop-up blockers for the CSV file to download.









Next Steps – Abnormal Results

Follow-up after LDCT scan using ACR Lung-RADS criteria

80-90% are negative or benign scans

- No nodules | Definitely benign nodules | Nodules with very low likelihood of becoming active cancer due to size or lack of growth
- Next steps: Write an order for an annual scan, if still eligible

10-15% have positive findings

- Nodule detected at a certain size and/or varying solid components
- <u>Next steps</u>: Write an order for a nodule CT 3-6 months after LDCT to assess growth and solid component

5% are 'suspicious' findings

- Additional diagnostic testing and/or tissue sampling is recommended
- Next steps: Discuss the findings with the patient and refer the patient to a specialist





Resources

Tobacco dependence treatment & lung cancer



Tobacco Dependence Treatment Programs

- Health System programs
 - Classes
 - Coaching by phone
- Community programs
- American Lung Association's <u>Freedom from Smoking</u> Group Quit Program
- Michigan Tobacco Quitlink
 - List of local resources at https://michigan.quitlogix.org/en-US/About-The-Program/Resources
- American Indian Commercial Tobacco Program (AICTP)



Michigan Tobacco Quitlink

- Free quit program for anyone who uses any type of tobacco product
- Personalized coaching available 24/7
 - By phone, email, and texting to:
 - Make a quit plan and set a quit date
 - Identify tobacco triggers and manage cravings
 - Get back on track after relapses
- Nicotine quit medications
 - Gum, lozenges, patches
 - Free nicotine quit medications for eligible patients
- Membership in an online community



Referring Patients to the Quitlink

Provider web referral

Enter clinic and patient information/preferences

eReferral

- Secure, two-way communication through the EHR
- Must be set up through the Quitlink

Fax referral

Sections to complete for both providers and patients





American Indian Commercial Tobacco Program

- 1-855-5AI-QUIT
- The AICTP offers support, culturally tailored quit coaches, quit tips
- Nicotine replacement therapy patches, gum, and lozenges to help Native Americans quit smoking and keep tobacco sacred
- Focus on preserving traditional tobacco



American Indian Commercial Tobacco Program (cont.)

- Phone and online coaching
 - American Indian coaches available for both phone and online
 - Set a quit date, tell your support system, prepare for cravings and triggers, find the right quit medications, strategies to get back on track

For more information on AICTP, how to enroll or provider referrals: https://mi-americanindian.quitlogix.org/index



Resources for Patient and Provider Education

- ✓ University of Michigan <u>Should I Screen</u> webpage
- ✓ National Cancer Institute <u>Patient-facing Lung Cancer</u> <u>Screening Resources</u>
- ✓ American Cancer Society <u>Patient Education Materials for Professionals</u>
- ✓ American Cancer Society <u>Evidence-based Interventions</u>
- ✓ American College of Radiology Clinical Resources
- ✓ American Lung Association <u>Lung Cancer Resources</u>
- ✓ The Michigan Cancer Consortium



Lung cancer is the second most common cancer and the leading cause of cancer death in the US. There are different kinds of lung cancer. The two most common types are non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC).

Risk Factors

Smoking is, by far, the leading cause of lung cancer. But not all people with lung cancer smoke. Some may have smoked in the past, and some people with lung cancer have never smoked at all.

Some risk factors for lung cancer can be changed. These include smoking tobacco, breathing in secondhand smoke from tobacco users, or being exposed to certain cancer-causing chemicals like radon and asbestos.

Other risk factors cannot be changed. These include a person's age and their personal or family history, having been treated with radiation therapy to the chest in the past, or being exposed to outdoor air pollution.

Prevention

Not all lung cancers can be prevented. And some people who get lung cancer do not have any known risk factors. But there are ways a person can help lower their risk:

- · Avoid all tobacco products.
- · Stay away from secondhand smoke.
- · Keep cars and homes smoke-free.
- Avoid or limit exposure to cancer-causing chemicals that may be in the home or workplace.
- Follow a healthy eating pattern that includes plenty of fruits and vegetables.

Screening

The American Cancer Society recommends screening for certain people at a higher risk for lung cancer. If a person currently smokes or has quit in the last 15 years, is 50 to 80 years old and is in fairly good health, they might benefit from screening for lung cancer with a yearly low-dose CT scan (LDCT). Talk to a health care provider to learn more about the possible benefits, limits, and risks of lung cancer screening.

Signs and Symptoms

Most lung cancers do not cause symptoms until they have spread outside the lungs. Some common signs and symptoms of lung cancer include:

- · A cough that does not go away or gets worse
- · Coughing up blood or rust-colored spit or phlegm
- Chest pain that is often worse with deep breathing, coughing, or laughing
- Hoarseness
- Loss of appetite
- · Losing weight without trying
- · Wheezing or shortness of breath
- · Feeling tired or weak
- Infections such as bronchitis and pneumonia that don't go away or keep coming back

cancer.org | 1.800.227.2345



Questions?

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Thank you!

Please complete the post-session evaluation



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