

IMPLEMENTATION OF LUNG CANCER SCREENING

INTRODUCTION

1. What cancer is the leading cause of cancer-related deaths in the United States?
 - a. colon
 - b. breast
 - c. pancreatic
 - d. lung
2. Each year more people die of lung cancer than _____.
 - a. colon
 - b. breast
 - c. prostate
 - d. all the above combined
3. What is the 5-year relative survival rate of patients with lung cancer?
 - a. 5%
 - b. 17%
 - c. 20%
 - d. 25%
4. Results for the National Lung Screening Trial demonstrated what percent reduction in mortality for patients screened with low-dose computed tomography (LDCT)?
 - a. 6%
 - b. 10%
 - c. 15%
 - d. 20%
5. In 2013, the US Preventative Services Task Force recommended annual lung cancer screening with low dose CT (LDCT) for what type person at high-risk of developing lung cancer?
 - a. elderly
 - b. symptomatic
 - c. asymptomatic
 - d. young
6. Some of the factors to consider for broad implementation of a lung cancer screening program include which of the following?
 - a. understanding the balance of potential benefits and harms
 - b. defining and reaching eligible populations
 - c. Disrupting patient flow
 - d. A&B

EVIDENCE BASE FOR LUNG CANCER SCREENING

7. Prior to LDCT the Mayo Lung Project and Prostate, Lung, Colorectal and Ovarian cancer (PLCO) project found x-ray imaging was _____ at reducing deaths from lung cancer.
 - a. Ineffective
 - b. effective
 - c. harmless
 - d. helpful

8. When compared to x-ray imaging, NLST data showed 3 annual screenings with LDCT averted how many deaths for every 1,000 screened?
 - a. 1
 - b. 2
 - c. 3
 - d. 4
9. Lung cancer screening also has the potential for harm including _____.
 - a. high false-positive rates
 - b. overdiagnosis and complications
 - c. lower lung cancer rates
 - d. A&B
10. What was the false positive rate in the National Lung Screening Trial?
 - a. 50%
 - b. 60%
 - c. 80%
 - d. 96%
11. In the National Lung Screening Trial how many people out of every 1,000 screened had a false alarm that led to an invasive procedure?
 - a. 10
 - b. 20
 - c. 25
 - d. 30
12. In the National Lung Screening Trial, how many people who did not have lung cancer died following a diagnostic procedure?
 - a. 1
 - b. 4
 - c. 10
 - d. 12
13. How many people out of every 5,000 high-risk individuals screened who would of have had a lung cancer were averted by the screening?
 - a. 2-3
 - b. 5-10
 - c. 15-20
 - d. 25-30
14. What was the false-positive percentage for radiologists who interpreted the highest volume of scans?
 - a. 4 - 46%
 - b. 4 - 52%
 - c. 4 - 63%
 - d. 4 - 69%

15. The radiation dose in LDCT is much _____ than the dose used for diagnostic scans and is comparable to mammography.
- lower
 - higher
 - more harmful
 - diagnostic
16. In preventative services, harm presents itself in what two forms?
- unintended consequences and denying services to those who may benefit
 - false positives and low cancer yield rates
 - high complication rates and low patient access
 - low positive findings and high false positive rates

ELIGIBILITY, CLINICAL PRACTICE GUIDELINES, AND MODELING

17. The current eligibility criteria for LDCT lung cancer screening include:
- 55-80 years, 30 pack-year history, currently smoking or quit within the last 15 years.
 - 55-77 years, 30-pack-year history, currently smoking or have quit within the last 15 years
 - 55-74 years, 30 pack-year history, and who currently or formerly smoked
 - All of the above
18. Symptoms such as cough, shortness of breath, or wheezing would suggest an individual is _____ for screening.
- delayed
 - eligible
 - ineligible
 - cleared
19. In the I-ELCAP clinical trial what was the estimated 10-year survival rate for Stage 1 cancer?
- 52%
 - 73%
 - 86%
 - 88%
20. Using the NLST eligibility criteria, how many million people in the United States would be eligible for lung cancer screening?
- 6 million
 - 7 million
 - 9 million
 - 11 million

INSURANCE COVERAGE OF LUNG CANCER SCREENING

21. Insurance coverage varies regarding lung cancer screening, which of the following are true?
- The Affordable Care Act (ACA) requires some insurers to cover screening if USPSTF criteria is met
 - States that expanded Medicaid under the ACA are required to cover recommended prevention services without cost sharing
 - Adults enrolled in traditional state Medicaid programs are not covered for this service
 - All the above

22. On average lung cancer patients are diagnosed at what age?
- a. 65
 - b. 67
 - c. 70
 - d. 75
23. CMS requirements for coverage include which of the following?
- a. Counseling and shared decision-making visit, registry to track outcomes
 - b. Criteria for radiologists to meet, standards for imaging facilities
 - c. Patient's willingness to keep appointments
 - d. A&B
24. LDCT screening facilities **are not** required to image within low-dose range and submit data to CMS
- a. True
 - b. False
25. CMS requirements for clinicians include which of the following?
- a. determine patient eligibility, shared decision making
 - b. provide counseling
 - c. provide breathing treatments
 - d. A&B

SHARED DECISION MAKING

26. Shared decision making pulls the clinician out of the decision-making process.
- a. True
 - b. False
27. The Cleveland Clinic found that some eligible patients opt out of lung cancer screening after undergoing shared decision making because they would _____.
- a. not complete the scan
 - b. not accept treatment
 - c. not stop smoking
 - d. not keep their appointment
28. Patients knowledge increased by what percent with the use of patient decision aids when compared to usual care results?
- a. 10 % increase
 - b. 14% increase
 - c. 19% increase
 - d. 22% increase
29. What is the only state to implement the patient decision aids policy measures?
- a. Texas
 - b. California
 - c. Florida
 - d. Washington
30. Quality dimensions for decision aids include which of the following?
- a. Health literacy
 - b. Disclosing conflicts of interest
 - c. Coaching and guidance
 - d. All the above

CHALLENGES TO IMPLEMENTATION OF LUNG CANCER SCREENING PROGRAMS

31. In South Carolina what percent of physicians referred more than one patient during the past year?
 - a. 10%
 - b. 17%
 - c. 41%
 - d. 46%
32. What percent of respondents in South Carolina, North Carolina, New Mexico and Texas said there was a well-functioning lung cancer screening program available to their practice?
 - a. 10%
 - b. 15%
 - c. 20%
 - d. 25%
33. Factors that can contribute to the low uptake include which of the following?
 - a. Clinician's knowledge
 - b. Challenges implementing screening program in a clinical practice
 - c. Lack of patient awareness and reaching patients at high risk
 - d. All the above
34. What areas of concern do clinicians have regarding the implementation of lung cancer screening in clinical practice?
 - a. Skepticism about evidence base and clinical practice guidelines
 - b. Medical liability and insurance coverage
 - c. Family support
 - d. A&B
35. A 2015 survey of primary care physicians in South Carolina found what percent of respondents believed LDCT screening reduced lung cancer mortality?
 - a. 26%
 - b. 30%
 - c. 41%
 - d. 45%
36. Young clinicians **do not** appreciate how prevalent smoking once was among older generations, and as a result there is need for empathy and understanding.
 - a. True
 - b. False
37. What issues hamper greater uptake for lung cancer screening in clinical practice?
 - a. Lack of time, tools, training, personnel
 - b. High quality screening facilities
 - c. Easy determination of patient eligibility
 - d. A&B
38. African Americans are more likely than Hispanics or Caucasians to be diagnosed with and die from what cancer?
 - a. colon
 - b. breast
 - c. brain
 - d. lung

39. Low income predicts:
- a. Increased risk of using tobacco
 - b. Increased risk of dying from lung cancer
 - c. Increased smoking cessation attendance
 - d. A&B

OVERCOMING IMPLEMENTATION CHALLENGES

40. Electronic medical records (EMR) need to be written to ask the _____ to identify eligible patients.
- a. age
 - b. location
 - c. pack-year history
 - d. insurance
41. Improving outreach to patients helps which of the following?
- a. patients can self-identify and tailor information to individual needs
 - b. increase patient's fear
 - c. decrease access points
 - d. decrease smoking cessation
42. Current smokers are more likely to feel uncomfortable with health information presented in terms of _____ compared to former smokers.
- a. survival rate
 - b. overall program
 - c. numbers and statistics
 - d. risk factors
43. When assessing CT scanning by county, it was found what percent of counties have no CT scanner?
- a. 16%
 - b. 23%
 - c. 27%
 - d. 32%

STRUCTURING LUNG CANCER SCREENING PROGRAMS

44. The individual developing the screening program needs to generate a plan that includes which of the following?
- a. creates an interdisciplinary team, acquires decision making material
 - b. disregards patient feedback
 - c. create a business plan, and obtain institutional funds
 - d. A&C
45. A _____ is crucial because you cannot implement lung cancer screening properly if you do not have somebody dedicated to this task.
- a. physician
 - b. patient advocate
 - c. program coordinator
 - d. nurse

46. Radiologists interpreting lung screening should undergo training to meet the qualifications.
- True
 - False
47. To reach eligible individuals the Cleveland Clinic developed _____.
- information aimed at clinicians and patients
 - information via newsletters, health fairs and patient letters
 - web based resources
 - all the above
48. We should work toward high-quality screening so that people are having dinner conversation about lung cancer screening the way they have about _____ cancer screening today.
- colon
 - breast
 - pancreatic
 - brain

ENSURING THE QUALITY OF LUNG CANCER SCREENING

49. Which component below **is not** essential to a high-quality lung cancer screening program?
- who is offered lung cancer screening
 - how the CT is performed
 - structured reporting
 - large CT suite
50. What year did the ACR develop the lung screening registry?
- 2011
 - 2013
 - 2014
 - 2015
51. The ACR lung screening registry is the first and only nationwide cancer screening registry approved by _____.
- Cleveland Clinic
 - Veterans Administration
 - CMS
 - Congress

SMOKING CESSATION AND LUNG CANCER SCREENING

52. Experts agree that smoking prevention is the best way to prevent lung cancer, and lung cancer screening should **not** be a substitute for what service?
- shared decision making
 - physician office visit
 - cessation
 - counseling

53. A core concept of _____ programs is the notion that educating patients about their risk of developing lung cancer will inspire them to quit.
- a. risk adjustment
 - b. cancer
 - c. smoking cessation
 - d. health
54. What percent of people completed the smoking cessation intervention when they were given cessation medicine and follow-up phone calls?
- a. 43%
 - b. 52%
 - c. 61%
 - d. 66%

VALUE AND EFFICIENCY IN LUNG CANCER SCREENING

55. What is the cost to Medicare to implement a lung cancer screening program over five years?
- a. 2.3 billion
 - b. 4.2 billion
 - c. 5.6 billion
 - d. 6.8 billion

WORKSHOP WRAP UP

56. Encouraging implementation nationwide of lung cancer screening, we are in a different world compared to when mammography and colonoscopy became available.
- a. True
 - b. False