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. prostrate
   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.
   a. lower  
   b. higher  
   c. more harmful  
   d. diagnostic

16. In preventative services, harm presents itself in what two forms?
   a. unintended consequences and denying services to those who may benefit  
   b. false positives and low cancer yield rates  
   c. high complication rates and low patient access  
   d. 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:
   a. 55-80 years, 30 pack-year history, currently smoking or quit within the last 15 years.  
   b. 55-77 years, 30-pack-year history, currently smoking or have quit within the last 15 years  
   c. 55-74 years, 30 pack-year history, and who currently or formerly smoked  
   d. All of the above

18. Symptoms such as cough, shortness of breath, or wheezing would suggest an individual is __________ for screening.
   a. delayed  
   b. eligible  
   c. ineligible  
   d. cleared

19. In the I-ELCAP clinical trial what was the estimated 10-year survival rate for Stage 1 cancer?
   a. 52%  
   b. 73%  
   c. 86%  
   d. 88%

20. Using the NLST eligibility criteria, how many million people in the United States would be eligible for lung cancer screening?
   a. 6 million  
   b. 7 million  
   c. 9 million  
   d. 11 million

INSURANCE COVERAGE OF LUNG CANCER SCREENING

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

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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.
   a. True
   b. False

47. To reach eligible individuals the Cleveland Clinic developed ________________.
   a. information aimed at clinicians and patients
   b. information via newsletters, health fairs and patient letters
   c. web based resources
   d. 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.
   a. colon
   b. breast
   c. pancreatic
   d. brain

ENSURING THE QUALITY OF LUNG CANCER SCREENING

49. Which component below is not essential to a high-quality lung cancer screening program?
   a. who is offered lung cancer screening
   b. how the CT is performed
   c. structured reporting
   d. large CT suite

50. What year did the ACR develop the lung screening registry?
   a. 2011
   b. 2013
   c. 2014
   d. 2015

51. The ACR lung screening registry is the first and only nationwide cancer screening registry approved by ______.
   a. Cleveland Clinic
   b. Veterans Administration
   c. CMS
   d. 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?
   a. shared decision making
   b. physician office visit
   c. cessation
   d. 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