

Components of High-Quality Lung Cancer Screening Programs
American College of Chest Physicians and American Thoracic Society Policy
2014

Component 1: Who is offered screening

Policy

1. Lung cancer screening programs should collect data on all enrolled subjects related to the risk of developing lung cancer.

Qualification as a screening facility

1. Screening program must confirm that there is a policy about who will be offered screening that is in keeping with USPSTF recommendation.
2. At least 90% of all screened subjects must match the program's stated policy, excluding those enrolled in clinical trials.gov registered NIH, CDC, AHRQ, CMS, DOD, VA and PCORI funded screening research protocols.

Component 2: How often, and for how long, to screen

Qualification as a screening center

1. The screening program must confirm that there is a policy about the frequency and duration of screening that is in keeping with the USPSTF recommendation.

Component 3: How the CT is performed

Policy

1. A low dose lung cancer screening CT should be performed based on the ACR-STR technical specifications
2. A lung cancer screening program should collect data to ensure the mean radiation dose is in compliance with ACR-STR recommendations.

Qualification as a lung cancer screening facility

1. The screening program must confirm that there is a policy about the technical specifications for performing low dose CT screening that is in keeping with the ACT-STR technical specifications and credentialing criteria.

Component 4: Lung Nodule Identification

Policy

1. A lung cancer screening program should have a policy about the size and characteristics of a nodule to be used to label the test positive.
2. A lung cancer screening program should collect data about the number, size, and characteristics of lung nodules from positive tests.

Qualification as a lung cancer screening facility

1. The screening program should describe their policy about the size of a lung nodule that is used to label the test as positive.
2. The screening program should provide data that describes the number and size of nodules that are being detected.

Component 5: Structured reporting

Policy

1. Screening program should use a structured reporting system such, as Lung-RADS.
2. Screening program should collect data about compliance with the use of the structured reporting system.

Qualification as a lung cancer screening facility

1. Screening program is using Lung-RADS as their structured reporting system, or uses a structured reporting system with similar elements (communication tool, identification of positive findings, lung nodule management recommendations).
2. The structured reporting system is being used for at least 90% of CT screen reports.

Component 6: Lung nodule management algorithms

Policy: A lung cancer screening program must:

1. Include clinicians with expertise in management of lung nodules and the treatment of lung cancer.
2. Have developed lung nodule care pathways.
3. Have the ability to characterize concerning nodules through PET imaging, non-surgical and minimally invasive surgical approaches.
4. Have an approach to communication with the ordering provider and/or patient.
5. Have a means to track nodule management
6. Collect data related to use of and outcomes from surveillance and diagnostic imaging, surgical and non-surgical biopsies for the management of screen detected lung nodules.

Qualification as a lung cancer screening facility

1. The screening program has designated clinicians with the expertise in lung nodule management, performance of non-surgical biopsies and minimally-invasive surgical biopsies and lung cancer treatment. The following specialties should be represented: radiology, pulmonary medicine, thoracic surgery, medical oncology, radiation oncology.
2. The screening program has designated an acceptable lung nodule management strategy, such as the use of available published evidence-based algorithms and/or care pathways.
3. The screening program can describe the lung nodule communication and nodule management tracking system being used by the program.
4. The screening program must be capable of reporting on: the number of surveillance and diagnostic imaging tests, non-surgical and surgical biopsies performed for malignant and benign screen detected nodules, the number of cancer diagnoses, the number of procedure related adverse events.

Component 7: Smoking cessation

Policy

1. A screening program must be integrated with a smoking cessation program.
2. A screening program should collect data related to the smoking cessation interventions offered to active smokers.

Qualification as a lung cancer screening facility

1. Screening program has integrated smoking cessation services for patients enrolled in their program.
2. Screening program will report on the portion of active smokers offered and who participate in smoking cessation interventions.

Component 8: Patient and provider education

Policy

1. Screening program should educate providers to adequately discuss benefits and harms of screening their patients.
2. Screening program should develop or use standardized education materials to assist education of providers and patients.
3. Screening program is responsible for oversight and supplementation of provider-based patient education.

Qualification as a lung cancer screening facility

1. Screening program will list educational strategies used to educate ordering providers about key components of lung cancer screening.
2. Screening program demonstrates availability of standardized patient and provider educational material.

Component 9: Data collection

Policy

1. Screening program must collect data on all enrolled patients related to quality of the program, including those enrolled in clinical trials. Data collection should include elements related to each of the other 8 components and should include outcomes of testing (complications, cancer diagnoses) and a description of cancers (histology, stage, treatment, survival).
2. Review of the data and subsequent QI plan should be performed at least annually.
3. Annual summary of the data should be reported to an oversight body with authority to credential screening programs. Standards set forth in this document should be used to judge compliance and deficiency.

Qualification as a lung cancer screening facility

1. Screening program must collect data related to each component of a lung cancer screening program, outcomes of testing, cancers diagnosed and report this annually to an oversight body.
2. Screening program should respond to concerns from the oversight body in order to maintain accreditation.

Multi-Society, Multi-disciplinary governance

Policy

1. A multi-society, multidisciplinary governance structure should be developed and supported to advance quality standards based on evolving evidence, administer an expanded credentialing system and suggest research priorities.
2. At a minimum, multi-society governance should oversee the evolution of structured reporting; nodule management algorithms; the structure, maintenance and integrity of a lung cancer screening registry; the research conducted on the registry; and research that would help define the criteria for screening eligibility.