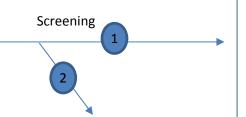
Appendix 1 (as supplied by the authors): analytic framework and key questions

Adults ≥18 y at average and high risk who are not suspected of having lung cancer



Harms (overdiagnosis; death, major complications, morbidity, infection or bleeding from invasive follow-up testing; false positives; consequences of false positives; negative consequences of incidental findings; anxiety; quality of life)

Lung cancer mortality, allcause mortality, smoking cessation rate, stage at diagnosis, incidental findings

Key Questions

- 1. What are the clinical benefits of screening for lung cancer in adults not suspected of having lung cancer?
 - a. What is the difference in screening effectiveness in populations and subgroups with varying risk for lung cancer?
- 2. What are the harms of screening for lung cancer in adults not suspected of having lung cancer?
 - a. What is the difference in harms in populations and subgroups with varying risk for lung cancer?

Contextual Questions

Based on a literature search limited to the previous five years, and results are presented narratively.

- 1. What is the evidence that test characteristics for effective lung cancer screening tests (sensitivity and specificity, false positives and false negatives, and negative and positive predictive values, and test positivity rate) differ by subgroups with varying risk for lung cancer?
- 2. What is the difference in test performance with changes and improvements in low-dose computed tomography technology or varying protocols used by radiologists?
- 3. What are participants' values and preferences on screening for lung cancer?
- 4. What is the optimal screening interval for screening for lung cancer?
- 5. What risk assessment tools are identified in the literature to assess the risk of lung cancer?
- 6. What is the evidence that subgroups have a higher burden of disease, a differential treatment response, differential performance of screening tests, or barriers to implementation? Subgroups include: Aboriginal populations, rural or remote populations, other ethnic populations.
- 7. What is the cost-effectiveness of screening for lung cancer?