Lung Cancer Screening Pilot for People at High Risk MARCH 2020

INFORMATION FOR HEALTHCARE PROVIDERS

Importance of lung cancer screening

Lung cancer is the leading cause of cancer death for people in Ontario

Many people die from lung cancer because by the time it is usually diagnosed, the cancer has spread to other parts of the body or is too big and treatment has less of a chance of working

Screening with low-dose computed tomography (LDCT) can find lung cancer at an early stage, when treatment has a better chance of working

Evidence to support lung cancer screening

National Lung Screening Trial¹:

Was a randomized controlled trial with over 50,000 participants

Compared annual screening with LDCT to chest X-ray in people at high risk over approximately 2 years

Found that people who got screened with LDCT had a 20% reduction in lung cancer mortality over 6 years, compared to people who got screened with chest X-ray

Potential benefits and harms of lung cancer screening

Potential benefits

- Finding lung cancer at an early stage, when treatment has a better chance of working
- Reducing the chance of dying from lung cancer

Potential harms

- Radiation exposure
- False-positive results
- Over-diagnosis

Return to screening

as per recommendation

We recommend using LDCT through an organized cancer screening program to screen people at high risk of getting lung cancer

The Lung Cancer Screening Pilot for People at High Risk (the pilot)

The pilot was launched in June 2017 at specific pilot site hospitals in Ontario – for the names of the pilot site hospitals, visit

cancercareontario.ca/highrisklungscreening

Eligible people are offered screening using LDCT of the chest

Evaluation data collected over 2 years by Ontario Health (Cancer Care Ontario) from the pilot site hospitals will inform the design and implementation of a provincial program

Lung cancer screening pilot pathway

Physician completes and submits screening referral form

Not everyone who meets the referral inclusion criteria will be eligible for lung cancer screening in the pilot Risk assessment by screening navigator

> Eligibility for screening determined by risk prediction model

Smoking cessation services will be offered to <u>all</u> <u>current smokers</u>

Screening visit

Discussion of the benefits, harms and limitations of screening

Smoking cessation support

Offered at every screening visit

LDCT

Referring physician is responsible for the appropriate management of any incidental findings (i.e., findings other than lung nodules) Results communication

Negative scan Recall for (Lung-RADS™ 1 or 2) annual screening Probably benign positive scan Follow-up LDCT (Lung-RADS™3) in 6 months Suspicious positive scan Follow-up LDCT (Lung-RADS™4A) in 3 months Scan double read Very suspicious positive scan (Lung-RADSTM 4B*) Follow-up LDCT in 1 month Very suspicious positive scan (Lung-RADSTM 4B or 4X) Referral for lung Staging and

diagnostic assessment

Additional imaging, workup, biopsy, etc.

Screening navigators at pilot site hospitals support participants throughout the screening process by providing information about lung cancer screening (including benefits and risks), determining eligibility for screening by conducting a risk assessment, providing screening results and ensuring that follow-up appointments are booked appropriately. For more information about lung cancer screening services, contact the screening navigator at the pilot site hospital.

treatment

If cancer is found

¹Aberle DR, Adams AM, Berg CD, Black WC, Clapp JD, Fagerstrom RM, et al. Reduced lung-cancer mortality with low-dose computed tomographic screening. N Engl J Med. United States; 2011 Aug 4;365(5):395–409.

^{*}A follow-up LDCT in 1 month will occur if a Lung-RADS™ score of 4B is assigned to a new large nodule identified on an annual recall LDCT and the reporting radiologist suspects an infection or inflammation.



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Referral Process:

Determining eligibility for the pilot is a two-step process. Only people who meet the criteria in steps 1 and 2 will be eligible to get screened for lung cancer through the pilot.

In step 1, physicians refer current and former smokers **ages 55 to 74 who have smoked cigarettes daily for at least 20 years** (not necessarily 20 years in a row, which means there could be times when they did not smoke) to a pilot site hospital. People can also self-present to a pilot site hospital to have their age and smoking history criteria assessed.

In step 2, a pilot site hospital screening navigator conducts a risk assessment with anyone who meets the referral inclusion criteria in step 1. The results of the risk assessment determine whether someone is eligible to get screened for lung cancer through the pilot.

Not everyone who meets the referral inclusion criteria will be eligible for lung cancer screening in the pilot – it is important to tell your patient they may not end up being eligible. It is estimated that 1 in 3 people referred will be eligible for screening.

People should not be referred if they:

- Have been diagnosed with lung cancer
- Are under surveillance for lung nodules
- Have had hemoptysis of unknown cause or unexplained weight loss of more than 5 kg in the past year, or
- Are currently undergoing diagnostic assessment, treatment or surveillance for life-threatening conditions (e.g., a cancer with a poor prognosis) as assessed by the referring physician

If a patient has lung cancer symptoms, follow the Program in Evidence-Based Care's guidelines for referral of suspected lung cancer (cancercareontario.ca/en/guidelines-advice/types-of-cancer/216) and Ontario Health (Cancer Care Ontario)'s lung cancer diagnosis pathway. For more information on recommended next steps, refer to the lung cancer diagnosis pathway (cancercareontario.ca/sites/ccocancercare/files/assets/LungCancerDiagnosisPathwayMap.pdf)

Risk Assessment: A risk assessment gives a percentage estimate of someone's risk of developing lung cancer in the next 6 years. People with a ≥2% risk of developing lung cancer over the next 6 years are considered eligible to participate in organized lung cancer screening.

People must have a physician's referral to participate

Primary care providers and some specialist physicians play a role in identifying people who may benefit from lung cancer screening

A physician must sign a completed pilot referral form to authorize LDCT

- A screen-eligible patient who self-presents to a pilot site hospital can contact, or have the pilot site hospital contact, their primary care provider to get a signed referral form
- If a screen-eligible person does not have a family physician, the pilot site hospital will find them one

Referring physician:

- Authorizes the pilot to coordinate recall and follow-up of suspicious findings
- Is responsible for appropriate management of incidental findings (e.g., aortic calcification, emphysema, pleural plaques)

Communications from the pilot

Notification if a referred patient is ineligible for or declines screening

A standardized radiology report** for lung cancer screening scans

Additional notification if there are incidental findings (to referring physicians only)

Notification if a patient is referred for lung diagnostic assessment

** The American College of Radiology's Lung-RADS™ (version 1.1) is used to standardize classification and follow-up of lung nodules found by screening

Download and complete the referral form at cancercareontario.ca/lungreferrals