

Recommendation Report: Entry and Transfer of Care Criteria for Lung Diagnostic Assessment Programs (DAPs) in Ontario

Objective:

The objective of this document is to describe recommended entry and transfer of care criteria for lung Diagnostic Assessment Programs (DAPs) in Ontario.

Target Population:

The population targeted in this report are adult patients in Ontario with a suspicion of primary lung cancer who require further investigation.

Intended Users:

This report is intended for program planners responsible for DAP operations, as well as providers referring their patients to a lung DAP, working within a lung DAP and/or treating patients referred to them following a positive diagnosis in a lung DAP. This includes but is not limited to: respirologists, thoracic surgeons, radiologists, radiation and medical oncologists, family physicians, general practitioners, emergency department physicians, and other primary care providers (e.g. nurse practitioners, registered nurses, physician assistants)

Preamble:

DAPs manage and coordinate the entire process of a person's diagnostic care, from testing to a rule-out of cancer or to a definitive diagnosis and transition to treatment. This coordination significantly improves access to quality health care. DAPs provide patients with a single point of contact and access to care that follows evidence-based, clinical pathways. These programs also facilitate transitions in care and improve communication between health care providers during the diagnostic phase.

Currently, DAPs vary in the service they provide along the cancer continuum (i.e., from symptoms to diagnosis to treatment and follow-up) which create inequities of care for patients and inconsistent referral criteria for clinicians. Defining consistent entry and transfer of care criteria for lung DAPs across the province will help address these challenges.

Lung DAP Entry Criteria:

Signs and Symptoms

The following are appropriate reasons for referral into a lung DAP in conjunction with abnormal imaging suggestive of or suspicious for primary lung cancer, and should be accepted into a lung DAP:

- A solitary pulmonary nodule or mass;
- A non-peripheral pulmonary nodule or mass;
- Multiple pulmonary nodules;
- Mediastinal hilar adenopathy;
- Hoarseness with lung mass or adenopathy;
- Non-resolving pleural effusions with lung lesions;
- Pancoast tumor (pain in shoulder area/arms, drooping eyelid, tumor in superior sulcus of lung);
- Lung mass with obvious metastatic disease (bone pain, jaundice, weight loss greater than 10% body weight);

- Persistent¹ non-massive hemoptysis (if a CT scan-chest has not been completed or the CT scan-chest indicates a suspicion of lung cancer²);
- Known lung malignancy;
- Superior vena cava (SVC) syndrome/obstruction³,
- Slowly or non-resolving pneumonia or consolidation non-responsive to one cycle of antibiotics. If not resolved on follow up chest x-ray after one month and lung cancer is suspected, the patient should be referred to a Lung DAP.

Non-resolving pleural effusions without lung lesions should be accepted into a lung DAP on a case-by-case basis if supported with additional clinical information.

Patients with multiple pulmonary nodules that are under active treatment or surveillance for a non-lung cancer and are being followed in a cancer centre should be managed by their treating oncologist and not be referred to a lung DAP.

Patients with massive hemoptysis, stridor and new neurological signs suggestive of brain metastases or spinal cord compression should be sent directly to the emergency department and not be referred to a lung DAP.

Imaging

An abnormal chest x-ray suspicious of lung cancer **or** an abnormal CT scan-chest suspicious of lung cancer is required prior to a lung DAP referral. Clinical judgement should be used by the referring physician to determine if both a chest x-ray and a CT scan-chest should be completed prior to referral to a lung DAP. A CT scan-chest must be completed prior to surgical consult within a lung DAP.

If the referring physician is making a referral to the DAP due to an abnormal chest x-ray suspicious of lung cancer, it is recommended that the referring physician order the CT scan-chest at the same time that the DAP referral is made. While it is appropriate for any provider to order the CT scan-chest if they can facilitate timely access, a DAP should facilitate an order for an expedited CT scan-chest when the DAP is able to facilitate faster access (e.g. block bookings). It is recommended that medical directives are in place for DAP patient navigators to facilitate access to any imaging required prior to assessment.

If an organized lung cancer screening program is in place, an abnormal low-dose CT scan-chest suspicious of lung cancer is sufficient imaging prior to DAP referral for lung RADs 4B and 4X.

Additional Considerations

A patient history should be included as part of the lung DAP referral and include, at a minimum: comorbidities, medications and allergies.

Neither pulmonary function tests nor blood work are required for referral to a lung DAP.

¹ Lasting more than three weeks or less than three weeks in people with known risk factors (Referral of Suspected Lung Cancer by Family Physicians and Other Primary Care Providers, 2011 – See Related Guidelines).

² Persistent non-massive hemoptysis should be an accepted referral criteria into a lung DAP if a CT scan-chest has not been completed or the CT scan-chest indicates a suspicion of lung cancer. Persistent non-massive hemoptysis with a normal CT scan-chest is not an appropriate reason for referral to a lung DAP and should be seen by a respirologist.

³ Patients with SVC syndrome/obstruction should be accepted by the lung DAP if the lung DAP can facilitate a diagnosis within one week. If the DAP cannot facilitate a diagnosis within one week, patients should be sent to the emergency department.

Lung DAP Transfer of Care Criteria:

Following referral into a lung DAP, patients will undergo an initial work-up. Once patients complete their diagnostic assessment, transfer of care criteria will help support continuity of care for patients and improve patient transitions. Patients should be transferred from the DAP as follows:

Patients Ruled-Out for Lung Cancer

- Following discussion of the results with the patient and documentation of results sent to the referring physician, patients who are ruled-out for lung cancer should be transferred at the point of diagnosis (no further testing required) from the DAP to the referring physician.
- If the patient was referred from an organized lung cancer screening program they should be transferred at the point of diagnosis (no further testing required) from the DAP to the screening program.

Patients with a Positive Diagnosis of Lung Cancer

- Following surgical consultation once the staging work-up has been completed and a treatment/follow up plan has been developed, patients with a positive diagnosis should be transferred from the DAP to a treating specialist (e.g. surgical oncologist, medical oncologist, or radiation oncologist).
- To support continuity of care for patients – if any issues should arise between the scheduling and attendance of the first treatment consultation with the specialist, patients will continue to have the support of the patient navigator.
- If the patient requires neoadjuvant therapy, the patient should not return to the lung DAP after neoadjuvant treatment is completed.
- If the patient requires palliative care, the patient should be transferred from the lung DAP after the first consult with medical/radiation oncology has been attended. DAPs should refer patients directly to palliative care, where appropriate.

Patients with an Indeterminate Lung Cancer Diagnosis

- Follow up for patients with indeterminate incidental nodules will be consistent with the Fleischner Guidelines for Management of Incidental Pulmonary Nodules Detected on CT Images.
 - Patients with an indeterminate incidental nodule less than 6 mm in size should be transferred to the referring physician or primary care provider for follow-up.
 - Patients with an indeterminate incidental nodule between 6 mm – 8 mm in size should be transferred to a small nodule clinic (where one exists) or to a specialist⁴ for follow-up.
 - Patients with an indeterminate or suspicious nodule greater than 8 mm in size should be transferred to a specialist for ongoing follow-up.
- Follow up for patients with indeterminate screen-detected nodules will be managed by the lung cancer screening program and be consistent with the Lung Reporting and Data System (Lung - RADS) Guidelines.

⁴ The specialist could be a thoracic surgeon or respirologist.

Related Guidelines

Referral of Suspected Lung Cancer by Primary Care Practitioners:

<https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/216>

Guidelines for Management of Incidental Pulmonary Nodules Detected on CT Images - Fleischner Society 2017:

<https://pubs.rsna.org/doi/10.1148/radiol.2017161659>

American College of Radiology Lung CT Screening Reporting and Data System (Lung – RADS) Guidelines:

<https://www.acr.org/Clinical-Resources/Reporting-and-Data-Systems/Lung-Rads>

Methods

A Lung DAP Entry and Transfer of Care Criteria Working Group, with representation from regional partners, clinicians, patients and relevant Cancer Care Ontario program areas, was established to support the development of recommended entry and transfer of care criteria for lung DAPs. A modified Delphi approach was used to support the consensus process. The working group was surveyed on entry and transfer of care criteria and results were then brought forward to working group meetings for discussion. The outcome of working group discussions informed the recommended entry and transfer of care criteria.

The working group recommendations for the entry and transfer of care criteria for lung DAPs were formulated into a provincial consensus survey and shared with a broader stakeholder group across Ontario. The broader stakeholder group was also invited to join an in-person expert panel event to further build consensus on the entry and transfer of care criteria for lung DAPs in Ontario by reviewing the results from the provincial consensus survey and focusing the discussion on the criteria that lacked consensus. After this, the results from the expert panel were developed into a consolidated recommendation report and shared with the broader stakeholder group for validation, along with a final provincial consensus survey. All feedback from the validation process was used to finalize this recommendation report.