

Optimal care pathway for people with lung cancer

Quick reference guide



Support: Assess supportive care needs at every step of the pathway and refer to appropriate health professionals or organisations.

The optimal care pathways describe the standard of care that should be available to all cancer patients treated in Australia. The pathways support patients and carers, health systems, health professionals and services, and encourage consistent optimal treatment and supportive care at each stage of a patient's journey. Seven key principles underpin the guidance provided in the pathways: patient-centred care; safe and quality care; multidisciplinary care; supportive care; care coordination; communication; and research and clinical trials.

This quick reference guide provides a summary of the *Optimal care pathway for people with lung cancer*.

Please note that not all patients will follow every step of the pathway.

Step 1: Prevention and early detection – Screening recommendations

Prevention

Recommendations for reducing the risk of lung cancer include:

- Participate in the National Lung Cancer Screening Program (NLCSP), which screens for lung cancer using a low-dose computed tomography (low-dose CT) scans every two years for people aged 50-70 years and with a history of cigarette smoking.
- Stop smoking. All patients who currently smoke (or have recently quit) should be offered best practice tobacco dependence treatment, given an opt-out referral to a behavioural intervention service such as Quitline 13 78 48, and prescribed smoking cessation pharmacotherapy, if clinically appropriate. Frame conversations about smoking using the Ask, Advise, Help model.
- Avoid exposure to second-hand tobacco smoke.
- Prevent occupational exposure to asbestos, silica, radon, heavy metals, diesel fumes and polycyclic aromatic hydrocarbons.
- Undertake regular moderate to vigorous-intensity physical activity.

Risk factors

- Personal factors:
 - current or former tobacco smoking
 - increasing age
 - family history of lung cancer
 - personal history of lung cancer
 - chronic lung disease
- Lifestyle factors:
 - physical inactivity

Environmental factors:

- second-hand smoke
- occupational exposure to arsenic, polycyclic aromatic hydrocarbon, cadmium, radon, asbestos, silica, iron and steel founding, nickel, beryllium, chromium VI, paint, diesel exhaust
- air pollution.

Indigenous Australians are approximately twice as likely to be diagnosed with and to die from lung cancer and have a lower 5-year survival compared with non-Indigenous Australians.

Early detection

- The National Lung Cancer Screening Program (NLCSP) is a targeted screening program using low-dose CT scans to look for lung cancer in high-risk people aged 50-70 years old, without any signs or symptoms suggestive of lung cancer, who currently smoke or have quit smoking in the past 10 years, and have a history of tobacco cigarette smoking of at least 30 pack-years.
- A person's eligibility may be opportunistically assessed for the program when visiting a healthcare provider, likely a general practitioner (GP) for another purpose. They may be proactively identified through their medical records, smoking cessation programs, or other interactions with the health system and encouraged to visit their GP, or they may self-identify and visit a GP based on information provided about the program.

Checklist

- Recent weight changes discussed and weight recorded
- Alcohol intake discussed and recorded and support for reducing alcohol consumption offered if appropriate
- Smoking status discussed and recorded and brief smoking cessation advice offered to smokers
- Physical activity recorded

Step 1: Prevention and early detection – Screening recommendations continued

- Participants can have a low-dose CT scan at participating public and private radiology providers. The low-dose CT scan is free for eligible people under Medicare.

Low-dose CT scan results will be sent from the radiology provider to the National Cancer Screening Register (NCSR), as well as to the participant's requesting practitioner and electronic medical records.

Screening recommendations

- **Very low risk findings (category 1):** Two-yearly repeat low-dose CT scan recommended. The practitioner should ensure participants are aware that a very low risk finding does not mean that they are not at risk of ever developing lung cancer and participants should be encouraged to re-screen every two years, and see their doctor prior to that if they develop symptoms.
- **Low risk, low to moderate risk, and moderate risk findings (categories 2,3,4):** Participants return for a follow-up low-dose CT scan at the interval specified in the NLCSP Nodule Management Protocol (12, 6, or 3 months respectively).

- **High risk and very high risk findings (categories 5 and 6):** Participants should be referred to a respiratory physician (or other specialist) linked to a lung cancer multidisciplinary team (MDT). If lung cancer is confirmed, the participant will be managed according to the Optimal care pathway for people with lung cancer.
- **Actionable additional findings** are clinically significant or potentially clinically significant findings unrelated to lung cancer. These should be investigated as per usual care arrangements and do not preclude a participant from continuing in the program. The practitioner managing the participant will make referrals to specialists for further investigations as required.

Refer to the NLCSP Program Guidelines for more about the program and risk categories <<https://www.health.gov.au/resources/publications/nlcsp-guidelines?language=en>>.

Checklist continued

- Referral to a dietitian considered
- Referral to a physiotherapist or exercise physiologist considered
- Education on being sun smart considered

Step 2: Presentation, initial investigations and referral

Signs and symptoms

The following unexplained, persistent signs and symptoms require investigation, if lasting **more than 3 weeks** (**earlier** in patients with known risk factors or with more than one sign or symptom):

- new or changed cough
- chest or shoulder pain
- shortness of breath
- hoarseness
- weight loss or loss of appetite
- persistent or recurrent chest infection
- fatigue
- DVT
- abnormal chest signs
- finger clubbing
- cervical or supraclavicular lymphadenopathy
- signs of lung cancer metastasis (e.g. brain, bone, liver or skin)
- pleural effusion
- thrombocytosis.

The following signs and symptoms require urgent referral for a chest CT scan and concurrent referral (**within 2 weeks**) to a specialist linked to a lung cancer multidisciplinary team:

- persistent or unexplained haemoptysis
- signs of superior vena caval obstruction
- high clinical suspicion of lung cancer
- imaging findings suggesting lung cancer.

The following signs or symptoms require **immediate referral** to an emergency department:

- massive haemoptysis
- stridor.

GP investigations include:

- a thorough medical history
- urgent chest x-ray for unexplained, persistent symptoms and signs (**lasting more than 3 weeks** (**earlier** in patients with known risk factors or with more than one symptom or sign) – if the chest X-ray is normal and symptoms persist repeat the chest x-ray at **6 weeks**

Checklist

- Signs and symptoms recorded
- Chest x-ray for unexplained, persistent symptoms and signs
- Contrast CT of the chest if there is a strong clinical suspicion of lung cancer and referral to a specialist linked to a lung cancer multidisciplinary team
- Supportive care needs assessment completed and recorded, and referrals to allied health services actioned as required
- Patient notified of support services such as Cancer Council 13 11 20
- Referral options discussed with the patient and/or carer including cost implications

Step 2: Presentation, initial investigations and referral continued

- chest CT scan if there is a strong clinical suspicion of lung cancer, persistent or unexplained haemoptysis, signs of superior vena caval obstruction or imaging findings suggest lung cancer **within 2 weeks** of the patient presenting with symptoms. The CT scan should be delivered with contrast unless contraindicated. Concurrently, refer the patient to a specialist linked to a lung cancer multidisciplinary team (consider immediate telephone contact).

Referral options

At the referral stage, the patient's GP or other referring doctor should advise the patient about their options for referral,

waiting periods, expertise, if there are likely to be out-of-pocket costs and the range of services available. This will enable patients to make an informed choice of specialist and health service.

Communication

The GP's responsibilities include:

- explaining to the patient and/or carer who they are being referred to and why
- supporting the patient and/or carer while waiting for specialist appointments
- informing the patient and/or carer that they can contact Cancer Council on 13 11 20.

Timeframe

Provide test results to the patient **within 1 week** of presenting to their GP.

The first specialist (linked to a lung cancer multidisciplinary team) appointment should take place **within 2 weeks** of the initial GP referral.

Step 3: Diagnosis, staging and treatment planning

Diagnosis and staging

Lung cancer may be diagnosed through:

- additional imaging (may include a PET-CT scan)
- bronchoscopy including endobronchial ultrasound-guided biopsy
- CT or ultrasound-guided biopsy or aspiration
- excisional biopsy or biopsy of a metastasis
- sputum cytology in rare cases.

Staging for lung cancer involves:

- CT scans of the chest and upper abdomen (in all cases) and imaging (can be MRI) of the brain in some cases
- PET-CT scans where curative treatment is being considered
- assessment by a surgeon with thoracic/lung cancer expertise in cases where curative treatment is being considered.

Imaging and/or pathological confirmation of the most advanced site of disease may be required.

Molecular testing and biomarker testing can inform the most appropriate treatment for non-small cell lung cancer (NSCLC).

Genetic testing

Familial causes are rare in lung cancer and testing is not usually needed.

Treatment planning

The multidisciplinary team should discuss all newly diagnosed patients with lung cancer, usually **before** treatment begins.

Research and clinical trials

Consider enrolment where available and appropriate. Search for a trial <www.australiancancertrials.gov.au>.

Communication

The lead clinician's' responsibilities include:

- discussing a timeframe for diagnosis and treatment options with the patient and/or carer
- explaining the role of the multidisciplinary team in treatment planning and ongoing care
- encouraging discussion about the diagnosis, prognosis, advance care planning and palliative care while clarifying the patient's wishes, needs, beliefs and expectations, and their ability to comprehend the communication
- providing appropriate information and referral to support services as required
- communicating with the patient's GP about the diagnosis, treatment plan and recommendations from multidisciplinary meetings (MDMs).

Checklist

- Diagnosis confirmed
- Full histology obtained
- Performance status and comorbidities measured and recorded
- Patient discussed at an MDM and decisions provided to the patient and/or carer
- Clinical trial enrolment considered
- Supportive care needs assessment completed and recorded, and referrals to allied health services actioned as required
- Patient referred to support services (such as Cancer Council) as required
- Treatment costs discussed with the patient and/or carer

Timeframe

Complete diagnostic tests **within 2 weeks** of the first specialist appointment.

¹ Lead clinician – the clinician who is responsible for managing patient care.

The lead clinician may change over time depending on the stage of the care pathway and where care is being provided.

Step 4: Treatment

Establish intent of treatment

- Curative
- Anti-cancer therapy to improve quality of life and/or longevity without expectation of cure
- Symptom palliation.

Surgery may be suitable for patients:

- with early-stage NSCLC who are fit for the required surgery
- requiring surgical diagnosis or palliation.

Radiation therapy may be suitable for patients with:

- early-stage (I-II) NSCLC who are unsuitable or unwilling to have surgery
- locally advanced (III), inoperable NSCLC
- limited stage (I-III) SCLC who are undergoing combined modality treatment with chemotherapy or who may benefit from prophylactic cranial irradiation.

All patients with NSCLC and SCLC may benefit from radiation therapy for palliative intent.

Local ablative therapies may be an alternative to curative or palliative therapy in some patients:

- with localised NSCLC who are unsuitable for surgery or radiation therapy
- with oligometastatic NSCLC who are unsuitable for surgery or radiotherapy
- undergoing multi-modality treatment in combination with radiotherapy, chemotherapy or immunotherapy.

Oligometastatic disease refers to a clinical situation where there are a limited number of metastatic tumours that could potentially be managed with curative intent.

Refer appropriate cases to centres with expertise in this area.

Systemic therapy may be suitable for patients with:

- advanced disease and good performance status
- NSCLC who are undergoing neoadjuvant or adjuvant therapy in conjunction with complete resection of locoregional disease
- inoperable, localised NSCLC who are suitable for combined modality definitive chemoradiation
- SCLC.

Palliative care

Early referral to palliative care can improve quality of life and in some cases survival. Referral should be based on need, not prognosis. For more, visit the Palliative Care Australia website <www.palliativecare.org.au>.

Communication

The lead clinician¹ and team's responsibilities include:

- discussing treatment options with the patient and/or carer including the intent of treatment as well as risks and benefits
- discussing advance care planning with the patient and/or carer where appropriate
- communicating the treatment plan to the patient's GP
- helping patients to find appropriate support for exercise programs where appropriate to improve treatment outcomes.

Checklist

- Intent of treatment established
- Risks and benefits of treatments discussed with the patient and/or carer
- Treatment plan discussed with the patient and/or carer
- Treatment plan provided to the patient's GP
- Treating specialist has adequate qualifications, experience and expertise
- Supportive care needs assessment completed and recorded and referrals to allied health services actioned as required
- Early referral to palliative care considered
- Advance care planning discussed with the patient and/or carer

Timeframe

Begin treatment **within 6 weeks** of the initial specialist referral. Medical emergencies should follow guidelines.

Step 5: Care after initial treatment and recovery

Provide a treatment and follow-up summary to the patient, carer and GP outlining:

- the diagnosis, including tests performed and results
- tumour characteristics
- treatment received (types and date)
- current toxicities (severity, management and expected outcomes)
- interventions and treatment plans from other health professionals
- potential long-term and late effects of treatment and care of these
- supportive care services provided
- a follow-up schedule, including tests required and timing

- contact information for key healthcare providers who can offer support for lifestyle modification
- a process for rapid re-entry to medical services for suspected recurrence.

Communication

The lead clinician's responsibilities include:

- explaining the treatment summary and follow-up care plan to the patient and/or carer
- informing the patient and/or carer about secondary prevention and healthy living
- discussing the follow-up care plan with the patient's GP.

Checklist

- Treatment and follow-up summary provided to the patient and/or carer and the patient's GP
- Supportive care needs assessment completed and recorded, and referrals to allied health services actioned as required
- Patient-reported outcome measures recorded

Step 6: Managing recurrent, residual or metastatic disease

Detection

Most residual local, recurrent or metastatic disease will be detected via monitoring, routine follow-up or by the patient presenting with symptoms.

Treatment

Evaluate each patient for whether referral to the original multidisciplinary team is appropriate. Treatment will depend on the location and extent of disease, previous management and the patient's preferences.

Advance care planning

Advance care planning is important for all patients but especially those with advanced disease. It allows them to plan for their future health and personal

care by thinking about their values and preferences. This can guide future treatment if the patient is unable to speak for themselves.

Survivorship and palliative care

Survivorship and palliative care should be addressed and offered early. Early referral to palliative care can improve quality of life and in some cases survival. Referral should be based on need, not prognosis.

Communication

The lead clinician and team's responsibilities include:

- explaining the treatment intent, likely outcomes and side effects to the patient and/or carer and the patient's GP.

Checklist

- Treatment intent, likely outcomes and side effects explained to the patient and/or carer and the patient's GP
- Supportive care needs assessment completed and recorded, and referrals to allied health services actioned as required
- Advance care planning discussed with the patient and/or carer
- Patient referred to palliative care if appropriate
- Routine follow-up visits scheduled

Step 7: End-of-life care

Palliative care

Consider a referral to palliative care. Ensure an advance care directive is in place.

Communication

The lead clinician's responsibilities include:

- being open about the prognosis and discussing palliative care options with the patient
- establishing transition plans to ensure the patient's needs and goals are considered in the appropriate environment.

Checklist

- Supportive care needs assessment completed and recorded, and referrals to allied health services actioned as required
- Patient referred to palliative care
- Advance care directive in place

Visit our guides to best cancer care webpage <www.cancercareguides.org.au> for consumer guides. Visit our OCP webpage <www.cancer.org.au/OCP> for the optimal care pathway and instructions on how to import these guides into your GP software.