



CASE STUDY 20:

Exploring the Australian Government's new National Lung Cancer Screening program using three case studies

Case 1: A 48-year-old patient has heard about the new lung cancer screening program. He has been a heavy cigarette smoker for most of his life, and has quit in the past year with the help of his regular GP. He would like to get screened for lung cancer.

The GP reviews his history and congratulates him on his smoking cessation. He calculates that the patient has an over-30 pack-year smoking history, and has no symptoms suggestive for lung cancer.

However, the patient is not eligible for the current screening program, because it is for people aged between 50 and 70. The GP explains this, and at the same time ensures that the patient is up to date with his bowel cancer screening, which commences at age 45. The patient is up to date with his other health checks. He adds a recall in the practice software for this patient when they turn 50.

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Case 2. A 59-year-old patient presenting for repeat scripts was identified by his GP as a potential candidate for the new lung cancer screening program.

The GP consulted the [lung cancer screening page](#) on HealthPathways Melbourne to check eligibility and suitability criteria.

4. Assess the patient's [eligibility](#) for baseline (first) lung cancer screening.

Eligibility

- Aged 50 to 70 years, and
- 30 [pack year](#) tobacco cigarette smoking history (includes packaged cigarettes and roll-your-own cigarettes – it does not include other forms of tobacco or nicotine smoking or consumption, such as vaping), and
- Currently smoking or quit in the last 10 years, and
- No signs or symptoms suggestive of lung cancer. See also Cancer Australia – [Investigating Symptoms of Lung Cancer](#)

6. If eligible for screening, assess the patient's [suitability for low-dose CT scan of the chest](#).

Suitability for low-dose CT scan of the chest

The patient:

- can lie flat for a minimum of 5 minutes and preferably be able to hold their hands above their head.
- has not had a symptomatic lung infection within the last 12 weeks. Delay the scan if this is the case.
- has not had a full CT of the chest within the last 12 months, or have one planned in the next 3 months

The patient fitted the 50 to 70 age range, was asymptomatic, and was actively still smoking. The GP used a calculator to arrive at an over-30 pack-year history.

The GP had a discussion with the patient about the importance of smoking cessation using the [HealthPathways Melbourne smoking and vaping cessation page](#) as an aid.

Noting that the patient was suitable to get a low-dose CT chest scan, he brought up the subject of the screening program, including the likely outcomes, using the [HealthPathways Melbourne page](#) for discussion points and patient handouts. He emphasised that the process involved going to a participating radiology provider, and that the scan would be free for him.

8. Check the [patient's understanding](#) of the choice of lung cancer screening.

Patient's understanding of the choice of lung cancer screening

- Ensure shared decision-making by providing accurate and clear [information about the screening program](#).
- Help the patient to understand that a choice to screen for lung cancer exists.
- Inform the patient about their options.
- Support the patient to decide [if screening is right for them](#)

The decision was made to proceed with the scan. The GP enrolled the patient in the NLCSP via the National Cancer Screening Register (NCSR) and requested the low-dose CT scan using a [program-specific request form](#) and informing the patient about the [local participating radiology services](#).

A week later the patient returned for his results. The report stated that he was in a 'very low risk' category. He was advised that he would continue in the screening program, with his next CT scan due in two years.

A recall for this was added into the medical software to supplement the NCSR one that will go directly to the patient.

The report also noted that he had an additional finding of a 1.5 centimetre liver lesion and recommended a liver ultrasound. The GP arranged this and also reviewed the [HealthPathways Melbourne incidental liver lesions page](#).

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7. If [additional actionable findings](#) are included in the structured clinical radiology report, re-assess the patient and make appropriate referrals according to relevant guidelines.

Additional actionable findings

See Royal Australian and New Zealand College of Radiologists – [NLCSP Additional Findings Guidelines](#).

- [Lungs](#)
- [Pleura](#)
- [Mediastinum](#)
- [Cardiovascular](#)
- [Abdomen](#)
- [Breast](#)
- [Thyroid](#)
- [Bone](#)

Case 3. The same GP had also referred an eligible 55-year-old patient for a low-dose chest CT scan under the lung cancer screening program.

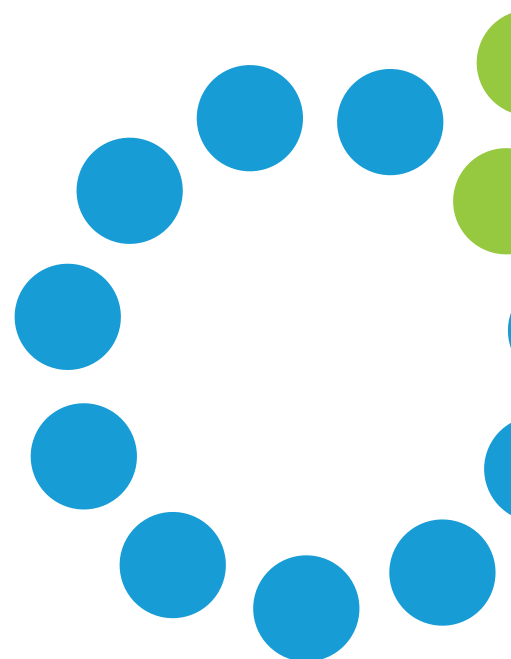
The patient had also returned for his results. They revealed 'moderate risk' findings.

The GP explains this to the patient, saying it means there have been findings that need to be monitored more frequently.

He provides the patient with a request form for another CT scan to be completed in three months. He adds a recall into the medical software as well.

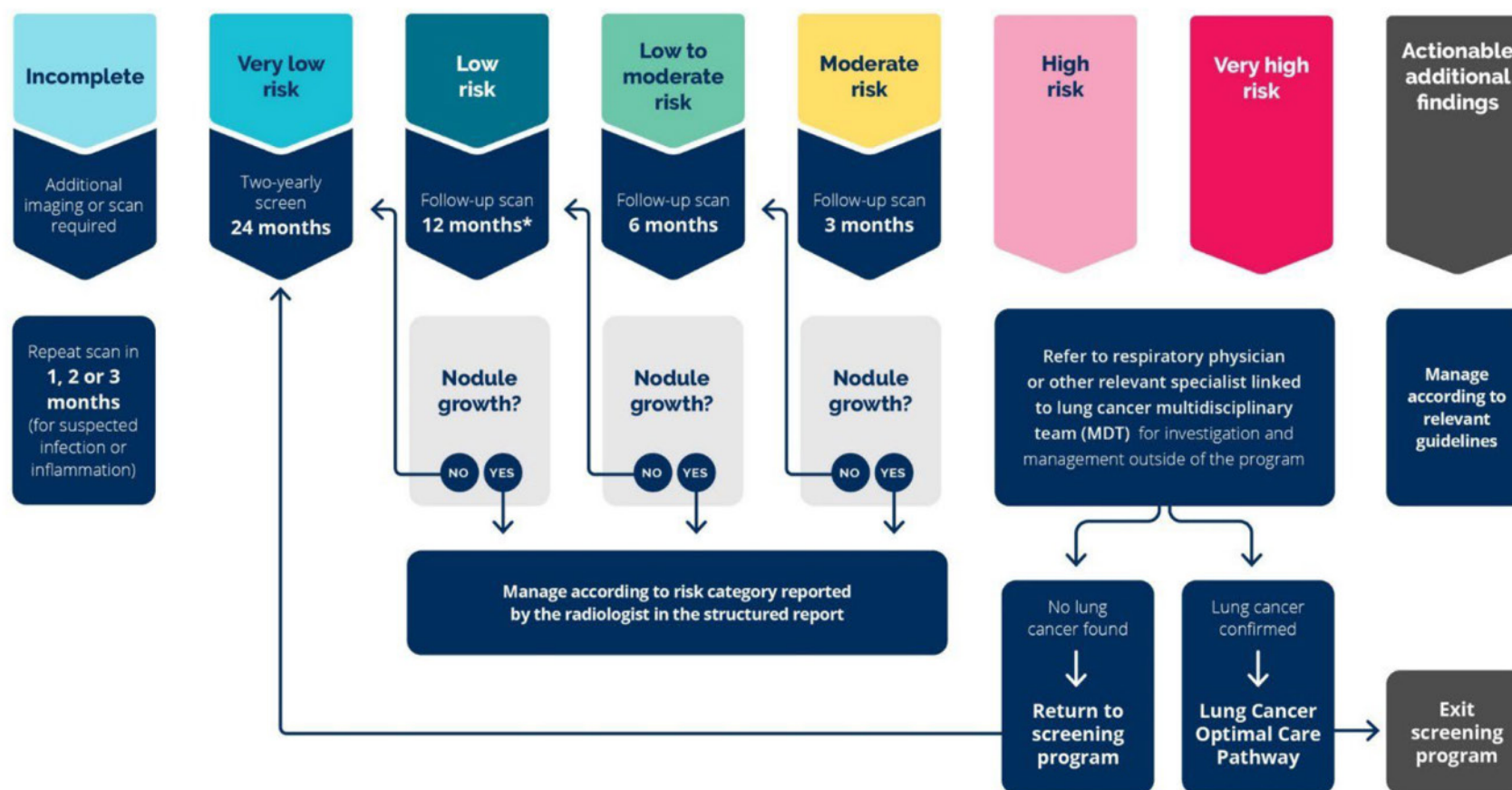
Three months later there has been growth of the nodule and the report now states that the findings are 'high risk'.

The GP explains that this means that there is a higher risk of lung cancer. Using the [HealthPathways Melbourne lung cancer screening services page](#) to find a local respiratory physician linked to a lung cancer multidisciplinary team (MDT), the GP refers the patient for further investigation and management.



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Simplified NLCSP Nodule Management Protocol flowchart



*Low risk participants require two 12 month scans before extending to 24 months.

Department of Health on behalf of the Commonwealth of Australia.