Lung Cancer Screening enquiry – consultation paper

On 1 August 2019, the Minister for Health, the Hon. Greg Hunt MP, invited Cancer Australia to conduct an enquiry into the prospects, process and delivery of a national lung cancer screening program for people at high risk of lung cancer in Australia.

Cancer Australia is seeking input and submissions from all Australians with an interest in lung cancer to help inform the enquiry.

Consultation paper

This consultation paper is for stakeholders who wish to provide input to the Lung Cancer Screening enquiry (the enquiry) through the Lung Cancer Screening enquiry Consultation Hub. It includes information about why the enquiry is being held, describes the policy context and provides an overview of the proposed approach to the enquiry and the issues under consideration in design of a possible national lung cancer screening program for Australia.

Why is the enquiry being held?

The enquiry is being held to investigate the feasibility of a national lung cancer screening program for people at high risk of lung cancer in Australia. Cancer Australia will submit a report to the Minister for Health on the prospects, process and delivery of such a program.

The enquiry recognises the need for continuing effort to reduce deaths from lung cancer in Australia. Lung cancer is a common cancer in Australian men and women and the leading cause of cancer-related deaths in Australia.

More than half of all cases of lung cancer are diagnosed at an advanced stage, when the likelihood of effective treatment is lower. Early detection and treatment of lung cancer is critical to improve outcomes.

Ongoing international research is assessing the feasibility of lung cancer screening with low-dose CT scanning as a way of finding lung cancer at an earlier stage. The enquiry provides an opportunity to examine the potential contribution that screening of

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Lung cancer in Australia

- In 2019, 12,817 people are estimated to be diagnosed with lung cancer in Australia (8.9% of all new cancer cases)
- In 2019, 9,034 people are estimated to die from lung cancer (18.1% of all cancer-related deaths)
- Five-year relative survival (2011-2015) for lung cancer is low compared to all cancers combined (17.4% vs 68.9%).

Cancer Australia 2019
people at high risk of lung cancer could make to reducing deaths from lung cancer in Australia.

Policy context

Population-based cancer screening is a key component of the Australian Government’s 10-year National Preventive Health Strategy. The Strategy is designed to keep people healthier and out of hospital by providing a better balance between prevention and treatment of health conditions (Department of Health 2019).

The Australian Government currently funds three well-established population-based cancer screening programs. National cancer screening programs are available for breast, cervical and bowel cancers and are offered to all individuals in defined target groups based on evidence of greatest benefit (Department of Health 2018).

What will the enquiry consider?

The enquiry will focus on ‘targeted’ screening for lung cancer in Australia. Targeted screening is defined as ‘screening of selected high-risk groups’ (Department of Health 2018). International clinical trials of lung cancer screening have focused on lung cancer screening with low-dose CT of high-risk groups such as current and former cigarette smokers. In the Australian context, high-risk groups include Aboriginal and Torres Strait Islander people and population groups who could benefit most from lung cancer screening for reasons such as remoteness, language, culture, age or mobility.

The enquiry will review the potential benefits and harms of lung cancer screening for Australians at high risk of lung cancer and the implications of such a program for the Australian health system. This will include consideration of:

- current and projected incidence and burden of lung cancer in Australia
- potential benefits and harms of lung cancer screening
- population[s] who could benefit most from lung cancer screening (who would be the focus population for a lung cancer screening program)
- the clinical pathway for lung cancer screening and assessment and the workforce and infrastructure to support the pathway
- use of technology
- cost effectiveness of lung cancer screening for people at high risk of lung cancer in Australia
- methods for recruitment and access to lung cancer screening for identified population groups
- communication mechanisms/means for the community, screening participants and health professionals.

In addition to considering the process for lung cancer screening, the enquiry will consider patient-related issues, such as stigma, that may affect participation in a lung cancer screening program.

The enquiry will also consider the critical role of research in improving health care treatment and outcomes, and ways to incorporate new and emerging evidence into the program over time.
Approach to the enquiry

The enquiry involves three main phases (see Figure 1).

Figure 1: Overview of the approach to the national Lung Cancer Screening enquiry

**Prospects**

The **prospects phase** will consider the prospects for a national screening program for people at high risk of lung cancer in Australia. This will include a review of national and international evidence on:

- benefits and harms of lung cancer screening, including effects of screening on mortality and morbidity, opportunities for prevention and early diagnosis
- consideration of the potential for ‘overdiagnosis’, and risks associated with radiation exposure due to lung cancer screening tests
- cost-effectiveness of lung cancer screening, including recognition of the limitations of published evidence
- the target population for a national lung cancer screening program, including groups at high risk of lung cancer and the timing of screening.

**Process**

The **process phase** will consider the design of a national lung cancer screening program for people at high risk of lung cancer in Australia and will include an economic evaluation of such a program for the Australian setting. This phase will investigate elements such as:

- the screening and assessment pathway: including recruitment, role of primary care, screening method, management of lung nodules identified through screening, processes for
patient follow-up and recall, identification and management of incidental findings, inclusion of smoking cessation strategies
• program considerations for populations who could benefit most from lung cancer screening
• workforce roles and responsibilities and requirements
• infrastructure and technology requirements
• quality assurance mechanisms
• data collection processes, including a framework for monitoring and evaluation
• economic analysis, including modelling of target populations, screening intervals and treatments
• communication for community, screening participants and health professionals.

Delivery

The delivery phase will consider how a national screening program for people at high risk of lung cancer could be implemented effectively in Australia. This phase will consider issues such as:

• governance requirements
• mechanisms for workforce training and capacity building
• funding and payment mechanisms
• key frameworks and strategies such as:
  • data collection framework
  • evaluation and monitoring framework
  • quality assurance framework
  • communication strategy
  • ongoing research strategy to incorporate emerging research findings.

Stakeholder engagement

Cancer Australia is committed to ensuring an inclusive and consultative process across all phases of the enquiry. Stakeholder engagement will include:

• public consultation via the Lung Cancer Screening enquiry Consultation Hub
• workshops with health professionals
• workshops with key communities, including Aboriginal and Torres Strait Islander health professionals and communities.

References
