Lung cancer screening

Burden of lung cancer

International and national screening trials

Pilot programs and implementation research

Stakeholder support

Invitation to conduct Lung Cancer Screening enquiry (LCSE)

LCSE undertaken 2019-2020

Report on the LCSE to Minister

Consultation of the LCSE report

Implementation considerations

Budget announcement (2021)

Early design and feasibility assessment for a potential program
Lung Cancer Screening enquiry
August 2019 – October 2020

- Evidence review
- Lung cancer risk factors
- Public Consultation summary
- Stakeholder consultation
- Aboriginal and Torres Strait Islander Community and Health Professionals consultations
- Multi-Agency Data Integration Project (MADIP) data
- Screening and assessment pathway & elements to operationalise
- Economic evaluation
- Program framework
Lung Cancer Screening enquiry
August 2019 – October 2020

In the first 10yrs of a screening program

- 70% of all screen-detected lung cancers would be diagnosed at an early stage
- Over 12,000 deaths would be prevented
- Up to 50,000 quality adjusted life years would be gained

Stakeholder Engagement

- Cancer Australia Governance groups
- Peak national consumer and clinical bodies
- Aboriginal and Torres Strait Islander groups
- LCSE Stakeholder workshop attendees
- State and Territory Health Departments
- Public consultation – stakeholder groups

Implementation considerations for a potential lung cancer screening program

Current phase: 2021/22 Lung Cancer Screening budget measure
Lung Cancer Screening Measure

Current 2021/22 phase of work (building on the LCSE 2019/20):

Early scoping and feasibility assessment of a potential lung cancer screening program

Further engagement and collaboration with key stakeholders

Focus on feasibility considerations
- Screening access and eligibility
- Workforce
- Infrastructure
- Information and communications
- Data and quality assurance

Consideration of Information and Communications Technology (ICT) requirements
- Lung Cancer Screening register
## Streams of work

<table>
<thead>
<tr>
<th>Workforce considerations</th>
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<tr>
<td>- Workforce requirements including roles and responsibilities and training and education requirements</td>
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<td>- Modelling impact assessment</td>
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<tr>
<th>Screening infrastructure</th>
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<tr>
<td>- Equipment, technology, software requirements</td>
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<td>- Service delivery capability and capacity</td>
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<th>State and Territory engagement</th>
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<td>- Understanding any downstream impacts for their health systems</td>
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<th>Co-design with Aboriginal and Torres Strait Islander people</th>
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<td>- Key principles and approach to co-design</td>
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<tr>
<td>- Culturally safe service delivery</td>
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<td>- Indigenous data sovereignty</td>
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<td>- Information and communication materials</td>
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<tr>
<th>Scoping of program tools, guidance, information and communication</th>
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<tr>
<td>- Identify tools, guidance, information and communications needed</td>
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<td>- Scope specifications and requirements for the future design, development and integration of program resources</td>
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<th>Program quality assurance and data governance</th>
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<tr>
<td>- Key performance indicators (KPIs) and data required to monitor success</td>
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<tr>
<td>- Data governance framework design considerations</td>
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<td>- High-level quality assurance framework</td>
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Principles

- Accessible
- Agile
- Value-based
- Person-centred
- Culturally Safe
- Informed by Best Practice
- Research & Data Driven
- Evidence-based
Policy components

Screening Program Governance
- Located within existing health setting
- Administered by Australian Government

Screening Program Population Cohort
- 55-74 years (50-74 Indigenous)
- Current/former smokers

Entry points into risk assessment
- Self-referral
- Facilitated
- Opportunistic
- Organised

Risk assessment
- PLCOm2012

Screening Eligible Population
- 55-74 years (50-74 Indigenous)
- PLCOm2012 6-year risk score ≥ 1.5%

Screening intervention
- Low-dose computed tomography (LDCT)
- Volumetric analysis
- 2-yearly interval

LDCT reporting
- Structured reporting
- Computer-aided diagnosis (CAD)
- Nodule management protocols PanCan/LungRADS

Screening intervention assessment
- Timing assessment – protocol
- Results sent to register

Screening participant reminder and follow-up
- Issued by register
- Preferred method of communication

Screening Register
- Collection/storage
- Sharing/analytics
- Correspondence/management

Screening intervention infrastructure
- Private/public
- Fixed/mobile CT

Principles:
- Accessible
- Agile
- Value-based
- Person-centred
- Culturally Safe for Aboriginal and Torres Strait Islander people
- Informed by best practice
- Evidence-based
- Research & data driven
Screening and Assessment Pathway

Lung Cancer Screening and Assessment Pathway

**Identification**
- People aged 55 to 74 years
- Aboriginal & Torres Strait Islander people aged 50 to 74 years
- Current or former smoker

**Risk Assessment**
- PLCO model 12-year risk score ≥1.5%
- Assessment of performance status
- Check eligibility criteria, provide information to enable shared decision-making & informed consent

**LDCT**

- No Significant Findings
- Low Malignancy Risk
- Moderate Malignancy Risk
- High Malignancy Risk
- Suspected Lung Cancer
  - Mass lesion of non-infectious aetiology, mediastinal or hilar lymphadenopathy
- Incidental Finding
  - Previously undiagnosed condition(s)

**Smoking Cessation**

**Low Risk or Ineligible (including symptomatic)**
Refer for appropriate clinical management (as applicable)

**LDCT 24 months**
- No
- Interval growth

**LDCT 32 months**
- No
- Interval growth

**LDCT 6 months**
- No
- Interval growth

**Rapid access to specialist linked to a MDT**
(Clinical assessment and appropriate follow-up)

**Manage according to relevant clinical guidelines**

*If interval growth, consider biopsy or PET after appropriate clinical assessment.*
Screening and Assessment Pathway

Lung Cancer Screening Health Workforce Roles

Source of Workforce Demand

~ 89% will receive a scan on a biennial basis and no abnormalities found

~ 11% predicted to have a low risk malignancy or above

Referral to a specialist linked to an MDT