



National Lung Cancer Screening Program

QUALITY FRAMEWORK



Journey of Impact - Artwork created by Wodi Wodi Walbunja Artist and Creative Cultural Lead, Lauren Henry from Yirra Miya First Nations Creative Agency.

At the centre of the artwork is a Yarning Circle which represents the safe space that the NLCSP hold and their invitation to community to be at the core of this space. Around this Yarning Circle are Meeting Places that represent the diverse communities that this program and framework will impact. The placement of these Meeting Places and the journey lines connecting them show the intersection between these communities and are visually placed to look like lungs. Within the space of the lungs, there are stars to represent the Ancestors of First Nations lands across this nation, and connected watering holes to represent how, through health and wellbeing, we are all connected. In the top right and bottom left corner are connected watering holes or water ways to represent the process of obtaining and sharing knowledge. On the bottom right and top left-hand corners of the artwork are Country lines to represent the different lands across this nation that will be impacted by the work. In both sections of Country lines are different animal tracks to represent the importance of the health of our lands and how this so delicately intertwines in a holistic approach to health when working with First Nations people. The kangaroo tracks represent moving forwards (as kangaroos cannot move backwards), that each small step forward is the right step in helping close the gap of inequality in the health care system faced by diverse backgrounds. It also acknowledges NLCSP's journey forward.

Acknowledgement of Country

Department of Health, Disability and Ageing acknowledges Aboriginal and Torres Strait Islander people as the Traditional Custodians of Country throughout Australia. We pay our respects to Elders, past and present.

We celebrate the ongoing connections of Aboriginal and Torres Strait Islander peoples to Country, culture, community, family and tradition and recognise these as integral to health, healing and wellbeing.

Department of Health, Disability and Ageing acknowledges the great diversity among Aboriginal and Torres Strait Islander peoples, and the contribution of the many voices, knowledge systems and experiences that guide all efforts to create a culturally safe and responsive cancer system that is equitable to all.

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INTRODUCTION

The National Lung Cancer Screening Program (NLCSP) is a targeted screening program which aims to reduce the morbidity and mortality associated with lung cancer through early detection using low-dose computed tomography (low-dose CT). By identifying lung cancer earlier, the program enables timely access to evidence-based treatment.

Screening is offered every two years to high-risk asymptomatic individuals who are aged 50 to 70 years who have a history of tobacco cigarette smoking of at least 30 pack years or had quit within the previous 10 years. A central focus of the NLCSP is to achieve equitable outcomes for all Australians, particularly those disproportionately impacted by lung cancer. The NLCSP is strongly committed to supporting identified priority populations, including:

- Aboriginal and/or Torres Strait Islander peoples
- people living in rural and remote areas
- people from culturally and linguistically diverse (CALD) backgrounds
- people with disability
- people with mental illness, and
- members of the Lesbian, Gay, Bisexual, Transgender, Intersex, Queer and Asexual (LGBTIQA+) communities.

The NLCSP delivery, in accordance with the <u>Australian Population Based Screening Framework</u>, is supported by this Quality Framework. The NLCSP Quality Framework provides a comprehensive quality management system for the NLCSP to achieve high standards of program management, service delivery, monitoring and evaluation. This includes but is not limited to:

- standards and processes for monitoring all aspects of the screening and assessment pathway, from enrolment to follow up, to achieve optimal outcomes and reduce morbidity and mortality from lung cancer, and
- clearly defined principles, roles and responsibilities for all stakeholders involved in the NLCSP including healthcare providers, radiology providers and participants.

By implementing this Quality Framework, the NLCSP will maximise its effectiveness, minimise potential harms, contribute to reductions in the costs associated with lung cancer treatment, and most importantly improve health outcomes, particularly for identified priority populations.

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BACKGROUND

Lung cancer is a significant public health challenge in Australia, with the number of new cases continuing to rise each year. It remains the leading cause of cancer-related death and has the lowest survival rate among the five most common cancers, with a five-year survival of just 26% (2016-2020). Improving early detection and access to timely, evidence based-based treatment is critical to enhancing health outcomes and quality of life for people affected by lung cancer. A strong and growing body of evidence supports the use of targeted screening with low-dose CT, which has been shown to reduce mortality among high-risk populations. ¹

In response, the Australian Government initiated a series of actions to explore the feasibility of a national lung cancer screening program. In 2019, the Australian Government requested Cancer Australia to lead an enquiry into the potential lung cancer screening program. The findings were published in the Lung Cancer Screening Enquiry (LCSE) in October 2020. Building on this work, funding was allocated in the 2021-22 Budget to further scope and assess implementation feasibility. A Summary Report on the feasibility of a potential lung cancer screening program was published in May 2023.

On 2 May 2023, the <u>Australian Government announced the investment of \$264 million</u> to establish the NLCSP, which officially launched on 1 July 2025. This initiative aligns with the Government's commitment to reducing tobacco-related harms and the <u>National Tobacco Strategy 2023-2030</u>. The decision to establish the NLCSP was informed by Cancer Australia's LCSE report, the feasibility work, and advice from the Medical Services Advisory Committee (MSAC). Legislative <u>amendments to the National Cancer Screening Act 2016</u>, enabled the inclusion of lung cancer as a 'designated cancer' in the National Cancer Screening Register (NCSR).

The Commonwealth Department of Health, Disability and Ageing (the Department) partnered with the National Aboriginal Community Controlled Health Organisation (NACCHO) and Cancer Australia to implement the program. Co-design with Aboriginal and Torres Strait Islander peoples and NACCHO ensures the NLCSP is equitable, culturally safe

¹ Oudkerk M, Liu S, Heuvelmans M, Walter J, Field J. Lung cancer LDCT screening and mortality reduction - evidence, pitfalls and future perspectives. Nature Reviews Clinical Oncology [Internet]. 2021 Mar;18(3):135-151. Available from: https://pubmed.ncbi.nlm.nih.gov/33046839/.

and accessible for Aboriginal and Torres Strait Islander peoples. Further actions have been taken to ensure safety and accessibility for other identified priority populations.

The NLCSP is underpinned by:

- National Lung Cancer Screening Policy (Appendix A)
- NLCSP Screening and Assessment Pathway (Appendix B)
- NLCSP Nodule Management Protocol
- NLCSP-specific Medicare Benefits Schedule (MBS) items <u>57410</u> and <u>57413</u>
- NCSR
- NCSR Data Governance Framework
- NCSR Data access and release policy
- NLCSP Program Guidelines
- NLCSP Quality Framework (this document)
- NLCSP Data Dictionary v1.0
- NLCSP Performance Indicators (<u>Appendix C</u>)
- Population Based Screening Framework
- National Safety and Quality Health Service Standards (NSQHS)
- Australian Cancer Plan
- National Agreement on Closing the Gap
- Australian Charter of Healthcare Rights
- <u>National Registration and Accreditation Scheme</u> administered by the Australian Health Practitioner Regulation Agency (AHPRA) and the 15 National Boards and Health Practitioner Regulation National Law
- <u>Diagnostic Imaging Accreditation Scheme</u> (DIAS)
- inclusion of low-dose CT scans to Australia's <u>National Diagnostic Reference Level</u> <u>Service</u> (NDRLS)
- Royal Australian College of General Practitioners (RACGP) <u>Standards of General Practice</u> (5th edition) and general practice accreditation
- National Cancer Screening Register Act 2016
- Health Insurance Act 1973

QUALITY FRAMEWORK

The NLCSP aims to reduce the morbidity and mortality associated with lung cancer by promoting lung cancer screening participation to high-risk eligible people who are asymptomatic. It is important that each step of the lung cancer screening and assessment pathway, from recruitment through to referral to relevant specialists for screen-detected abnormalities, is supported by high-quality services so that the benefits of screening outweigh any potential risks or harms.

The Quality Framework outlines the principles for the NLCSP and how they should be applied as well as the requirements or actions that ensure service providers deliver safe and high-quality services. Service providers across the screening and assessment pathway (Appendix B) include: ²

- Requesting practitioners
- Radiology providers³
- Healthcare providers without authorisation to request a low-dose CT scan
- Practice staff in primary care
- Health support workers
- Respiratory Physicians linked to a lung cancer multidisciplinary team (MDT)⁴
- Commonwealth and state and territory governments managing the NLCSP.

The Quality Framework does not cover downstream services or service providers that fall outside the scope of the NLCSP, this includes the clinical investigation of screen-detected abnormalities and the diagnosis of lung cancer and other conditions.

² Service provider categories, where possible, align with the <u>NLCSP Program Guidelines</u> and are defined in the Glossary.

³ Radiology providers may offer lung cancer screening services through either mobile or fixed facilities.

⁴ This may include other specialists with relevant expertise who are linked with a lung cancer MDT.

Principles of quality for the NLCSP

These principles provide the basis for achieving a high-quality lung cancer screening program and have been informed by the Australian Safety and Quality Framework for Health Care and the Australian Population Based Screening Framework.

Table 1: Principles of quality for the NLCSP and relevant NLCSP policy objectives

F	Principle	Relevant NLCSP policy objectives
1.	The NLCSP promotes ethical and person-centred practice.	 Provide lung cancer screening that is equitable, accessible, culturally safe and appropriate for the target population.
2.	The NLCSP is evidence-based, informed by research and guided by best practice methods, processes and techniques.	Provide quality program management, monitoring, evaluation and accountability.
3.	The NLCSP is designed to protect the safety of participants.	 Minimise the harms of lung cancer screening. Provide safe and effective services in accordance with the Quality Framework. Provide quality program management, monitoring, evaluation, and accountability.
4.	The benefits of lung cancer screening in the target population must outweigh the risks and harms.	 Reduce mortality and morbidity attributable to lung cancer. Maximise the proportion of participants who are screened every 2 years. Minimise the harms of lung cancer screening. Provide safe and effective services in accordance with the Quality Framework.
5.	The NLCSP aims to achieve equitable access to screening services to achieve equitable health outcomes for all eligible participants, irrespective of their geographic, socioeconomic, age, sex, gender, disability, or cultural background.	 Maximise the proportion of participants who are screened every 2 years. Provide lung cancer screening that is equitable, accessible, culturally safe and appropriate for the target population.

Р	rinciple	Relevant NLCSP policy objectives
6.	All service providers across the screening and assessment pathway meet relevant accreditation and registration standards and commit to delivering quality services, participate in continuing professional development and engage in quality improvement activities.	Provide safe and effective services in accordance with the Quality Framework.
7.	Continuous quality improvement is supported at a national, state and territory, and provider level.	 Provide safe and effective services in accordance with the Quality Framework. Provide quality program management, monitoring, evaluation, and accountability.
8.	The governance structure will support the NLCSP to provide safe, effective, and cost-effective services.	 Provide safe and effective services in accordance with the Quality Framework. Provide quality program management, monitoring, evaluation, and accountability.
9.	The performance and outcomes of the NLCSP are monitored, evaluated and continuously improved.	 Maximise the proportion of participants who are screened every 2 years. Reduce mortality and morbidity attributable to lung cancer. Provide quality program management, monitoring, evaluation, and accountability. Provide lung cancer screening that is equitable, accessible, culturally safe and appropriate for the target population.
10.	Quality and safety are monitored across the entire screening pathway.	 Provide safe and effective services in accordance with the Quality Framework. Provide quality program management, monitoring, evaluation, and accountability.

Table 2 (on pages 7 -22) shows the principles of quality for the NLCSP and how they are applied.

 Table 2: Principles of quality for the NLCSP and how they are applied

Principle	How the principles are applied within the NLCSP	Who is responsible?
 The NLCSP promotes ethical and person- centred practice. 	Lung cancer screening services are delivered in accordance with the highest standards of professional behaviour and ethical conduct, ensuring participants are involved as partners in decisions and planning about their care.	• Healthcare providers ⁵
	A participant's experience will be person-centred, non-stigmatising, culturally safe, respectful and inclusive to their needs.	 Healthcare providers Radiology providers Practice staff in primary care Health support workers Health services
	Healthcare providers will engage potential participants in shared decision-making, in accordance with the NLCSP Program Guidelines, to enable an informed choice about participating in lung cancer screening.	Healthcare providers
	Healthcare providers will obtain a participant's informed consent before each examination, investigation, or referral along the NLCSP screening and assessment pathway in accordance with the relevant guidelines. (Informed consent	Healthcare providers

⁵ Healthcare providers include requesting practitioners, radiology providers, healthcare providers without authorisation to request a low-dose CT and respiratory physicians.

Principle	How the principles are applied within the NLCSP	Who is responsible?
	does not have to be in writing.) ⁶	
	The privacy and confidentiality of participants is maintained according to relevant legislation at all times. ⁷	All program stakeholders
	Lung cancer screening services should be delivered with empathy for, and understanding of, nicotine dependence. Healthcare providers and services should be aware of the barriers and reasons that may impact participation in screening. They should actively utilise available resources and support strategies to address these barriers and promote informed, equitable access to the NLCSP.	 Health services Health care providers Health support workers Practice staff in primary care
	Information resources are available to participants regarding the screening test, screen-detected abnormalities, and appropriate follow- up actions.	 Commonwealth, state and territory governments managing the NLCSP⁸ Peak bodies Healthcare providers Health support workers Practice staff in primary care

⁶ The Australian Health Practitioner Regulation Agency requires health providers to adhere to relevant Board guidelines on code of conduct including obtaining informed consent from patients. The Diagnostic Imaging Accreditation Scheme includes Standard 2.2: Consumer Consent and Information Standard.

⁷ Adherence to current federal and state legislation on privacy by all providers in the screening pathway.

⁸ The NLCSP program advisory group is one of 2 key governance groups for the NLCSP and comprises representatives from all state and territory health departments or portfolios. It provides a formal avenue for consultation between the Commonwealth and state and territory agencies.

Principle	How the principles are applied within the NLCSP	Who is responsible?
	Requesting practitioners should notify participants of their lung cancer screening results sensitively and recommended next steps in an appropriate and timely manner, in accordance with the NLCSP Program Guidelines.	Requesting practitioners
	In accordance with the NLCSP Program Guidelines, requesting practitioners or their delegate, where appropriate, are responsible for: • facilitating enrolment of participants in the NLCSP • checking suitability for all low-dose CT scans • providing participants with a low-dose CT request form • communicating results to participants when required • advising participants of any necessary follow-up steps, including follow-up scans or referral for further investigation. ⁹	 Requesting practitioners Practice staff in primary care (enrol participant as a delegate)
	Healthcare providers offer smoking cessation support to all	Requesting practitioners

⁹ If a participant has a high risk or very high risk finding, the requesting practitioner should refer them to a respiratory physician (or other specialist with relevant expertise) who are linked to a lung cancer MDT.

Pr	inciple	How the principles are applied within the NLCSP	Who is responsible?
		potential participants across the lung cancer screening and assessment pathway in accordance with NLCSP Program Guidelines.	 Healthcare providers without authorisation to request a low-dose CT Health support workers
2.	The NLCSP is evidence-based and informed by research and best practice guidelines.	The NLCSP is developed from MSAC recommendations based on an independent evaluation of current evidence and supported through the listing of appropriate NLCSP-specific items on the MBS. ¹⁰	• Commonwealth
		Participants are appropriately supported or facilitated along the screening and assessment pathway in accordance with the NLCSP Nodule Management Protocol and the NLCSP Program Guidelines. ¹¹	 Commonwealth Requesting practitioners Health services Healthcare providers Practice staff in primary care Health support workers
		NLCSP policies and the NLCSP Program Guidelines are reviewed as new evidence, screening technologies, and management guidelines become available, and are communicated to relevant stakeholders to support consistent implementation.	• Commonwealth

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 $^{^{10}}$ NLCSP-specific radiological MBS items for low-dose CT scans, including mandatory reporting requirements, came into effect on 1 July 2025.

¹¹ The NLCSP Nodule Management Protocol is used to assess the risk of a lesion being lung cancer and recommend appropriate surveillance or referral for management.

Principle	How the principles are applied within the NLCSP	Who is responsible?
	Monitoring and evaluation should be informed by research and evidence and used in planning and management. Research should also be enabled to inform future activities.	 Commonwealth, state and territory governments managing the NLCSP NLCSP clinical advisory group Cancer and Population Screening (CAPS) Committee
3. The NLCSP is designed to protect the safety of participants.	The NCSR sends reminders to participants as they become due to rescreen, and if relevant notifications to contact the requesting practitioner for any required follow-up actions in accordance with the national-follow up protocols.	• Commonwealth
	The NCSR sends reminders to healthcare providers (or recorded primary healthcare provider) and participants, in accordance with the national follow-up protocols, when appropriate next steps become overdue.	• Commonwealth
	The NCSR maintains a record of all episodes of care required to support delivery of the NLCSP including screening and assessment (up to and including a diagnosis of lung cancer). 12	 Commonwealth Requesting practitioners Radiology providers Practice staff in primary care (as a delegate) Respiratory Physicians13

¹² The NCSR will maintain a record of all NLCSP participants. Eligible individuals may choose to opt-out of the NCSR, which also means opting-out of the NLCSP. These individuals can undergo low-dose CT scans claimed using the NLCSP-specific MBS items and are considered external screeners. The NCSR will not record new data for people who have opted-out; however, any existing data collected prior to opting out will be retained.

¹³ This may include other specialists with relevant expertise who are linked with a lung cancer MDT.

Principle	How the principles are applied within the NLCSP	Who is responsible?
		Pathology laboratories
	The NCSR provides the screening history of participants to healthcare providers (or recorded primary healthcare provider) to aid in clinical decision-making.	• Commonwealth
	In accordance with the NLCSP Program Guidelines, requesting practitioners or their delegate, where appropriate, are responsible for:	 Requesting practitioners Practice staff in primary care (as a delegate)
	 facilitating enrolment of participants in the NLCSP 	
	checking suitability for all low-dose CT scans	
	 providing participants with a low-dose CT request form 	
	 communicating results to participants when required 	
	advising participants of any necessary follow-up steps, including follow-up scans or referral for further investigation. ¹⁴	
	Radiographers performing low- dose CT scans for the NLCSP must refer to current Royal	Radiology providersRadiology services

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¹⁴ If a participant has a high risk or very high risk finding, the requesting practitioner should refer them to a respiratory physician (or other specialist with relevant expertise) who are linked to a lung cancer MDT.

Principle	How the principles are applied within the NLCSP	Who is responsible?
	Australian and New Zealand College of Radiologists (RANZCR) guidelines for appropriate low- dose CT acquisition. 15	
	Radiologists interpret and report scan findings in accordance with the NLCSP Nodule Management Protocol and the Structured Radiology Report format. Results must be submitted to the NCSR in line with the NCSR Rules 2017.	Radiology providers
	All radiology services providing Medicare-funded low-dose CT scans for the NLCSP must meet the requirements of the Diagnostic Imaging Accreditation Scheme Standards and the legislated requirements as set out in the Health Insurance (Diagnostic Imaging Services Table) Regulations (No. 2) 2020 made under the <i>Health Insurance Act 1973</i> .	Radiology services
	Once a participant with positive screening results is referred to a Respiratory Physician, they move from the screening to the assessment pathway. The responsible physician will	• Respiratory physicians ¹⁶

 $^{^{15}}$ Refer to current \underline{RANZCR} Low-dose CT Acquisition Guidelines for appropriate low-dose CT acquisition.

¹⁶ This may include other specialists with relevant expertise who are linked with a lung cancer multidisciplinary team.

Principle	How the principles are applied within the NLCSP	Who is responsible?
	determine if and when the individual can return to routine screening or support them to transition into a treatment pathway.	
4. The benefits of lung cancer screening in the target population must outweigh the harms.	The NLCSP is developed from MSAC recommendations based on an independent evaluation of current evidence and supported through the listing of NLCSP-specific items on the MBS. (aligned to the MSAC recommendations for program eligibility).	• Commonwealth
	Healthcare providers and services carry out lung cancer screening, including managing next steps and referral processes for further investigations and follow-up, in accordance with NLCSP policies and the NLCSP Program Guidelines.	 Commonwealth Health services Healthcare providers Practice staff in primary care Health support workers
	Healthcare providers' clinical decisions are evidence-based and informed by the NLCSP Program Guidelines and NLCSP Nodule Management Protocol.	Healthcare providers
	The benefits and harms of screening are assessed through monitoring of NLCSP Performance Indicators and Quality and Safety Standards; other investigations to support NLCSP operations are	 Commonwealth, state and territory governments managing the NLCSP NLCSP clinical advisory group CAPS Committee

Principle	How the principles are applied within the NLCSP	Who is responsible?
	undertaken to support quality improvement activities.	
5. The NLCSP aims to achieve equitable access to screening services for all eligible participants, irrespective of their geographic, socioeconomic, age, sex, gender, disability, or cultural	Active screening participant recruitment strategies are in place at the national, state and territory, Primary Health Network, and practice levels to encourage participation and improve equity of access in the NLCSP, including specific activities for under-screened and never-screened participant cohorts.	 Commonwealth state and territory governments Health services Healthcare providers Health support workers Practice staff in primary care Peak bodies¹⁷
background.	Patterns of participation are monitored where possible by age, sex, gender, state and territory of residence, remoteness area of residence, socioeconomic area of residence, Indigenous status and CALD variables to inform safety monitoring activities that target under-represented populations.	Commonwealth, state and territory governments managing the NLCSP
	Continued partnerships with relevant bodies to deliver tailored services and recruitment activities to meet the diverse needs of priority populations to support people	 Commonwealth, state and territory governments managing the NLCSP. Peak bodies

¹⁷ Peak bodies include organisations that represent and advocate for a particular sector, profession, or group at a national or jurisdictional level. This may include professional colleges or associations, advocacy organisations and federations or alliances.

Principle	How the principles are applied within the NLCSP	Who is responsible?
	to participate and engage in screening.	
	Support culturally informed practices and resources for all priority populations	 Commonwealth, state and territory governments managing the NLCSP Healthcare providers Health services Health support workers Practice staff in primary care Peak bodies
	Healthcare providers have access to, and utilise, appropriate web accessible resources to support effective program delivery, enhance participant understanding, and increase awareness of the stigma associated with lung cancer and barriers to screening.	 Commonwealth, state and territory governments managing the NLCSP. Healthcare providers Health support workers Practice staff in primary care
	Participants are offered access to interpreter services or teletypewriter (TTY) when required.	 Commonwealth, state and territory governments managing the NLCSP Healthcare providers Health services Health support workers Practice staff in primary care
7. All service providers across the screening and assessment pathway meet relevant accreditation and registration standards and commit to	Healthcare providers and services involved in lung cancer screening adhere to the recommendations and consider the practice points in the NLCSP Program Guidelines to ensure delivery is standardised across service providers and is safe, effective and high-quality.	 Health services Healthcare providers Health support workers Practice staff in primary care

Pr	inciple	How the principles are applied within the NLCSP	Who is responsible?
	delivering quality services, participate in continuing professional development and engage in quality	Healthcare providers maintain correct clinical practice to meet the standards reasonably expected by the public and peers and work within the limits of their skills and competence.	Healthcare providers
	improvement activities	Radiologists interpret and report scan findings in accordance with the NLCSP Nodule Management Protocol and the Structured Radiology Report format. Results are submitted to the NCSR in line with the NCSR Rules 2017 and communicated back to the requesting practitioner per usual practice.	Radiology providers
		Service providers participate in relevant external accreditation schemes and registration standards and monitor and evaluate their own performance to maintain and where needed improve the services they provide.	Health servicesHealthcare providersRadiology providers
8.	Continuous quality improvement is supported at a national, state and territory, and provider level	All stakeholders use the Quality Framework for the NLCSP for guidance on quality principles and requirements for delivery of the NLCSP.	All stakeholders
		Program management at national and state and territory levels includes a focus on continuous quality improvement through monitoring and addressing issues, safety issues,	 Commonwealth, state and territory governments managing the NLCSP CAPS Committee

Principle	How the principles are applied within the NLCSP	Who is responsible?
	trends and complaints and proactive identification of opportunities for improvement.	
	The Quality Framework is reviewed and updated as required. ¹⁸	Commonwealth
	Healthcare providers engage in relevant professional development and quality assurance activities.	Healthcare providersHealth services
9. The governance structure will support the NLCSP to provide safe, effective, and cost effective services.	The NLCSP structure provides effective leadership and oversight of the organised targeted approach to lung cancer screening across the NLCSP Screening and Assessment Pathway.	• Commonwealth
	The governance structure supports appropriate monitoring and evaluation so that NLCSP services are safe and effective.	Commonwealth, state and territory governments managing the NLCSP
	Health services delivering lung cancer screening services across the NLCSP Screening and Assessment Pathway have governance systems in place that actively manage service delivery to maximise safety and minimise risk.	• Health services

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 $^{^{18}}$ The Quality Framework will be subject to regular review by the Commonwealth with support from the NLCSP clinical advisory group, program advisory group and relevant stakeholders.

Principle	How the principles are applied within the NLCSP	Who is responsible?
	Health services identify and assess safety and risk at regular intervals and implement any identified needed change(s) to practice.	Health services
10. The performance and outcomes of the NLCSP are monitored, evaluated and continuously improved.	The NCSR provides timely reports and data to Commonwealth and state and territory governments including participation rates by all participants and specified demographic groups. This data collection enables monitoring and evaluation of the NLCSP and the development of targeted recruitment strategies, particularly for underrepresented populations.	
	The requesting practitioner ascertains the participant's Indigenous status, language spoken at home, and country of birth. These demographic data are recorded on the Eligibility and Enrolment form where possible.	Requesting practitioner
	Radiologists adhere to the NLCSP Structured Radiology Report format and report results to the NCSR. Reports are read and reported using the NLCSP Nodule Management Protocol.	Radiology providers
	Linkage of data across relevant systems enables comprehensive monitoring, supports program	 AIHW Commonwealth, state and territory governments managing the NLCSP

Principle	nciple How the principles are applied Who is responsible? within the NLCSP	
	evaluation, and facilitates continuous quality improvement.	
	The incidence and mortality from lung cancer are monitored by the NLCSP and reported annually in accordance with the National Performance Indicators.	 AIHW Commonwealth, state and territory governments managing the NLCSP
	Monitoring and evaluation are undertaken in a timely manner to ensure the ongoing quality and safety of the NLCSP.	Commonwealth, state and territory governments managing the NLCSP
	A current NLCSP Data Dictionary is available for consistency in national reporting.	 Commonwealth, state and territory governments managing the NLCSP AIHW
	NLCSP Performance Indicators are reported annually and available to the public.	CommonwealthAIHW
	The NCSR provides timely high- quality data, reports, and information to enable research, monitoring, and evaluation activities.	• Commonwealth
11. Quality and safety are monitored across the entire screening pathway.	Quality and safety measures and performance indicators are regularly monitored in accordance with the Quality Framework and the NLCSP Performance Indicators.	Commonwealth, state and territory governments managing the NLCSP
	Safety monitoring activities are undertaken to promote the safety of participants.	Commonwealth, state and territory governments managing the NLCSP
	The NLCSP Quality Framework is maintained to guide and monitor	Commonwealth

Principle	How the principles are applied within the NLCSP	Who is responsible?
	the delivery of lung cancer screening services that promote safety, effectiveness, and high quality.	
	NLCSP governance groups are established to support monitoring the safety and quality of the NLCSP.	• Commonwealth
	Processes are in place at all steps of the screening pathway to obtain optimal data quality, completeness, and integrity.	All stakeholders

Quality and safety in practice

The NLCSP has an established clinical and corporate governance structure that clearly defines responsibilities and enables the monitoring of NLCSP aims and objectives.

The <u>CAPS Committee</u> provides strategic direction for national population screening and cancer control, and as such has a role in providing leadership and national direction on policy, implementation, and monitoring of the NLCSP. The CAPS Committee receives advice from the NLCSP program advisory group and the NLCSP clinical advisory group on quality and safety issues as they arise. The NLCSP monitors and reports on program performance, quality, and safety through its clinical and corporate governance structure. These reports can alert the NLCSP to overarching program safety and quality issues. Operational issues at a national, jurisdictional, local, or service provider level are also identified through the NLCSP program advisory group, the NCSR operator/s, service providers, and participants.

If an identified quality or safety concern impacts, or has the potential to impact, the safety of participants, the process for managing quality and safety concerns will be put into action by the NLCSP clinical advisory group and/or Commonwealth and state and territory governments (<u>Appendix D</u>).

The <u>Australian Safety and Quality Framework for Healthcare</u> and associated resources and tools produced by the Australian Commission on Safety and Quality in Health Care, as well as the NLCSP Program Guidelines can be used to assist individuals and organisations

understand their roles and responsibilities in providing safe and quality healthcare services including lung cancer screening.

Accreditation and professional standards

As the primary care workforce and radiology workforce are appropriately accredited and regulated, there will be no further accreditation required to deliver the NLCSP.

Radiology providers must be accredited under the Diagnostic Imaging Accreditation Scheme to deliver Medicare-funded diagnostic imaging services, including those related to lung cancer screening. A diagnostic imaging service covers both the diagnostic imaging procedure and the reading and report generated for the procedure by the diagnostic imaging provider.

The NLCSP will support quality improvement by working with RANZCR to develop individual standards and targets for radiologists reporting in the NLCSP. In the interim, individual service providers and radiologists are encouraged to be responsible for undertaking their own quality improvement activities.

Monitoring, evaluation and continuous quality improvement

The Commonwealth will implement a comprehensive monitoring and evaluation approach to generate data and evidence that supports continuous quality improvement for the NLCSP.

An independent evaluation of the NLCSP will be conducted within the first 2 years of operation, once the NLCSP has reached a level of maturity. The objectives, scope and methodology for this evaluation are currently under development. Findings from the evaluation, alongside emerging evidence or major policy changes, will inform whether additional support or adjustments are required to enhance the NLCSP's effectiveness.

The standards and measures will be reviewed within two years of the NLCSP's commencement to assess their relevance and introduce benchmarks where needed. The NLCSP Quality Framework will be reviewed at the same time with support from the NLCSP governance groups and other relevant stakeholders, to ensure it remains relevant, evidence-informed and responsive.

Quality of program register services

The NLCSP is supported by the NCSR through the collection, storage, analysis and reporting of lung cancer screening and diagnostic data. The NCSR also supports a participant's journey along the screening and assessment pathway by issuing a participant welcome letter upon enrolment, sending follow-up reminders to both participants and requesting providers, and aiding clinical decision making. For a detailed overview, please refer to Appendix E – NLCSP Data Sources from the NCSR. Monitoring the quality of program register services is integral to ensuring the NLCSP is delivered to a high standard.

The NCSR is delivered through a third-party supplier under a Services Agreement with the Commonwealth.

The NCSR facilitates the collection of all data required to support the NLCSP and undertakes the necessary actions to support:

- participants along the NLCSP screening and assessment pathway
- timely clinical decision making through the provision of screening histories to healthcare providers excluding low-dose CT scan images
- clinical software integration and electronic reporting to assist in streamlining healthcare providers workflow, including supporting mandatory reporting requirements for radiologists
- automated histopathology reports from integrated laboratories to the NCSR
- the reporting requirements of the Commonwealth and state and territory governments
- Commonwealth evaluation and planning for mobile screening services
- Commonwealth and jurisdictional planning and evaluation of health promotion, recruitment and education initiatives
- quality and safety of the NLCSP
- research relating to lung cancer and its prevention.

The NCSR monitors program quality as part of standard operations and make improvements as required.

Quality of program data

The quality of program data is a critical component for evaluating the achievement of a high-quality NLCSP. Throughout the NLCSP screening and assessment pathway, there are numerous distinct touchpoints for data collection, primarily facilitated through the submission of NLCSP data forms to the NCSR. These forms serve as key data sources and provide essential information to support and guide participants through their screening journey. To promote robust data collection, the NLCSP has fostered a culture of data awareness through the inclusion of reporting guidance in the NLCSP Program Guidelines and targeted education initiatives. Additionally, mandatory structured radiology reporting, aligned with the NLCSP Nodule Management Protocol, supports consistent collection of standardised data. For a detailed overview, please refer to Appendix E – NLCSP Data Sources from the NCSR.

Under the direction of the Commonwealth, the NCSR undertakes quality improvement activities as part of continuous improvement. It works collaboratively with the Commonwealth, state and territory governments managing the NLCSP to address any quality concerns with program data. The following activities are undertaken:

- the NCSR will monitor data quality, completeness and integrity and undertaking improvement activities
- the NCSR will notify to the Commonwealth and state and territory governments when data quality issues arise
- where data from healthcare providers and diagnostic imaging services are found to have quality issues the NCSR, Commonwealth, states and territories will engage peak bodies, including regulatory and accreditation bodies, to facilitate quality improvement
- the Commonwealth and state and territory representatives will have access to an
 interactive data visualisation platform and will monitor key program data quality and
 safety measures (as listed in the Quality Standards) and provide advice to the NCSR
 operator and on continuous improvement activities
- the NLCSP governance groups will seek ongoing guidance from AIHW on data linkage projects and consider and assess potential uses of data derived through data linkage in the NLCSP.

The Commonwealth is the Data Custodian for all data associated with the NLCSP. Accordingly, all access, use and sharing of this data must align with relevant data governance frameworks and comply with applicable legislative and other requirements. This ensures that data is managed responsibly, securely, and in a manner that supports the objectives of the NLCSP.

Quality and safety standards, measures and benchmarks

The NLCSP quality and safety standards and measures reflect a level of quality that should be attained by service providers and the NLCSP as a whole. These standards are both qualitative and quantitative in nature and will be used to monitor delivery and outcomes of the program.

The quality and safety standards require data or information to be collected to enable effective monitoring. Data collection throughout the screening and assessment pathway is primarily driven by the submission of NCSR data forms, which occur at several clearly defined touchpoints (<u>Appendix E</u>). Completion of these forms by relevant healthcare providers will enable effective monitoring of the NLCSP's performance and outcomes.

The quality and safety measures indicate how the quantitative standards will be measured. The NLCSP is committed to ensuring that quality care is provided equitably, regardless of a person's abilities or social, economic, demographic, or geographic characteristics. Where appropriate, and where suitable data is available, measures will be disaggregated by the following key population groups:

- Age
- Sex
- Gender
- State and territory or residence
- Remoteness area of residence
- Socioeconomic area of residence
- Aboriginal and/or Torres Strait Isalnder status
- CALD background
- Type of radiology facility (fixed or mobile).

This disaggregation will enable a more nuanced understanding of program outcomes across different population groups and support the identification of areas for targeted quality improvement as part of NLCSP's continuous improvement activities.

Qualitative standards will require a different monitoring process; these qualitative standards and process for monitoring are yet to be determined.

As the NLCSP is a new screening program, data collection and regular monitoring will be required to establish benchmarks. Accordingly, benchmarks are currently listed as "To Be Determined" (TBD).

Table 3 provides the quantitative standards, measures and benchmarks for the NLCSP.

Table 3. Quality and Safety Standards, Measures and Benchmarks for the NLCSP

	andard	rds, Measures and Benchmarks for the NLC Measure	Benchmark ¹⁹
1.	 Participation in the NLCSP is equitable, accessible and optimised across all population screening groups. 	 Number of people screened in a 2- year period, or the following 6 months, as a percentage of people assessed as eligible for screening in a 2-year period. 	TBD
		 Number of people screened in a 2- year period as a percentage of the estimated eligible people in the population.²⁰ 	TBD
2.	An enhanced participant experience is achieved through a value-based, nonstigmatising, accessible and person-centred approach that ensures all individuals receive effective, culturally safe and inclusive care throughout their experience.	Patient Reported Experience Measures (PREMs) will be further developed and refined during implementation to ensure relevance and responsiveness.	TBD
3.	Where relevant, NLCSP participants are offered smoking cessation support, across the screening pathway, to quit smoking or maintain cessation.	 Number of participants offered smoking cessation support as a percentage of participants with healthcare provider contact. 	TBD
red Scr	All NLCSP participants receive appropriate screening in the recommended timeframe.	 Percentage of people who were screened within 3 months of enrolment as a percentage of people enrolled in the NLCSP. 	TBD
		Median time between referral and first (baseline) low-dose CT scan.	TBD
		Percentage of participants who had a screening result of 'Category 1 very low	TBD

 $^{\rm 19}$ Benchmarks will be established, where appropriate, as part of the two-year review.

²⁰ Estimated based on <u>updated participation modelling</u> completed for the NLCSP by Flinders University.

Standard	Measure	Benchmark ¹⁹
	risk' or negative diagnostic assessment and had a repeat screening within 27 months.	
	 Number of follow-up scans completed within a specified time period as a percentage of 'Category 0 incomplete', 'Category 2 low risk', 'Category 3 low to moderate risk' or 'Category 4 moderate risk' scans. 	TBD
5. The screening test and NLCSP Nodule Management Protocol demonstrate a high	Number of scans in each screening risk category as a percentage of all low-dose CT scans.	TBD
degree of accuracy for the detection of lung cancer and actionable additional findings in the target screening population.	 Percentage of participants with a 'Category 5 high risk' or 'Category 6 very high risk' screening test result who underwent diagnostic assessment and were diagnosed with lung cancer, (Positive Predictive Value (PPV) of Category 5 and Category 6 scans for detecting lung cancer). 	TBD
	Percentage of participants with a 'Category 2 low risk' or 'Category 3 low to moderate risk' or 'Category 4 moderate risk' screening test who were diagnosed with lung cancer after their follow-up scan (PPV of Category 2, 3, 4 low-dose CT scans for nodule surveillance).	TBD
	Number of participants who had a low-dose CT scan result reclassified to a different scan category as a percentage of participants who had a Category 5 or 6 scan result and were assessed by a responsible physician linked to an MDT.	TBD
	Number of participants who had actionable additional findings as a percentage of participants who had a low-dose CT scan.	TBD

Sta	ndard	Measure	Benchmark ¹⁹
6.	6. Potential harms due to participation in the NLCSP are minimised.	 Percentage of participants who had a biopsy following a 'Category 5 high risk' or 'Category 6 very high risk' screening test result and had a defined adverse event. 	TBD
		Number of low-dose CT scans less than or equal to CTDIvol 3.0 mGy as a percentage of low-dose CT scans completed.	TBD
7.	NLCSP participants receive appropriate and timely diagnostic assessments.	 Percentage of participants who had a screening test result of 'Category 5 high risk' or 'Category 6 very high risk' and had follow-up diagnostic assessment. 	TBD
		The time interval between the scan and diagnostic assessment for those who received a Category 5 or 6 screening result.	TBD
8.	NLCSP participants receive timely treatment for s creen-detected lung cancer by healthcare providers and services in accordance with best practice.	Number of participants who commenced treatme nt within 6 weeks of HCP referral as a percentage of participants who were diagnosed with lung cancer.	TBD
9.	The number of NLCSP participants diagnosed with latestage lung cancer is minimised. ⁴	Percentage of participants screened who were diagnosed with lung cancer detected through the NLCSP.	TBD
10.	Data quality, integrity and completeness in the NCSR are maximised.	 Proportion of people in the NLCSP who opted out of the NCSR, ceased NCSR correspondence or deferred participation.²¹ 	TBD

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²¹ Opt-out of the NCSR means to opt-out of the program. An eligible person will become an external screener if their low-dose CT scan is claimed using the NLCSP-specific MBS items, or they may cease screening all together.

Standard	Measure	Benchmark ¹⁹
	Number of participants who have lung cancer stage documented as a percentage of all participants diagnosed with lung cancer.	TBD
	 Number of participants with return to sender flags as a proportion of the number of participants sent correspondence by the NCSR. 	TBD
	 Number of participants with Aboriginal and/or Torres Strait Islander or CALD data as a percentage of all participants, compared to ABS population estimates. 	TBD
11. Radiologists meet individual standards and targets for reporting in the NLCSP.	 Measures to provide guidance for individual performance review to be developed with the Royal Australian and New Zealand College of Radiologists (RANZCR). 	TBD

ABBREVIATIONS

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
CALD	Culturally and linguistically diverse
CAPS Committee	Cancer and Population Screening Committee
Low-dose CT	Low dose computed tomography
MBS	Medicare Benefits Schedule
MSAC	Medical Services Advisory Committee
NACCHO	National Aboriginal Community Controlled Health Organisation
NCSR	National Cancer Screening Register
NLCSP	National Lung Cancer Screening Program
PPV	Positive Predictive Value
RANZCR	Royal Australian and New Zealand College of Radiologists
TBD	To be Determined
ТТҮ	Teletypewriter

GLOSSARY

Term	Definition
Aboriginal and/or Torres Strait Islander person	An Aboriginal and/or Torres Strait Islander person is a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander person and is accepted as such by the community in which he or she lives
Actionable additional findings	Actionable additional findings on lung cancer screening are defined as low-dose CT scan findings unrelated to the primary purpose of identifying lung cancer for which follow-up action is required
Active recruitment strategies	Strategies designed to actively use opportunities to target participants to participate in and complete routine screening.
Asymptomatic	For the purposes of the NLCSP, asymptomatic is defined as having no signs or symptoms suggestive of lung cancer (for example unexplained persistent cough, coughing up blood, shortness of breath).
Benchmark	A standard or point of reference against which performance may be compared. Can be either qualitative or quantitative in nature and are used to help participants to commit to quality improvement
Cultural safety	Culturally safe practice requires the ongoing critical reflection of health practitioners' knowledge, skills, attitudes, practising behaviours and power differentials in delivering safe, accessible, and responsive healthcare free of racism. Defined by Ahpra, cultural safety is determined by Aboriginal and/or Torres Strait Islander individuals, families and communities
Diagnostic imaging service	The entire procedure including the report. Under Medicare, the report itself is considered the service, and includes all processes that were required to produce the report. The service can only be provided by a medical practitioner.
Eligibility assessment	An assessment of whether individuals meet the NLCSP eligibility criteria and qualify for participation in the program.

Term	Definition
First screen	The first screen is the first scan or baseline scan a participant has as part of the NLCSP
Follow-up scan	A follow-up scan occurs after the first or baseline scan and occurs at intervals specified in the NLCSP Nodule Management Protocol i.e. 2 yearly repeat screening or 3 -month interval screen.
Healthcare providers	Includes requesting practitioners, radiology providers, healthcare providers with and without authorisation to request a low-dose CT and respiratory physicians.
Healthcare providers without authorisation to request a low-dose CT scan	Health care providers without authorisation to request a low-dose CT scan can include Aboriginal and Torres Strait Islander Health Practitioners and Workers, Nurses and Allied health professionals.
Health services	Health services include primary, secondary and tertiary healthcare services delivered by public or private providers. These services may be involved in the prevention, detection and treatment of disease, or the promotion, maintenance, and restoration of health and wellbeing. This definition may also include independent organisations, such as Primary Health Networks, that coordinate care within specific regions. Please note, this definition may include radiology services.
Health support workers	Those who play a vital role in health care teams and provide support to people across the screening and assessment pathway. Health support workers may include Aboriginal Liaison Officers, health support workers and smoking cessation services.
Late-stage lung cancer	Late-stage lung cancer is defined as stages III and IV.
Multidisciplinary team (MDT)	Multidisciplinary teams comprise the core disciplines that are integral to providing good care. The team is flexible in approach, reflects the patient's clinical and psychosocial needs and has processes to facilitate good communication.

Term	Definition
National Cancer Screening Register (NCSR)	A national screening register that supports the NLCSP by collecting and storing cervical screening data to enable issuing of cervical screening invitations, reminders and follow-up.
NLCSP clinical advisory group	An invited/select group of experts who monitor issues relating to the quality and safety of the NLCSP.
Participant	An eligible person registered as part of the NLCSP through the NCSR.
Peak bodies	Include organisations that represent and advocate for a particular sector, profession, or group at a national or jurisdictional level. This may include professional colleges or associations, advocacy organisations and federations or alliances.
Performance Indicators	A set of quantifiable measures that are used to gauge or compare performance in terms of meeting the NLCSP's strategic and operational goals.
Positive screening results	Positive screening results are defined as high risk or very high-risk findings on the low-dose CT.
Practice staff in primary care	Practice staff in primary care include practice managers and administrative staff who may enrol a participant in the NCSR as a delegate.
Priority populations	The following groups have been identified as priority populations for the NLCSP. We acknowledge that some people may identify with one or more of the following groups: Aboriginal and/or Torres Strait Islander people; people living in rural and remote areas; people from culturally and linguistically diverse (CALD) backgrounds; people with a disability; people with mental illness; and people from Lesbian, Gay, Bisexual, Transgender, Intersex, Queer and Asexual (LGBTIQA+) communities.
program advisory group	An invited/select group of representatives from state and territory health departments and other relevant portfolios who provide jurisdictional and key stakeholder agency perspectives and pass on

Term	Definition
	information to their respective jurisdictional health systems, to support local program implementation based on regional needs.
Quality Management System	A quality management system is a collection of business processes focused on achieving a quality policy and quality objectives. It is expressed as the organisational structure, policies, procedures, processes and resources needed to implement quality management.
Quality and safety measure	Quality measures are tools that help measure or quantify outcomes and goals.
Radiology providers	Radiology providers deliver diagnostic imaging services and include but are not limited to, radiologists and radiographers.
Radiology reporting	The reading and interpretation of low-dose CT scan results.
Radiology services	Radiology services are accredited practices which can perform Medicare-funded diagnostic imaging services.
Requesting practitioners	Healthcare providers authorised to request low-dose CT scans as part of the NLCSP, including general practitioners, medical specialists, consultant physicians and nurse practitioners.
Respiratory Physicians	Respiratory Physicians may include other specialists with relevant expertise who are linked with a lung cancer MDT.
Screening and assessment pathway	The screening and assessment pathway defines the structure of the NLCSP.
Smoking cessation	The stopping or quitting of smoking cigarettes or other combustible tobacco products (e.g. cigars, cigarillos, pipes, and shisha). Smoking cessation support refers to assistance given to someone to help them quit smoking. Cessation support should also be offered to people who use vapes or e-cigarettes, noting that tobacco products in the context of the NLCSP's eligibility criteria does not include vapes or e-cigarettes.
	Healthcare providers can access clinical tools and guidelines for smoking cessation support via www.quitcentre.org.au .

Term	Definition
	Smoking cessation resources for consumers include My QuitBuddy, Quitline (13 78 48), and the National Cessation Platform at www.quit.org.au .
Socioeconomic status	An indication of disadvantage or advantage in terms of individual's access to material and social resources as well as their ability to participate in society.
Standard	A level of quality that should be attained and will be used to provide a basis for comparison and monitoring.
Under-screened participants	Participants who have > 1 complete empty screening rounds between scans

APPENDIX A - National Lung Cancer Screening Policy

The National Lung Cancer Screening Program (NLCSP) aims to achieve better health outcomes for Australians by detecting lung cancer early and reducing deaths from lung cancer. This will be achieved through targeted screening of high-risk asymptomatic participants to help detect lung cancer at an earlier stage.

This policy is based on the recommendations of the Medical Services Advisory Committee that were formed following a comprehensive and robust evidence review and modelling evaluation (MSAC, 2022 – Application 1699).

The NLCSP is supported by the Program Guidelines which provide recommendations and practice points to assist healthcare providers and health support workers to navigate themselves and participants through the screening program. ²²

The National Lung Cancer Screening Policy recommends: ²³

- 1. Lung cancer screening should be undertaken every 2 years for eligible participants, using low dose computed tomography (low-dose CT).
- 2. Potential participants should be identified or supported to consult a requesting practitioner to confirm their eligibility.²⁴
- 3. Individuals may be eligible for the NLCSP if they:
- are aged between 50 and 70 years

AND

• are asymptomatic (no signs or symptoms suggestive of lung cancer)²⁵

AND

• currently smoke or have quit smoking in the past 10 years

²² The NLCSP *Program Guidelines* include the steps of the screening and assessment pathway and links to other information and materials supporting the NLCSP.

²³ The National Lung Cancer Screening policy is in accordance with the Medical Services Advisory Committee recommendations, October 2022 (Application 1699).

²⁴ A requesting practitioner includes a general practitioner or other practitioner, such as a nurse practitioner or medical specialist, who can request a low-dose CT scan.

²⁵ Participants with symptoms should be managed according to usual care practices including the Optimal Care Pathway for people with lung cancer.

AND

- have a history of tobacco cigarettes smoking of at least 30 pack-years.
- 4. Smoking cessation supports are to be offered to all potential participants across the lung cancer screening and assessment pathway.²⁶
- 5. Potential participants should be given clear information by their healthcare provider or health support worker the benefits and risks of participating in screening (including possible follow-up requirements) to support informed decision-making by participants.²⁷
- 6. Eligible people who choose not to register for the NLCSP through the National Screening Register (NCSR) are not considered a participant of the NLCSP but are able to access the NLCSP-specific low-dose CT Medicare Benefits Schedule (MBS) items.²⁸ The requesting practitioner is responsible for screening, results communication and follow up care.
- 7. Eligible individuals will receive a welcome letter upon enrolment in the NCSR.
- 8. A requesting practitioner is required to check eligible individuals are suitable for a low-dose CT prior to completing a low-dose CT scan request for 2-yearly screening or any required interval low-dose CT scans.
- 9. Participants aged 50 years or older and less than 71 years will be reminded to participate by their requesting practitioner (or recorded primary healthcare provider) supported by the NCSR.
- 10. Participants may choose to opt-out of the NLCSP at any time. Alternatively, they will automatically exit upon reaching the upper age limit of 71 years. After exiting the NLCSP, they should continue to be managed by their healthcare provider, as they may still be at risk of developing lung cancer.
- 11. A participant's journey through the screening and assessment pathway will be supported and facilitated by healthcare professionals and support workers, guided by the results of their low-dose CT scan, in accordance with the NLCSP Nodule Management Protocol and the NLCSP Program Guidelines, 1, 29

 $^{^{26}}$ The screening and assessment pathway defines the structure of the NLCSP and is evidence-based and tailored to the unique Australian context.

²⁷ NLCSP-specific MBS items for low-dose CT scans, including mandatory reporting requirements, came into effect on 1 July 2025.

²⁸ Shared decision-making and informed consent for lung cancer screening is a guide to support healthcare providers to engage in shared decision-making and support people to make an informed choice to participate in lung cancer screening.

²⁹ The *NLCSP Nodule Management Protocol* is used to assess the risk of a lesion being lung cancer and recommend appropriate surveillance or referral for management.

- 12. The requesting practitioner is responsible for facilitating patient enrolment in the NLCSP, providing a low-dose CT request form, communicating results when required, and advising participants of any necessary follow-up including referrals for further investigation.
- 13. Participants in whom lung cancer is detected will exit the NLCSP and be managed according to usual care practices including optimal care pathways,³⁰
- 14. Eligible individuals who have been successfully treated for lung cancer can re-enter the screening NLCSP. Clinical judgement will be used to assess if this is appropriate for the individual.
- 15. Monitoring and evaluation of the NLCSP will be in accordance with the NLCSP Quality Framework.
- 16. All radiology providers providing Medicare-funded⁶ low-dose CT scans for the NLCSP must meet the requirements of the Diagnostic Imaging Accreditation Scheme Standards and the legislated requirements as set out in the Health Insurance (Diagnostic Imaging Services Table) Regulations (No.2) 2020 made under the *Health Insurance Act 1973.*³¹

³⁰ Cancer Australia, in partnership with Cancer Council Victoria, have published optimal care pathways for lung cancer and for Aboriginal and Torres Strait Islander people with cancer, setting national standards for high-quality, culturally responsive care.

³¹ The Diagnostic Imaging Accreditation Scheme is a formal program where trained assessors review an imaging practice's evidence of implementation of the Diagnostic Imaging Accreditation Standards. Accreditation provides a commitment to the community that a diagnostic imaging practice meets expected standards for safety and quality.

APPENDIX B – NLCSP Screening and Assessment Pathway

The NLCSP is structured around a screening and assessment pathway (referred to as the pathway) that is evidence-based and tailored to the unique Australian context. This approach aligns with existing national cancer screening programs for breast, cervical and bowel cancer that include tailored screening and assessment pathways to define clinical and policy parameters and map the participant journey. The pathway supports the delivery of culturally safe, evidence-based and consistent care, and maximises opportunities for primary prevention, especially smoking cessation. Figure 1 presents an overview of the pathway.

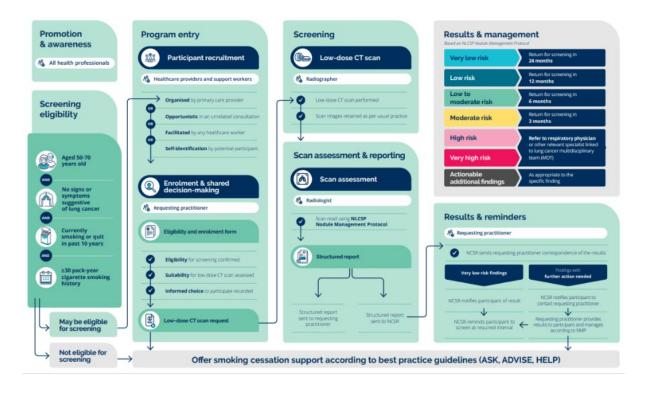


Figure 1. NLCSP Screening and Assessment Pathway

APPENDIX C – NLCSP Performance Indicators

The performance indicators for the NLCSP are outlined below.

Screening pathway	Performance indicator
Recruitment	1. Rate of participation
	2. Repeat screening
Screening	3. Screening positivity rate
	4. Adherence to recommendation for a follow up scan
	5. Follow up scan result
Assessment	6. Diagnostic assessment rate
	7. Time between positive screen and diagnostic assessment
	8. Biopsy adverse event rate
Diagnosis	9. Lung cancer detection rate
	10. Interval cancer rate
	11. Positive predictive value of low-dose CT scans for detecting lung cancer
Outcome	12. Lung cancer incidence
	13. Australian lung cancer mortality

Further information on the NLCSP Performance Indicators can be found in the <u>NLCSP Data Dictionary v1.0</u>.

APPENDIX D - Process for managing quality and safety concerns

Identify the issue

There are a number of channels where a quality and safety issue could be identified including:

- Review of quality and safety monitoring data by the NLCSP clinical advisory group
- Oversight by the NLCSP program advisory group, including monitoring of program quality and safety data, and provision of feedback from health services
- State and territory monitoring of NLCSP quality and safety, including jurisdictional data
- Analysis and monitoring by NCSR data analysts
- Input from peak bodies, including professional colleges and associations
- Individuals, including healthcare providers working within health services, and program participants
- Notifications received by the Department via the Lung Cancer Screening mailbox (mailto:lungcancerscreening@health.gov.au)

Alert relevant governance bodies

Any notifications regarding quality issues received by the Commonwealth or state and territory should be provided to the NLCSP clinical advisory group via the Lung Cancer Screening mailbox (lungcancerscreening@health.gov.au) for assessment, investigation and progression if required to the CAPS Committee.

Investigation of the issue and risk analysis

If the issue/concern cannot be resolved by the NLCSP clinical advisory group level, the NLCSP clinical advisory group will provide advice to the Department for consideration and submission to the CAPS Committee. The submission will include what actions need to be undertaken by the NLCSP to investigate the issue. These actions may include, but should not be limited to:

- confirming the validity of the issue, and identifying potential causes
- conducting data analyses
- seeking feedback from relevant stakeholders
- undertaking a risk analysis.

Address the issue

A report should be provided by the investigating organisation (to be agreed by the CAPS Committee if approached) to the NLCSP clinical advisory group for feedback and advice on how to manage the issue. The combined report from the NLCSP clinical advisory group and relevant stakeholders should be provided to the CAPS Committee for action.

Communication

Any safety or quality concerns should be raised with relevant stakeholders and state and territory governments managing the NLCSP, including the NLCSP program advisory group to ensure they are aware of the issue and can support any actions that may be required to address the issue.

Monitoring

The issue should be monitored by the NLCSP clinical advisory group in collaboration with state and territory governments managing the NLCSP, including the NLCSP program advisory group and relevant stakeholders through data review until resolution and systems are in place to prevent this issue occurring again.



Figure 2. Process for managing quality and safety concerns

APPENDIX E – NLCSP Data Sources from the NCSR

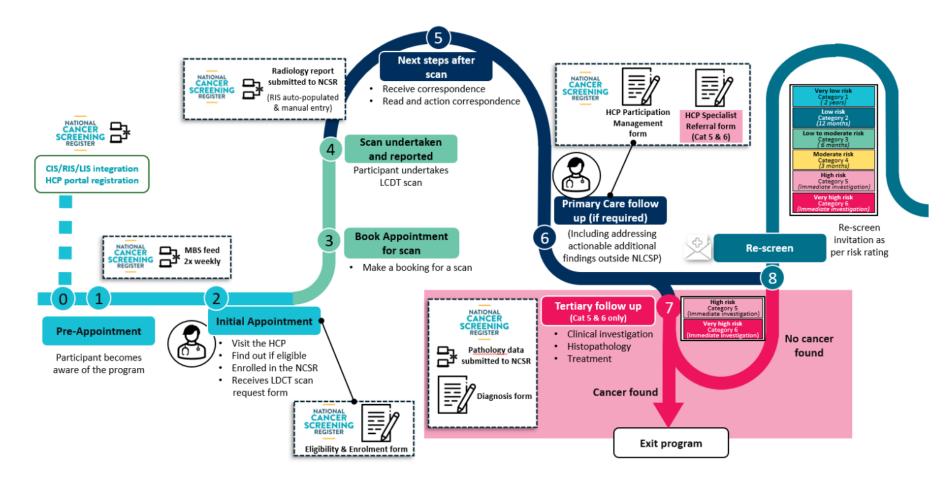


Figure 3. NLCSP Data Sources from the NCSR



