



9 February 2022

MSAC Secretariat  
Australian Government Department of Health  
MDP 960  
GPO Box 9848  
CANBERRA ACT 2601

Via email: [commentsMSAC@health.gov.au](mailto:commentsMSAC@health.gov.au)

Dear MSAC Secretariat,

### Re: 1699 – National Lung Cancer Screening Program

On behalf of our patients, and their family and carers, we write to support the MSAC application 1699 on the National Lung Cancer Screening Program (**NLCSP**) to improve the early detection of lung cancer in high-risk individuals.

#### About Lung Foundation Australia

Lung Foundation Australia is Australia's only national for-purpose organisation working to strengthen the lung health of all Australians and supporting those experiencing a lung disease and lung cancer. We are Australia's oldest and most trusted lung cancer organisation. We fund life-changing research and deliver support services that give hope to people living with lung disease or lung cancer.

Since 1990 we have been working to ensure lung health is a priority for all; promoting good lung health and early diagnosis of disease, advocating for policy change and research investment, raising awareness about the symptoms and prevalence of lung disease, and championing equitable access to treatment and care. Lung Foundation is the only national service with a dedicated 1800 Help Line for patients with lung cancer and their carers.

#### Support for the NLCSP

Lung Foundation Australia commend Cancer Australia and the Australian Government for the work completed to date in progressing the development of a national targeted lung cancer screening program, and wholly support seeing this program into implementation.

A targeted lung cancer screening program will not only position Australia as a world leader in lung cancer early detection, but the benefits are far reaching. As the leading lung health organisation in Australia, we are committed to improving outcomes for the many Australians who experience lung disease and lung cancer, and firmly believe there is a significant need to implement an evidence-based, cost-effective national targeted screening program, and this is something our community of passionate lung cancer advocates are excited at the prospect of seeing to fruition.

Further, in a Lung Foundation Australia funded YouGov survey we found very high support with **82% of Australians reporting that they thought that Federal Government should invest in a national lung cancer screening program.**

## Why do we need a targeted lung cancer screening program?

1. Lung cancer is often detected too late when treatment options are limited
2. Lung cancer is the leading cause of cancer death in Australia
3. Each year over 13,000 Australians are diagnosed with lung cancer
4. Lung cancer has the lowest five-year survivorship out of the top cancers
  - a. **Lung cancer – 20%**
  - b. Bowel cancer – 70%
  - c. Cervical cancer – 74%
  - d. Breast cancer – 92%
  - e. Melanoma skin cancer – 92%
  - f. Prostate cancer – 95%
5. The majority of lung cancer cases are detected at a late stage where fewer treatment options are available and overall poorer outcomes are experienced
6. In 2015-2016, lung cancer cost the health system \$448.4million<sup>i</sup>
7. The key to improving survival and quality of life of Australians affected by lung cancer is to diagnose lung cancer early.
8. The proposed targeted lung cancer screening program meets the criteria from the World Health Organisation

## Recent evidence, advances, and additional acknowledgements

Lung Foundation Australia believe that the Cancer Australia report appropriately explains the parameters of this program, and identified key considerations, at risk groups, and methodologies that will be most appropriate. Specifically, we note:

### *Multidisciplinary Teams*

The program encompasses all activities from recruitment through to point of referral to a specialist linked to a multidisciplinary team (MDT) for further investigation and treatment where appropriate. The majority of lung cancer cases are diagnosed too late at stage III and IV so the adequate resourcing and training and development of primary health care is critical, including using the existing tools developed by Cancer Australia. A recent study found that there were significant variations in the quality, efficacy and resourcing of MDTs across Australia with the most significant variations occurring in regional and remote locations<sup>ii</sup>. Lung Foundation Australia strongly support the adequate resourcing of MDTs consistent with the Optimal Care Pathway to ensure that the benefit of lung cancer screening is fully realised.

### *Selected cohort*

The program cohort will be the general population aged 55 to 74 years and Aboriginal and Torres Strait Islander people aged 50 to 74 years who are current or former smokers. Lung Foundation Australia acknowledge that this is where the greatest need is, which therefore supports the cost-effectiveness and impactful program delivery.

### *LDCT and equitable access*

A risk assessment tool will be used to determine eligibility for LDCT screening. Lung Foundation Australia commend the proposed use of LDCT, as this methodology is evidence based and known to be the most effective in identifying lung cancer and lung diseases broadly.

Access to LDCT will, in most places in Australia, be through existing public and private radiology service providers. In some remote and very remote areas, mobile vans will be utilised. Lung Foundation Australia would like to acknowledge that Heart of Australia has successfully deployed mobile LDCT vans, which demonstrates that we have moved beyond the theoretical into the implementation. The research undertaken by the MRFF sponsored programs by A/Professor Nicole Rankin and Professor Kwun Fong will highlight the most effective way of engaging some of our most vulnerable communities, in particular our First Nations communities who are over-represented.

Evidence from mobile units in Yorkshire in the UK show significant numbers of patients being identified at Stage I, noting that this is positioned within the community as a lung health screening program. Proof of concept is currently being implemented in Queensland at minimal cost – early indications are a cost of \$3million to construct and \$1.5million to operate per annum. When considering the cost to targeted therapies for late-stage lung cancer the investment in the early detection of lung cancer is evident.

### *Smoking cessation*

Smoking cessation is an integral component of the Program. Given the significant economic and social burden resulting from tobacco smoking (\$137billion annually in direct and indirect costs), incorporating smoking cessation supports into this screening program is commendable. The incorporation of smoking cessation will aid in the achievement of National Preventive Health Strategy policy priorities.

### *Register*

The proposed screening program would require the development of a national register to ensure that quality assurance standards are maintained and will enable research and effective program functioning. Lung Foundation Australia would like to acknowledge the significant work completed over the last few years in the redevelopment of the register and public interface for the national bowel and cervical screening programs (on the National Cancer Screening Register - <https://www.ncsr.gov.au/>). We believe it would be most cost-effective if the required register for the proposed lung cancer screening program be incorporated into the National Cancer Screening Register. We strongly believe learnings from the existing National Cancer Screening Register should be applied, including ensuring that patients and primary care physicians are able to easily access and understand their screening options, which includes information on smoking cessation, referral timeliness, reminders, and patient experiences. Lung Foundation Australia strongly suggests that data is published annually and made available to not just government and researchers so that patients can see implementation.

### **The health, financial and social cost of lung cancer in Australia**

Lung cancer is the leading cause of cancer-related death in Australia<sup>iii</sup>. Each year, more than 13,000 Australian men and women will be diagnosed with lung cancer<sup>iv</sup>. This number is projected to reach almost 160,000 new diagnoses over the next 10 years.

Lung cancer, regardless of categorisation, has the lowest five-year relative survival rate (20%) when compared to the other top five most commonly diagnosed cancers.

Lung cancer is responsible for the highest proportion of cancer burden<sup>v</sup>. It can affect anyone, not just smokers. Approximately one fifth (21%) of those living with lung cancer are life-long non-smokers<sup>vi</sup>.

Lung cancer imposes a significant financial burden on the Australian health system, people living with lung cancer and their families. The economic burden of lung cancer, for patients diagnosed in 2018, was estimated to reach<sup>vii</sup>:

- \$283.7 million in direct costs, including treatment costs, out-of-hospital costs and out-of-pocket expenses.
- \$13.5 million in indirect costs, including absenteeism resulting from the additional time off work taken by people living with lung cancer because of their illness.

People living with lung cancer die earlier (prematurely) by an average of 11 years compared to the general population. It is estimated that this amounts to approximately 137,600 years of life lost in 2018 alone. These years of life lost incur an economic cost of approximately \$6.9 billion to society in 2018<sup>viii</sup>.

With population projections and new incidences of lung cancer growing at a similar rate, the costs over 10 years to 2028 are estimated to be \$6.6 billion in direct costs and \$325.9 million in indirect costs (absenteeism)<sup>ix</sup>. Years of life lost from premature deaths will grow to approximately 2.9 million years by 2028<sup>x</sup>. Over 10 years, these years of life lost incur a cost of approximately \$144.8 billion<sup>xi</sup>.

### Benefits of a NLSCP to individuals, health services and the Australian community

As outlined in Cancer Australia's report on the lung cancer screening enquiry<sup>xii</sup>:

- The program outlined would be cost effective with an incremental cost-effectiveness ratio of \$83,545 per QALY gained.
- Based on the national and international evidence, a screening program using biennial low dose computed tomography in asymptomatic high-risk Australians could detect cancers in their early stages when treatment is most likely to be successful.
- A targeted lung cancer screening program would save lives, reduce lung cancer mortality in Australia by 20% in the screened population, and improve the survival, quality of life and productivity of Australians affected by lung cancer.
- It is estimated that in the first 10 years of a lung cancer screening program in Australia, over 70% of all screen detected lung cancers would be diagnosed at an early stage, over 12,000 deaths would be prevented and up to 50,000 quality adjusted life years would be gained.
- Lung cancer has a greater proportional impact on Aboriginal and Torres Strait Islander people, people in regional and rural areas, and those of lower socioeconomic status. Through research, analysis and consultation with key stakeholders, Cancer Australia has defined the elements and framework for delivery of a cost-effective and equitable national lung cancer screening program in Australia.

### Summary

In summary, we believe that a national targeted lung cancer screening program will:

- offer an effective early detection program which will improve patient wellbeing, quality of life and survival
- reduce cost to health system associated with late diagnosis and end of life care
- create equity of early detection and outcomes across rural and remote areas
- support closing the gap
- support tobacco cessation and achievement of policy priorities in the National Preventive Health Strategy, and
- reduce costs to health systems and services by reducing the burden of disease on individuals, communities and governments.

Lung Foundation Australia wholly support the implementation of the national lung cancer screening program, and encourage further investment and consultation in refining the delivery model in a timely manner to ensure that lung cancer is being actively detected in the community and saving lives.

Yours sincerely,



Mark Brooke  
**Chief Executive Officer**  
**Lung Foundation Australia**

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<sup>i</sup> AIHW 2021, *Health System Expenditure on cancer and other neoplasms in Australia, 2015-16*.

<https://www.aihw.gov.au/reports/cancer/health-system-expenditure-cancer-other-neoplasms/data>

<sup>ii</sup> Brims, F. J. H., C. Kumarasamy, J. Nash, T. L. Leong, E. Stone, and H. M. Marshall. 2022. "Hospital-based multidisciplinary lung cancer care in Australia: a survey of the landscape in 2021." *BMJ Open Respir Res* 9 (1)

<sup>iii</sup> Australian Government. Cancer Australia. Lung Cancer in Australia statistics. Accessed 20<sup>th</sup> January 2022. Available at: <https://lung-cancer.canceraustralia.gov.au/statistics>

<sup>iv</sup> PWC. Making Lung Cancer a Fair Fight: A Blueprint for Reform. 2018. Available at: <https://lungfoundation.com.au/wp-content/uploads/2018/10/Information-paper-Making-Lung-Cancer-A-Fair-Fight-A-Blueprint-for-Reform-Oct2018.pdf>

<sup>v</sup> Australian Institute of Health and Welfare. Cancer in Australia 2021. Cat. no. CAN 144. Canberra : AIHW, 2021.

<sup>vi</sup> Ibid, PWC. Making Lung Cancer a Fair Fight: A Blueprint for Reform. 2018.

<sup>vii</sup> Ibid

<sup>viii</sup> Ibid

<sup>ix</sup> Ibid

<sup>x</sup> Ibid

<sup>xi</sup> Ibid

<sup>xii</sup> Cancer Australia 2020. *Report on the Lung Cancer Screening enquiry*. <https://www.canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/report-lung-cancer-screening-enquiry>