

The 45 and Up Study has informed important research on lung cancer, which contributed to the federal government's landmark decision in 2023 to fund the National Lung Cancer Screening Program.

The Challenge

Lung cancer is one of the most commonly diagnosed and deadliest forms of cancer globally. Despite advancements in treatment, early detection remains a key factor in improving survival rates.

Australia faced a significant public health challenge in devising cost-effective strategies for the early detection of lung cancer.

Our Role

The **Daffodil Centre**, a joint venture between **Cancer Council NSW** and the **University of Sydney**, has led research into lung cancer using data from the 45 and Up Study.

Numerous projects over the past decade have been supported by our data, including research on the cost of lung cancer care and the accuracy of lung cancer risk-prediction tools.

An important paper was published in the **British Journal of Cancer** in 2022, demonstrating the cost-effectiveness of targeted lung cancer screening using low-dose computed tomography scans. Data from the 45 and Up Study's cohort of more than 250,000 Australians were pivotal to this research.

Policy Impact

The findings from the Daffodil Centre's research, underpinned by data from the 45 and Up Study, played an important role in informing policy decisions.

In 2022, Australia's **Medical Services Advisory Committee** recommended a national lung cancer screening program, following extensive analysis into its feasibility.

This informed the federal government's announcement in May 2023 to invest \$263.8 million in the implementation of The National Lung Cancer Screening Program, for commencement by July 2025.

The program is estimated to prevent more than 500 deaths from lung cancer per year. The collaboration between the 45 and Up Study and the Daffodil Centre exemplifies the power of data-driven research in addressing pressing public health challenges.

Date: 2023

Partner organisations: Daffodil Centre, Cancer Council NSW, University of Sydney