International Cancer Benchmarking Partnership (ICBP)

Lung Network Summary Report

Purpose

This document provides an overview of the International Cancer Benchmarking Partnerships (ICBP) Lung Cancer Screening network, recognising its achievements, lessons learned, and plans on how the information gathered has informed the next phase of research.

Background and overview

The Lung Cancer Screening Network was established in 2021, during the ICBPs Transition Phase, to create an international peer network across ICBP countries to support activities to inform international cancer policy and practice. The network provided a forum for discussion and sharing of lessons learned in relation to implementation of lung cancer screening across the ICBP countries, targeted at service providers and policy decision-makers e.g., screening programme administrators/managers and department of health screening leads.

The core outputs from the Lung Network were two virtual events. The first event titled 'Implementation of Lung Cancer Screening' focused on sharing insights about lung screening from jurisdictions at various stages of the process; from scoping and presenting business cases to awaiting government approval and/or funding, early planning stages, or implementing and monitoring. The second event, 'Building a Business Case for Lung Cancer Screening', looked to provide tried and tested resources (e.g., readiness tool, Ontario's business case plan template) to assist jurisdictions when pitching to local government and policy makers involved in allocating annual healthcare budgets.

Across the two events, there were 54 attendees, representing Australia, Canada, the UK (England, Northern Ireland, Scotland and Wales), Ireland, Denmark and New Zealand.

Lung Network Leadership

ICBP Programme Board Sponsor

Professor Aileen Keel CBE,

Senior Advisor (former Director), Innovative Healthcare Delivery Programme, Usher Institute, University of Edinburgh

Lung Network Co-Chair

Dr Annette McWilliams,

Clinical Associate Professor, University of Western Australia; Clinical Lead, Thoracic Tumour Collaborative of Western Australia

Lung Network Co-Chair

Dr Christian Finley,

Professor, Department of Surgery, McMaster University;
Clinical Lead, Ontario Lung Cancer Screening Programme

Overview of the two Lung Cancer Screening Network events:

Event 1: Implementation of Lung Cancer Screening

The first network event included five presentations from speakers in the UK, Canada and Australia. Topics included an overview of the lung screening research landscape delivered by Dr. Stephen Lam; evidence from the Ontario Lung Screening Pilot for high-risk populations designed using low-dose computed tomography presented by Dr. Martin Tammemagi; and development of targeted CT screening in the UK shared by Dr. David Baldwin. There were presentations from Professor Matthew Callister who spoke about issues for lung cancer screening implementation in the UK, and Professor Dorothy Keefe, who outlined the steps taken to scope and complete a feasibility assessment of lung cancer screening in Australia The main themes from the discussion included challenges with patient retention, how to optimise approaches for underserved communities without further exacerbating inequities, and opportunities to share information and research around the health economics of lung screening programmes.

Event 2: Lung Cancer Network: Building a Business Case

The second network event featured talks from Dr. Marianne Weber and Dr. Christian Finley. Dr. Weber spoke about building a strong portfolio of evidence by observing and filling the gaps to support strong business cases for lung cancer screening programmes and Dr. Finley provided an overview of the approach and business case utilised in Canada to implement lung cancer screening on a national level. The second half of the event allocated attendees into working groups to discuss the best practice for business case creation as well as to provide insights from their jurisdiction, commonly encountered barriers to implementation, and potential solutions.

The most common theme that emerged from these discussions was that underserved populations tended to have poorer access to lung cancer screening, with Australia, Canada, and New Zealand particularly highlighting this for their indigenous and first nation peoples. The importance of tailoring approaches was highlighted, and different models of lung cancer screening (e.g. telephone interventions in part of Canada and in-person triage in parts of England) were shared. There was agreement that using real patient data when pitching a business case plan to policymakers is especially influential and helps to translate statistics into real world impacts. The importance of collecting data before pilots are even initiated was noted, as this can provide a benchmark, and supply data that supports continued funding and support for policymakers.

Lessons Learned:

Some of the key lessons learned across the two events are as follows:

- **Jurisdictions are at different stages of the process. A lot can be gained from sharing considerations, barriers, and challenges.** As of the second network event in November 2022, some jurisdictions were already implementing national lung cancer screening programmes (Canada, Australia), while others were in the piloting stage (England, Norway) or still developing a business case to gain funding (New Zealand, Scotland, Wales, Northern Ireland, Denmark, Ireland). The Lung Cancer Policy

Network's interactive map contains up-to-date information of where lung screening programmes are being implemented internationally.
Following the second event many members were able to identify and engage with leads in different jurisdictions to continue conversations, notably including presentations from Australian stakeholders to those in Scotland to share experiences from their journey towards implementation.

- **There are opportunities to engage with community leaders from underserved groups** (e.g. ethnic minorities, indigenous peoples, rural communities) who should inform, and where possible, lead the design and planning of interventions which in turn will lead to better, more tailored planning of interventions and campaigns.

- **Jurisdictions should carefully consider how lung screening programmes will impact capacity in their health system.** In England it was recognised that many of the lung screening sites struggle with capacity and as a result, experts from the other cancer screening programmes were consulted on planning health service capacity changes and shifts in workforce management. One factor impacting capacity is incidental findings from lung cancer screenings and how these are incorporated into service delivery plans without putting additional pressure on existing provision.

- **Jurisdictions should continue to share learnings to maximise the potential of lung screening programmes and mitigate the risks.** There are significant differences between jurisdictions in the level of resource and expertise associated with health economics of lung cancer screening activities. Therefore, there are opportunities to collate health economics research and evidence to support business cases/government proposals.

Additional Insights and Next Steps

We will continue to build upon the knowledge and relationships gained through this network in Phase 3 of the ICBP, where lung cancer will be included as one of the focus sites across the benchmark and research modules. The team will continue to monitor developments across the jurisdictions on lung cancer screening and provide opportunities for sharing and learning. We will be monitoring developments across ICBP jurisdictions with a particular focus on which QPIs jurisdictions implement to determine how local screening programmes will be monitored (LCS programme evaluation policy briefing). The ICBP is working towards the publication of a lung-specific treatment paper related to its cancer patient pathways module, which we will be sharing with the network for comment and feedback.

The ICBP remains committed to facilitating discussions between jurisdictions at different stages of Lung Cancer Screening implementation. If you are interested in learning more then please contacts us at ICBP@cancer.org.uk. You can also stay updated on ongoing developments in the ICBP through signing up to our Newsletter and following our social media channels (LinkedIn,, X (formerly Twitter), and YouTube).

Acknowledgements and Thanks
Since the formation of the ICBP Lung Cancer Screening Network, considerable progress has been made internationally, with many jurisdictions moving towards the implementation of screening programmes and more international groups furthering knowledge sharing efforts in this space. The ICBP has achieved its aim of creating a forum for lung screening experts to share knowledge, and to support building business cases for implementation. As such, the

network is now being brought to a close we and will be sharing opportunities for experts to be involved in Phase 3. We would like to reflect on the past events and thank all our speakers and attendees for joining the sessions. The network has provided jurisdictions with a space to exchange ideas and be inspired by developments in various areas of lung cancer screening practise.

Considerable thanks for the success of the network must be given to the Programme Board Sponsor, Aileen Keel, and the networks co-chairs, Annette McWilliams and Christian Finley, who played a significant role in identifying key themes and areas for overseeing all outputs. Additionally, we would like to share our thanks for all the speakers and attendees for joining and contributing to the sessions.

List of speakers:

Speaker	Biography
Dr Stephen Lam Canada	Professor of Medicine, University of British Columbia. Medical director of the BC Lung Screening Program, Canada.
Dr Martin Tammemagi Ontario	Professor Emeritus, Brock University, Canada. Scientific Lead of the Ontario Lung Screening Program.
Dr David Baldwin UK	Consultant respiratory physician, Nottingham University Hospitals, UK.
Prof Matthew Callister UK	Consultant Respiratory Physician, Leeds Teaching Hospitals. Honorary Professor of Respiratory Medicine, University of Leeds, UK.
Prof Dorothy Keefe Australia	Medical Oncologist, and the Chief Executive Officer of Cancer Australia.
Dr Marianne Weber Australia	Cancer Epidemiologist, Daffodil Centre.