

P1.327: Using data for policy insights to inform the implementation of lung cancer screening



Find out more about the role of global data in
advancing lung cancer screening



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INTRODUCTION

The majority of lung cancer cases are diagnosed at advanced stages, significantly contributing to lung cancer's status as the leading cause of cancer-related mortality worldwide.¹⁻⁴ Low-dose computed tomography (LDCT) screening presents a critical opportunity to shift this trajectory by enabling the earlier detection of lung cancer, and improve outcomes and survival rates.⁵⁻¹⁰

Despite strong and consistent evidence from large-scale clinical trials and an expanding body of real-world data from national programmes, progress in implementing LDCT screening has been slow and uneven across countries. This gap between evidence and practice highlights persistent challenges in translating research into policy and scaling up screening initiatives at the population level.

METHODS

In 2022, the Lung Cancer Policy Network – a global multidisciplinary network of experts from the lung cancer and oncology community – developed an interactive map of lung cancer screening.¹¹ The tool is a comprehensive and regularly updated overview of screening activities worldwide, including pilot projects, organised programmes and relevant research initiatives. The third edition of the map was published in 2025.

Using data collated through the interactive map, the Network produced a report, *Closing the gap: the role of global data in advancing lung cancer screening*, aimed at addressing the persistent disparity between research evidence and policy uptake.¹² The report draws on 235 studies, pilot projects and screening programmes featured on the map, analysing common approaches, challenges and enabling factors. It highlights practical, real-world examples alongside recent policy developments and emerging strategies that have the potential to accelerate implementation. By bringing together this diverse evidence base, the report provides policymakers with robust, actionable insights to support the design and roll-out of national lung cancer screening programmes.

DISCUSSION AND CONCLUSION

The report demonstrates that effectively harnessing data can be transformative in advancing the implementation of equitable and high-quality lung cancer screening programmes. By drawing on robust international data sets and real-world experience, policymakers and programme designers are better equipped to develop strategies that are both evidence-based and tailored to their specific health system contexts.

Importantly, the insights generated through the interactive map provide a strong foundation for targeted policy action, and help bridge the gap between evidence and implementation. By using these insights to inform decision-making, countries can accelerate the introduction and scale-up of lung cancer screening, ultimately improving early detection rates, reducing mortality and driving meaningful, long-term improvements in public health outcomes.

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RESULTS

The report urges policymakers to use insights from current initiatives to guide policy harmonisation, shape programme development and accelerate lung cancer screening implementation. Greater alignment and collaboration across countries are identified as key opportunities to accelerate progress. Sharing best practice and leveraging global data platforms – such as the interactive map of lung cancer screening – can support more efficient and coordinated implementation.

To support action, the report presents a practical, evidence-based roadmap for policymakers, health system leaders and programme implementers. It outlines ten essential areas for action spanning the full screening pathway:

1. Incorporating lung cancer into national cancer control plans (NCCPs) to formalise screening commitments

2. Utilising population-based cancer registries (PBCRs) to inform the design of programmes
3. Applying risk prediction models to inform eligibility for screening
4. Exploring the potential role of biomarkers in recruiting screening participants
5. Selecting appropriate healthcare professionals to refer people to screening
6. Improving screening recruitment through targeted outreach strategies
7. Selecting an appropriate screening model
8. Highlighting the role of shared decision-making
9. Incorporating smoking cessation services into screening
10. Using computer-aided detection technologies.

The status of global implementation of LDCT screening for lung cancer, 2025.

