POSTER P1.024 P1.001-105 Screening and Early Detection

Barriers and Facilitators to Subsidized LDCT Lung Cancer Screening in Vietnam

Dung Van Tran[1,2] (presenting author), Quang Van Le[1,3], Lam Le Ngo[1], Dong Van Hoang[4,5], Vu Anh Trong Dam[2], Kiem Khac Nguyen[1], Huong Thanh Thi Tran[1,3], Hung Manh Do[1], Huy Hong Luu[1], Xuan Thanh Thi Nguyen[1], Kui Son Choi[2,6]

[1]Vietnam National Cancer Hospital (K Hospital), Hanoi. [2]National Cancer Center Graduate School of Cancer Science and Policy, Goyang, Korea. [3]Hanoi Medical University, Hanoi. [4]Cancer Centre, Fiona Stanley Hospital, WA, Australia. [5]Mekong University, Vinh Long. [6]National Cancer Control Institute, National Cancer Center, Goyang, Korea.

Correspondence: dungtranvk1011@gmail.com Corresponding author: kschoi@ncc.re.kr

BỆNH VIỆN K
Trao hy vọng - Nhận niềm tin

IASLC 2026 World Conference on Lung Cancer
SEPTEMBER 12 – 15, 2026
SEOUL, REPUBLIC OF KOREA

63.9% attended
2,100 of 3,288 adults at high risk of lung cancer

Making the scan free did not make people feel they needed it.
What separated those who came was how they rated their own health and how aware they were of their risk.

INTRODUCTION

- Lung cancer is the **second leading cause of cancer death in Vietnam**: 24,426 new cases and 22,597 deaths in 2022. It is usually found late, and five-year survival is 12–16%.
- Low-dose CT lowers lung cancer mortality by **20%** (NLST) and **24–33%** (NELSON), but only among those who take up the offer.
- Vietnam has **no national screening programme** and health insurance does not cover preventive scans. Reported uptake elsewhere is low: 5–18% in the United States.
- Cost is widely assumed to be the principal barrier. Vietnam's first Ministry of Health-funded community LDCT programme offered the scan **free of charge**, which allowed that assumption to be tested.

OBJECTIVES

1. Quantify uptake of a fully subsidized LDCT among adults at high risk.
2. Identify the individual, behavioural and system factors that separate those who attended from those who did not.

METHODS

Design Cross-sectional survey nested in Vietnam's first Ministry of Health-funded community LDCT screening programme; Thanh Tri and Hoang Mai districts, Hanoi, January–August 2024.

Delivery model Thirty commune health stations did case finding and invitation through mass media and leaflets. K Hospital did the imaging. The scan was free and transport from the commune station was provided.

Participants Aged 50–74 years, at least 20 pack-years, currently smoking cigarettes or having quit within 15 years. Excluded: cancer within 5 years, mobility limitation, current treatment for tuberculosis, pneumonia or interstitial lung disease, chest CT within 6 months.

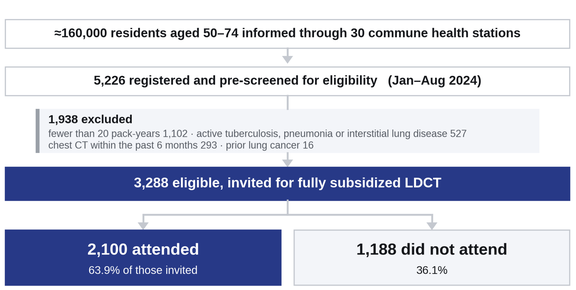
Outcome Completion of the invited LDCT scan.

Data Structured interviews in REDCap: face-to-face for those who attended, by telephone for those who did not, who were also asked their reasons.

Analysis Twelve-variable multivariable logistic regression, with sex-stratified models. Classification tree (rpart, cp = 0.005) to identify interacting subgroups. R 4.3.2.

Ethics Approved by the Ethics Committee in Biomedical Research, Vietnam National Cancer Hospital (3377/BVK-HĐĐĐ); all participants gave written informed consent.

Fig 1. Participant flow into the analysis.



DISCUSSION AND CONCLUSION

Actionable take-away message

- 63.9% of those invited completed a fully subsidized LDCT, above the 11.5% of the UK Lung Screen pilot, 14.4% in the United States and 32–40% in K-LUCAS. Denominators differ, so this is indicative only.
- Removing the fee did not change how necessary people thought the scan was. Rating one's own health as normal or good carried the strongest negative association with attendance **(aOR 0.21)**, and half of those who did not attend said the scan was unnecessary.
- The income gradient runs opposite to high-income settings. Earning more than 200 USD a month **halved the odds of attending**. Where the scan carries no fee, it reaches the poorest best.
- What brought people in was awareness of risk and prior contact with care: smoking now (4.33), family history of cancer (3.12), a check-up within 3 years (2.39). This is consistent with the Health Belief Model.
- Women were 3.8% of the cohort yet formed the highest-attending subgroup, and sex-stratified models pointed the same way in both sexes. Only 124 women were eligible, so their estimates are imprecise.

Four candidate actions for programmes

1. Message asymptomatic risk: feeling well is not evidence of a clear scan
2. Navigation for men who feel well and have no recent check-up
3. Recruit through what works: family history, current smoking, check-ups
4. Widen eligibility for women around non-smoking risk

None of the four has yet been evaluated prospectively.

Limitations

Cross-sectional and observational, with no comparator. Two districts of Hanoi where the scan and the transport were free, so uptake reflects favourable conditions. Everything except the scan itself was self-reported, so recall and social desirability bias are possible. Only 124 women were eligible, which limits the sex-specific estimates. One screening round.

REFERENCES, DISCLOSURES & AI STATEMENT

References

1. Tran DV, Le QV, Ngo LL, et al. Barriers and facilitators to uptake lung cancer screening using low-dose computed tomography scan in high-risk people in Vietnam. *Transl Behav Med* 2026; doi:10.1093/tbm/ibag045.
2. Aberle DR, et al. Reduced lung-cancer mortality with low-dose computed tomographic screening. *N Engl J Med* 2011;365:395–409.
3. de Koning HJ, et al. Reduced lung-cancer mortality with volume CT screening in a randomized trial. *N Engl J Med* 2020;382:503–13.
4. Lin YA, et al. Barriers and facilitators to uptake of lung cancer screening: a mixed methods systematic review. *Lung Cancer* 2022;172:9–18.
5. Schiffelbein JE, et al. Barriers, facilitators, and suggested interventions for lung cancer screening among a rural screening-eligible population. *J Prim Care Community Health* 2020;11:2150132720930544.
6. Lee J, et al. Feasibility of implementing a national lung cancer screening program: interim results from K-LUCAS. *Transl Lung Cancer Res* 2021;10:723–36.

Ethics, funding and disclosures

Approved by the Ethics Committee in Biomedical Research, Vietnam National Cancer Hospital (3377/BVK-HĐĐĐ); all participants gave written informed consent. Funded by the Ministry of Health of Vietnam (Decision No. 1651/QĐ-BYT) and by a Grant-in-Aid for Cancer Research and Control from the National Cancer Center, Republic of Korea (No. 2510673). Partial support for implementation and article processing charges came from AstraZeneca Vietnam, which had no role in the design, conduct, analysis or reporting of the study, or in the decision to submit. No other competing interests.

Acknowledgements

The authors thank the district health centres of Thanh Tri and Hoang Mai, the 30 participating commune health stations, and every participant.

Artificial Intelligence (AI) Use Disclaimer

The authors designed the study, performed the analyses and interpreted the findings, and take full responsibility for the content of this poster. No artificial intelligence was used in the study design, data collection, statistical analysis or interpretation of results. Claude (Anthropic) assisted with figure drawing and page layout from numbers and text supplied by the authors.

In accordance with ACCME standards, individuals in control of content are required to disclose any use of AI in the development of educational materials, including the specific tool used and how it contributed. IASLC maintains oversight of all educational content and reviews materials to ensure they are evidence-based, fair-balanced and free from commercial bias.

RESULTS

2,100 / 3,288
completed the fully subsidized LDCT scan
63.9% uptake among those invited

Invited high-risk cohort (n = 3,288)

96.2%	63.7%	94.2%	59.8%	89.4%	19.9%	19.2%
men	aged 50–64 y	currently smoking	≥30 pack-years	public insurance	occupational risk	family history

Fig 2. Factors associated with attending the LDCT scan.
Twelve-variable multivariable logistic regression (n = 3,288). Coloured estimates reached statistical significance (P < 0.05); the right-hand column gives crude attendance in each category.

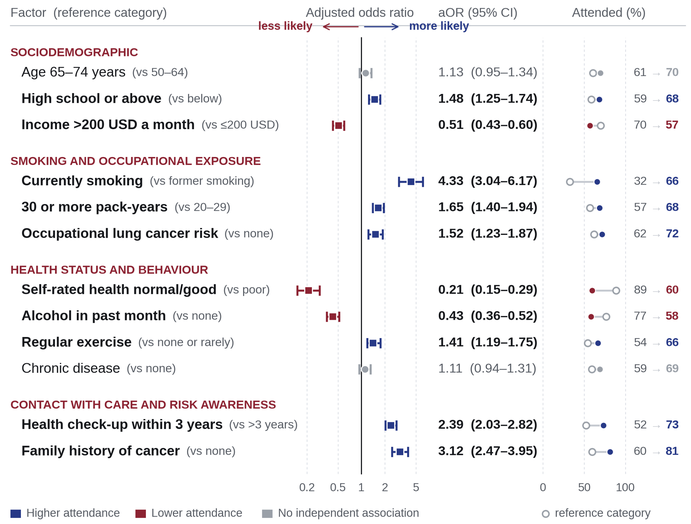


Fig 3. Reasons given for not attending.
Asked of the 1,188 people who did not attend; more than one answer was allowed.

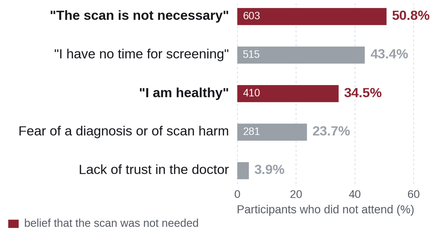


Fig 4. Women in the invited cohort: few eligible, high attendance.

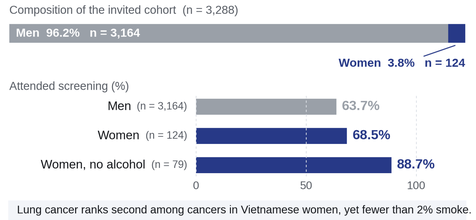


Fig 5. Subgroups defined by the classification tree, and attendance in each.
Sex-stratified tree (rpart, cp = 0.005). Terminal nodes are shaded; the highest and lowest subgroups are filled. The right-hand panel ranks all 14 subgroups from the full tree.

