Survey on lung-cancer screening perceptions and practices in Europe

Information about SOLACE and the survey

SOLACE is a 36-month project funded by the EU under the EU4Health programme and coordinated by the European Institute for Biomedical Imaging Research (EIBIR). The SOLACE project assesses the current state of play, needs and best practice of Lung Cancer Screening (LCS) in EU member states and produces a comprehensive guideline and implementation package. SOLACE aims at developing, testing and disseminating tools to help overcome identified bottlenecks and specifically addresses the health inequalities in different European countries. It will provide a toolbox for individualised approaches for lung cancer screening on a national or regional level.
More information about SOLACE

An important aspect of the project is the creation and organisation of semi-structured interviews and rolling out an online survey in all member states and other EEA countries. The primary objective of this survey is to gather comprehensive data on the current status of LCS in each member state, as well as conduct a detailed needs and gap analysis.

This survey is targeted at health professionals and other relevant stakeholders and takes about 9 minutes to complete.

Your survey responses are saved only after each page is completed by clicking 'next' (not after each question is filled in). You may complete the SOLACE survey intermittently, as long as you use the same computer (IP address) and internet browser. However, once the survey is submitted, you are no longer able to go back and change answers.

This survey is anonymous.

Kindly be aware that we need all responses to be submitted by September 22.

Survey on lung-cancer screening perceptions and practices in Europe

Section 1

About you

1. Please choose one of the below options that best describes your job

- ◯ Doctor/Physician
- ◯ Public health specialist
- ◯ Epidemiologist
- ◯ Radiology technician
- ◯ Physicist
- ◯ Nurse
- ◯ Physiotherapist
- ◯ Psychologist
- ◯ Social worker
- ◯ Policy maker
- ◯ Other (please specify)

[ ]

Survey on lung-cancer screening perceptions and practices in Europe

Section 1

About you

2. What is the main area you are working in?
Please choose one that best describes your area of work

- ◯ Primary Care / General Medicine
- ◯ Angiology
- ◯ Cardiology
- ◯ Gastroenterology
- ◯ Gynecology/Mastology
- ◯ Occupational Medicine
- ◯ Oncology
- ◯ Pathology/molecular diagnostics
- ◯ Radiation Oncology / Radiotherapy
- ◯ Radiology
- ◯ Respiratory Medicine
- ◯ Rheumatology
- ◯ Thoracic Surgery
- ◯ Urology
- ◯ Other (please specify)

[ ]

3. Are you taking care of lung cancer patients on a regular basis (>1 patient per week)? Please choose one of the below

- ◯ Yes
- ◯ No

Survey on lung-cancer screening perceptions and practices in Europe

Section 1

About you

4. Which area(s) of lung cancer care are you involved in?
Please choose all that apply to you

- [ ] Imaging diagnostics
- [ ] Clinical lung cancer diagnostics including bronchoscopy/endoscopy
- [ ] Pathology / Molecular diagnostics
- [ ] Thoracic surgery
- [ ] Radiotherapy / Radiation oncology
- [ ] Systemic therapy / Medical oncology
- [ ] Palliative Care
- [ ] General Medicine / Primary Care
- [ ] Other (please specify)

Survey on lung-cancer screening perceptions and practices in Europe

Section 1

About you

5. How many years have you been working in your profession?
Please choose one that is the best match for you

- ◯ 0-5 years
- ◯ 6-10 years
- ◯ 11-15 years
- ◯ >15 years

6. Which gender do you mostly identify with?
Please choose one that best describes you

- ◯ Male
- ◯ Female
- ◯ Other
- ◯ Prefer not to say

7. What age are you now?
Please choose your age category

- ◯ 18-29 years
- ◯ 30-39 years
- ◯ 40-49 years
- ◯ 50-59 years
- ◯ 60-69 years
- ◯ 70-79 years
- ◯ 80 years and above

8. Which country do you work in?
Please choose the country you currently work in

Survey on lung-cancer screening perceptions and practices in Europe

Section 2

General attitude towards Low dose CT Lung Cancer Screening (LDCT LCS) programmes

9. Are you aware of the new **EU Council Cancer Screening Recommendation*** from December 2022 on Low dose CT Screening for Lung Cancer?

* EU COUNCIL RECOMMENDATION of 9 December 2022 on strengthening prevention through early detection: A new EU approach on cancer screening replacing Council Recommendation 2003/878/EC (2022/C 473/01)

- ◯ Yes
- ◯ No

10. What is the status in your country relating to Low dose CT Lung Cancer Screening (LDCT LCS)?
Please choose the one that best describes your country

- ◯ Structured national / regional LDCT LCS program on-going
- ◯ Structured LDCT LCS programme currently planned / under development
- ◯ LDCT LCS pilot study on-going / completed
- ◯ No structured LDCT LCS programme or pilot study
- ◯ Do not know

11. Have you personally been involved in LDCT LCS?
Please choose all that apply to the best of your knowledge

- [ ] Yes, within a structured national/regional LDCT LCS programme
- [ ] Yes, within a LDCT LCS pilot
- [ ] Yes, within research related to LDCT LCS
- [ ] No

12. In your opinion, what are benefits from structured national LDCT LCS programmes?
Please choose all statements that apply from your point of view

- [ ] Detection of lung cancer at an earlier stage resulting in higher curative treatment rates
- [ ] Reduction of lung cancer mortality
- [ ] Higher smoking cessation rates within LDCT LCS programmes
- [ ] Potential of LDCT to diagnose other relevant diseases (i.e. coronary calcification, emphysema, osteoporosis)
- [ ] Programs will be cost-effective
- [ ] Improved health equity in LDCT LCS programs (i.e. for socially deprived populations)
- [ ] There are no clear benefits
- [ ] Do not know
- [ ] Other benefits (please state)

13. In your opinion, what are the potential harms of structured national LDCT LCS programmes?
Please choose all statements that apply from your point of view

- [ ] Risk of false-positive findings is too high
- [ ] Risk of unnecessary subsequent invasive procedures is too high
- [ ] Risk of overdiagnoses / overtreatment is too high
- [ ] Risk of mental stress for participants is too high
- [ ] Radiation exposure is too high
- [ ] There are no clear harms
- [ ] Do not know
- [ ] Other harms (please state)

14. How do you rate the benefit-harm-ratio of a structured national LDCT LCS programme?
Please rate your own willingness on a scale from 1 (=Harms outweigh benefits) to 7 (=Benefits outweigh harms)

Harms outweigh benefits — Benefits outweigh harms

15. In your opinion, what are obstacles of implementing a structured national LDCT LCS programme?
Please choose all statements that apply from your point of view

- [ ] Current inclusion criteria need improvement to better identify individuals at high risk for lung cancer
- [ ] Insufficient strategies to enrol hard-to-reach populations
- [ ] Low inclusion / participation rates of individuals at high risk for lung cancer in structured national LDCT LCS programs
- [ ] Poorly coordinated interaction of LDCT LCS and subsequent management of positive screening-detected findings
- [ ] Overreporting of incidental findings derived from LDCT (i.e. emphysema, coronary calcification) resulting in higher healthcare costs
- [ ] Lack of resources (i.e. qualified staff, equipment) to run structured national LDCT LCS programs
- [ ] Limited/missing evidence of the benefits and harms of structured national LDCT LCS programs
- [ ] Limited/missing evidence of the cost-effectiveness of structured national LDCT LCS programs
- [ ] There are no obstacles or risks
- [ ] Do not know
- [ ] Other obstacles or risks (please state)

16. How do you rate the overall impact of a structured national LDCT LCS programme?
Please rate the overall benefit on a scale from 1 (=very negative) to 7 (=very positive)

Very negative — Very positive

17. Would you generally support a structured national LDCT LCS programme yourself?

- ◯ Yes
- ◯ Undecided
- ◯ No
- ◯ Comment

Survey on lung-cancer screening perceptions and practices in Europe

Section 3

Contribution to specific steps within a LDCT LCS programmes

18. Within a structured national LDCT LCS programme, would you, or do you already, actively contribute ....

	Yes	Undecided	No	Not my field of expertise
....to the identification of individuals at high risk for lung cancer	◯	◯	◯	◯
.... to the enrolment of individuals eligible for participation	◯	◯	◯	◯
.... actively perform LDCT imaging acquisition	◯	◯	◯	◯
.... read and report LDCTs	◯	◯	◯	◯
.... utilise computer assisted devices/artificial intelligence solutions to help with reading and reporting LDCT scans	◯	◯	◯	◯
.... work-up positive LDCT screening findings	◯	◯	◯	◯

19. Which of the following algorithms/guidelines for **LDCT scan reading in LCS** would you use?
Please choose your personal preference

- ◯ American College of Radiology Lung RADS (2022)
- ◯ Fleischner society Guidelines for Management of Incidental Pulmonary Nodules Detected on CT Images (2017)
- ◯ British Thoracic Society guidelines for the investigation and management of pulmonary nodules (2015)
- ◯ Expert Group: European position statement on lung cancer screening (2017)
- ◯ Existing national algorithm/guideline
- ◯ Existing local algorithm/guideline
- ◯ Do not know
- ◯ Other (please specify)

20. Which of the following algorithms/guidelines for the **screen-detected positive findings** (suspicious of lung cancer) will you use?
Please choose your personal preference

- ◯ American College of Radiology Lung RADS (2022)
- ◯ Fleischner society Guidelines for Management of Incidental Pulmonary Nodules Detected on CT Images (2017)
- ◯ British Thoracic Society guidelines for the investigation and management of pulmonary nodules (2015)
- ◯ Expert Group: European position statement on lung cancer screening (2017)
- ◯ Existing national algorithm/guideline
- ◯ Existing local algorithm/guideline
- ◯ Do not know
- ◯ Other (please specify)

Survey on lung-cancer screening perceptions and practices in Europe

Section 4

Readiness to implement/run a structured national LDCT LCS programme, education and research needs

21. How do you rate the quality of your local and national IT-infrastructure to support a future/on-going structured LDCT LCS programme in your country?
Please rate the quality on a scale from 1 (=very poor) to 7 (=very high)

Very poor — Very high

22. Would you attend education and training programmes for LDCT LCS programmes ...
Please choose one of the below

- ◯ Yes
- ◯ Undecided
- ◯ No
- ◯ Not needed for my field of expertise
- ◯ Comment

23. Do you see a need to integrate or link smoking cessation programmes with LDCT LCS programmes?

- ◯ Yes
- ◯ Undecided
- ◯ No
- ◯ Comment

24. Do you see a need or benefit in extending LDCT LC screening programme to include lung health checks (i.e. pulmonary function test)?

- ◯ Yes
- ◯ Undecided
- ◯ No
- ◯ Comment

25. Where do you see a need for further research to improve structured national LDCT LCS programmes?
Please choose all options you think are needed

- [ ] Better definitions of individuals with high risk of lung cancer
- [ ] Better enrolment strategies of individuals with high risk of lung cancer
- [ ] Meaningful extension of LDCT LCS programmes to never-smokers or low smoking consumption populations with high risk of lung cancer
- [ ] Development of liquid biopsy-based biomarkers for better risk prediction of individual lung cancer risk
- [ ] Development of liquid biopsy- or radiomics-based biomarkers for better malignancy risk prediction of screening-detected positive findings
- [ ] Individualisation of LDCT follow-up intervals based on individual predictive risk factors for development of lung cancer
- [ ] Other (please specify)