

## Domain 2: Additional considerations for planning technical and workforce capacity for lung cancer screening



This summary seeks to provide examples of activities and healthcare professionals that may be responsible for each component of a screening programme. Multidisciplinary teams are also necessary to support clinical decision-making and onward referral and management of results from screening to ensure the best possible outcomes for participants.

*Table A* includes the factors to consider ahead of screening while *Table B* lists considerations for during and after the appointment.

Please note that this list is not exhaustive and varies according to the local health system.

**Table A. Considerations in the lead-up to screening**

Programme component	Example activities	Example roles
Recruitment*	<ul style="list-style-type: none"> <li>design, delivery and maintenance of public health campaign to raise awareness of screening</li> <li>information provision during routine check-ups</li> <li>set-up and maintenance of a database for recruitment to coordinate invitations to screening</li> <li>offering training to those involved in recruitment.</li> </ul>	Family physicians Primary care nurses Community-based healthcare professionals (e.g. pharmacists, dentists) Non-clinical personnel (e.g. call centres) Occupational physicians Respiratory medicine specialists (pulmonologists) Patient organisations
Eligibility assessment*	<ul style="list-style-type: none"> <li>design and delivery of questionnaires for assessing an individual's eligibility to participate in the screening programme</li> <li>provision of information on the benefits and harms of screening</li> <li>collection of biospecimens (e.g. blood samples)</li> <li>screening for other non-communicable diseases and, if necessary, onward referral to relevant primary care services.</li> </ul>	Family physicians Respiratory medicine specialists Occupational physicians Primary care nurses Patient navigators
Smoking cessation	<ul style="list-style-type: none"> <li>design, coordination and resourcing required to deliver smoking cessation services e.g.:               <ul style="list-style-type: none"> <li>hiring smoking cessation specialists</li> <li>training screening personnel on smoking cessation</li> <li>development or licensing of decision aids</li> <li>coordinating and securing participant access to existing services (e.g. telephone support), nicotine replacement therapy or pharmacotherapy</li> </ul> </li> <li>data collection on outcomes from participating in the intervention.</li> </ul>	Respiratory medicine specialists Occupational physicians Primary care nurses Smoking cessation specialists

\* Alternatively, this step may be centrally organised and delivered by regional health authorities (i.e. not directly through the healthcare professionals listed).

Please note that this list is not exhaustive and varies according to the local health system.

**Table B. Considerations relating to screening delivery and follow-up procedures**

Programme component	Example activities	Example roles
Screening delivery	<ul style="list-style-type: none"> <li>delivery of LDCT scans</li> <li>development and implementation of a system for quality management (to ensure the programme meets all regulatory and safety requirements).</li> </ul>	Radiologists Respiratory medicine specialists Radiographers Medical physicists
Evaluation of results	<ul style="list-style-type: none"> <li>Interpretation of scan results, which may include computer-aided detection and other approaches to analysis</li> <li>coordination and consultation with multidisciplinary teams.</li> </ul>	Radiologists Respiratory medicine specialists Multidisciplinary teams
Communication of results	<ul style="list-style-type: none"> <li>communication of baseline scan results and next steps</li> <li>coordination with primary care to relay information about screening results.</li> </ul>	Radiologists Respiratory medicine specialists Family physicians or primary care nurses Specialist cancer nurses Patient navigators
Diagnosis and treatment (care escalation)	<ul style="list-style-type: none"> <li>offering follow-up LDCT imaging and other tests for diagnosis (e.g. endobronchial ultrasound, PET scanning, biopsy), including communication with medical and pathology lab scientists</li> <li>may involve coordination and delivery of treatment (e.g. radiation therapy, chemotherapy or surgery) and onward referral for any incidental findings from diagnostic workup or treatment.</li> </ul>	Radiologists Respiratory medicine specialists Thoracic surgeons Medical oncologists Radiation oncologists Nuclear medicine physicians Specialist cancer nurses Medical and pathology lab scientists Community-based healthcare professionals (e.g. pharmacists, dentists, dieticians, physiotherapists) Specialists in psychosocial support (e.g. social workers, clinical psychologists, psychiatrists) Patient organisations Patient navigators Palliative care providers
Data monitoring and evaluation	<ul style="list-style-type: none"> <li>set-up and maintenance of a data management system for all data collected across the screening programme</li> <li>design and delivery of an evaluation of the screening programme</li> <li>reporting of outcomes and monitoring data to the relevant stakeholders (e.g. linking data to screening registries)</li> <li>equipping and coordinating other infrastructure for the programme (e.g. office or clinic spaces, mobile CT units, telehealth).</li> </ul>	Programme coordinator Quality improvement analysts (evaluation specialists) Data specialists Public health specialists/epidemiologists Non-clinical personnel (e.g. administrators) Programme evaluation centre (regional/national)