

# NSC TLHC Seminar Eligibility Assessment

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## Introduction & COI

- Chest Physician & 'Champion for Early Diagnosis', RMH/ICR BRC
- NHSE Joint National Clinical Lead Targeted Lung Health Checks
- NIHR CRN National Specialty Lead Screening, Prevention and ED
- NIHR Oncology-TRC ED theme chair

COI: RMCC funded, NHSE TLHC co-Lead, NIHR CRN SPED Lead Academic collaborations/joint grants with Optellum, QURE and Roche

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# Risk Assessment (NHSE TLHC Protocol section 3.3)

- Assessment of risk essential to maximise cost effectiveness of the intervention.
- Standard protocol uses two thresholds to identify participants: a risk threshold of ≥1.51% risk of lung cancer over 6 years as the minimum threshold for PLCOM2012; and ≥2.5% risk of lung cancer over 5 years for LLPv2.
- Triage, or pre-population of risk calculator data can be performed by appropriately trained admin staff.
- Decision to proceed to LDCT requires review by a doctor/nurse. Cases excluded from LHC assessment by a non-clinician should be audited by the responsible assessor or delegated clinician >= Band 6 LHC nurse



Table 2: Factors included in two multivariable risk prediction models

| LLPv2: ≥2.5% risk               | PLCO <sub>M2012:</sub> ≥1.51% risk          |
|---------------------------------|---|
| Age                             | Age (years)                                 |
| Gender                          | Education level                             |
| Smoking duration (years)        | Body mass index                             |
| Previous pneumonia/ COPD/       | COPD/ chronic bronchitis/ emphysema         |
| emphysema/ bronchitis/ TB       | Personal history of lung cancer             |
| Occupational asbestos exposure  | Family history of lung cancer               |
| Previous history of malignancy  | Ethnicity*                                  |
| Previous family history of lung | Smoking status                              |
| cancer; and relative's age at   | Average number of cigarettes smoked per day |
| onset i.e. <60 y or >60 years;  | Duration smoked (years)                     |
| whether first degree relative   | Years having ceased smoking                 |

<sup>\*</sup> referred to as 'Race' in the original PLCOM2012 risk model



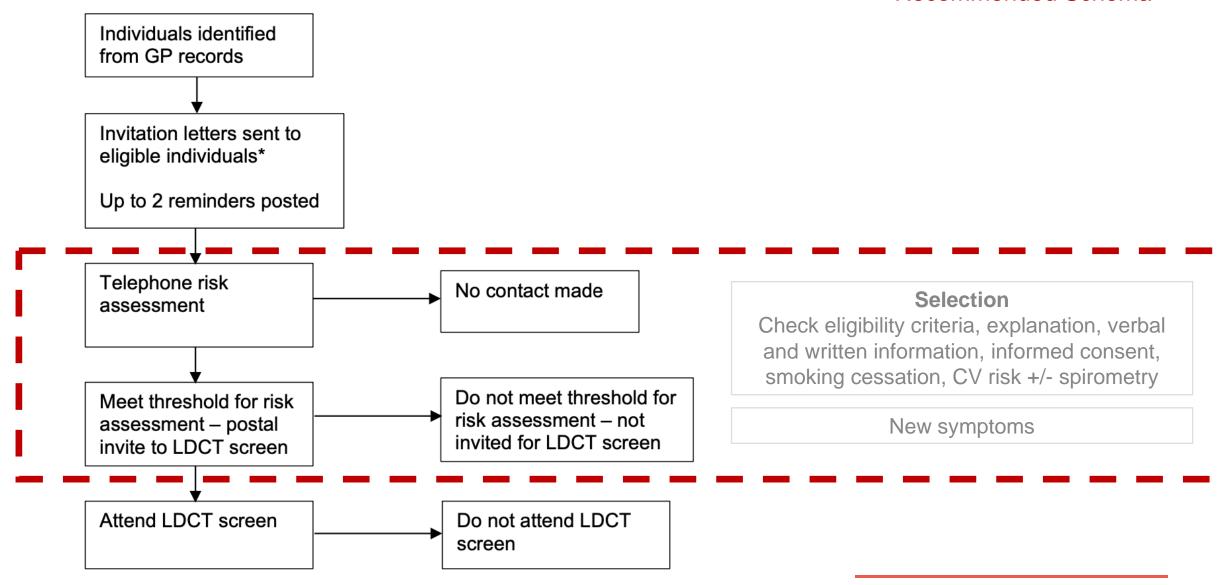
### **Exclusion Criteria**

- Participant does not have capacity to give consent (standard criteria for assessing capacity apply);
- Weight exceeds restrictions for scanner (>200kg);
- Participant unable to lie flat; or
- Poor physical fitness (treatment with curative intent contra-indicated)



Figure 9 Assumed pathway to LDCT screening

#### Recommended Schema



<sup>\*</sup>eligibility defined by smoking history and age.

# Process: Eligibility and assessment

- Lung cancer pathways task and finish group
- Lead authors: John Field, Richard Lee, Amelia Randle
- Key Suggestions for modelling:
  - Only include smokers on GP records
  - Who does the assessment of eligibility?
  - Multivariable models vs. smoking/age
  - Benefit prediction uncertainty
  - Link to adjustments paragraph as may influence assessment method
  - Telephone vs F2F
  - Smoking Cessation advice built into first CT appointment
  - Importance of fitness
  - If patient DNA, offer one further appointment
  - Reassessment method in silico or further contact to confirm data
  - Additional health check items nil vs all vs selected e.g. spirometry

