

medical intervention and prevention of further progression of disease through improved management of these conditions.

S131 WHAT PROPORTION OF THE UK POPULATION WOULD BE ELIGIBLE FOR CT SCREENING FOR LUNG CANCER ACCORDING TO VARIOUS PROPOSED INCLUSION CRITERIA?

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Introduction Low dose CT screening reduced lung cancer mortality by 20% in the National Lung Screening Trial (NLST) using eligibility criteria of age 55–74 yrs, ≥ 30 pack year smoking history, and quit time < 15 years. The US Preventative Services Task Force (USPSTF) has proposed using the NLST criteria extending the upper age limit to 80 years. Alternative proposed eligibility criteria use thresholds from composite risk prediction scores such as a 1.51% lung cancer risk over 6 years using the PLCO_{M2012} model (derived from the Prostate Lung Colorectal and Ovarian Study) and a 5% lung cancer risk over 5 years using the Liverpool Lung Project (LLP) model (used in the UK Lung Screening trial). We sought to compare the proportions of patients in the UK who would be eligible for screening according to these criteria.

Methods We commissioned an anonymous telephone survey in Yorkshire (Hull, Leeds and Wakefield) to collect parameters to calculate lung cancer risk (PLCO_{M2012} and LLPv.2) and likelihood of participation in a future programme. Index of multiple deprivation (IMD) was recorded based on postcode and used to ensure a representative cohort. No patient identifiable information was entered into the research database.

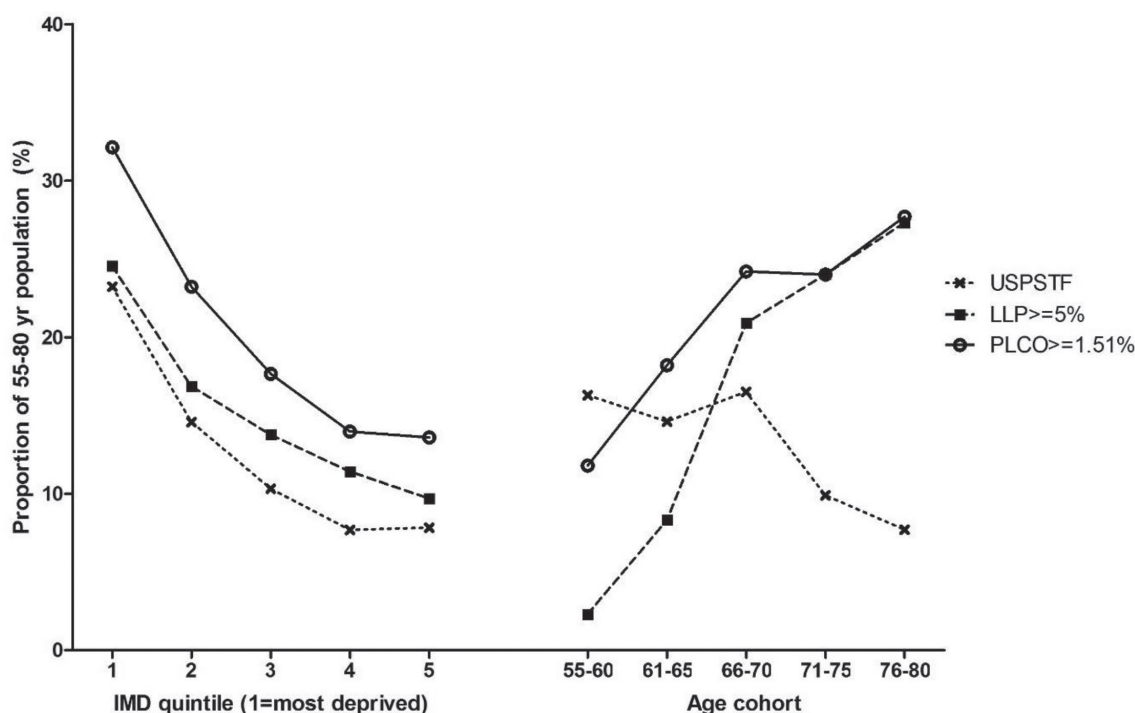
Results 2,424 persons 55–80 years agreed to participate in the telephone survey, of which 1,335 were ever-smokers. The proportion of patients (95% CI) eligible according to various criteria were as follows: NLST 11.9% (10.6%–13.2%), USPSTF 13.3% (12.0%–14.7%), PLCO_{M2012} $\geq 1.51\%$ 20.7% (19.1%–22.3%) and LLP $\geq 5\%$ 15.8% (14.4%–17.3%). The proportions eligible by USPSTF, PLCO and LLP criteria by IMD and age cohort are shown in Figure 1. When asked how likely they would be to attend an NHS lung cancer screening programme, 62.6% indicated ‘very likely’. This proportion was similar between those eligible for screening by any criteria and those not (62.5% and 62.7% respectively) and current and ex-smokers (61.4% and 63.0% respectively).

Discussion The proportions of the population eligible for screening differ considerably between various eligibility criteria, and according to deprivation and age. The criteria selected to determine screen-eligibility in a future national screening programme will have a significant impact on the cost and cost-effectiveness of such a programme.

S132 A RANDOMISED CONTROLLED STUDY OF LUNG CANCER SCREENING IN SCOTLAND USING THE DETECTION OF AUTOANTIBODIES TO TUMOUR ANTIGENS (EARLYCDT-LUNG TEST)

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Abstract S131 Figure 1 The proportion of 55–80 year old population eligible for screening by various criteria by IMD quintile and age