

# The SUMMIT Study: Four-week quit rates amongst individuals referred to Stop Smoking Services following attendance at a Lung Health Check

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- Background to Lung Cancer Screening (LCS) and delivery of smoking cessation interventions in a LCS setting
  - The SUMMIT Study
  - Stop Smoking Service (SSS) referral pathway
  - Outcomes of referrals made to local SSS from the study
  - Discussion and conclusion
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- Lung cancer is the leading cause of cancer related mortality in the UK
- Low-Dose Computed Tomography (LDCT) screening reduces lung cancer related mortality
- NLST – 20% relative reduction
- NELSON – 24% relative reduction (33% in female sub-group analysis)
- 16% relative reduction in meta-analysis of 9 RCTs



Reduced Lung-Cancer Mortality with Low-Dose Computed Tomographic Screening

The National Lung Screening Trial Research Team\*



Reduced Lung-Cancer Mortality with Volume CT Screening in a Randomized Trial

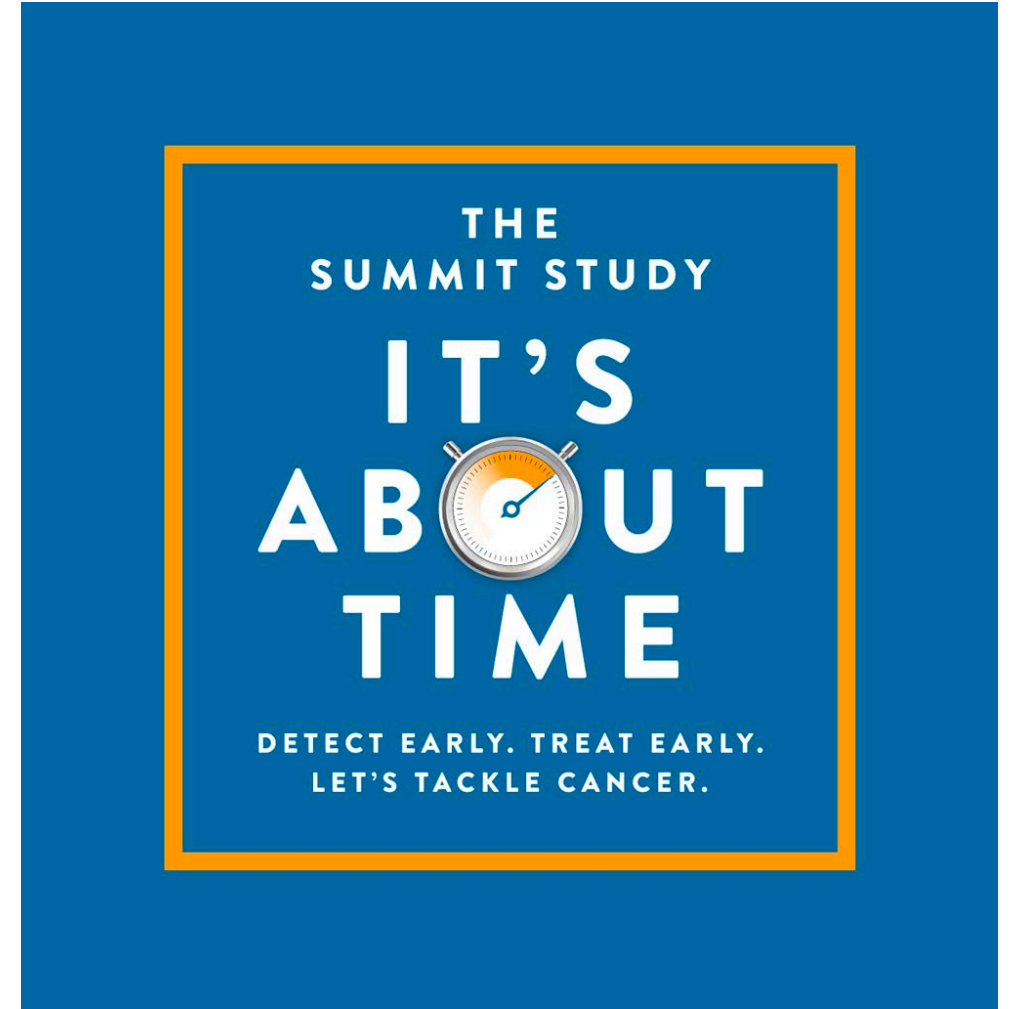
- Estimated 86% of lung cancer deaths in the UK are caused by tobacco smoking (Cancer Research UK)
- Additional association with vascular and respiratory disease
- Estimated 4-5 million deaths a year worldwide\*
- Prevalence of cigarette smoking in the UK has fallen consistently since 2011
- 14.1% of the UK population currently smoke (ONS)

\*Vineis P. Smoking and impact on health. *European Respiratory Review*. 2008 Dec 1;17(110):182–6

- Up to 55% of participants in LCS studies are reported to be people who currently smoke
  - Evidence from screening studies suggests increased motivation to stop smoking in such individuals
  - LCS visits provide a valuable opportunity for smoking cessation interventions to be delivered
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- Unclear how such interventions are best provided in this setting
  - ATS multistakeholder committee (2017) recommendation: *‘a national research agenda should include strategies for implementing tobacco dependence treatment within the lung cancer screening setting’*
  - Action on Smoking and Health (ASH) highlighted the absence of a clear-cut solution for delivering effective smoking cessation support in a LCS setting
  - Importance of drawing insights from real-world experiences gained through UK screening pilot programmes emphasised
  - TLHC protocol recommends that current smokers are offered smoking cessation (SC) advice and formal SC referral on ‘opt-out’ basis
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- Prospective observational cohort study which aims to assess the implementation of Low Dose Computed Tomography (LDCT) screening for lung cancer in a high-risk population in North Central and East London and validate a multi-cancer early detection blood test (NCT03934866)



- Eligibility for LCS via study participation assessed at baseline Lung Health Check (LHC)
- Assessment of smoking history, including duration and average consumption, and current smoking status was included in the baseline LHC appointment
- Questions explored both the use of cigarettes and 'non-cigarette' tobacco-based products including cigars, cigarillos, and pipes

- Current tobacco smokers = individuals smoking cigarettes on most days of the week, or smoking cigars, cigarillos, and pipes at least once per week at the time of the LHC
- Very Brief Advice provided by the research nurse or clinical trials practitioner conducting the appointment
- ‘Opt-out’ referral to SSS made on behalf of those who consented and were resident in boroughs where local SSS were present and accepted secondary care referrals (regardless of eligibility for screening)
- Those residing in boroughs with no local SSS or where the local service only accepted self-referrals, and those who preferred to self-refer were provided smoking cessation support information cards with relevant contact details

- Individual SSS contacted for aggregate outcomes for study referrals
  - Number of referrals received
  - Number of individuals who accepted the service, defined as those who agreed to be booked into a clinic appointment after being contacted
  - Number who declined support when contacted and those whom the service could not contact following a referral from the study was also collected
  - Outcome data included the numbers of quit dates set, successful four-week quits and non-quits
  - All individuals attending a baseline LHC and referred to SSS between 8 April 2019 and 31 January 2020 included
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# Why four-week quit rate?

- Most people who smoke relapse within the first couple of days of a serious quit attempt
  - Prognosis for permanent cessation improves five-fold after the first four weeks
  - Four-week time frame therefore provides a reliable indicator of long-term abstinence
  - Current standard for the assessment of quit success rates is carbon monoxide (CO)- verified four-week quit rate
  - Self-reported four-week quit rates are also widely used in practice
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# Results – acceptance of appointment

- Outcomes available for 742 referrals across five SSS
- 47.3% (n=351/742) of individuals accepted an appointment with the service
- 16.7% (n=124/742) declined the service
- 34.2% (n=254/742) could not be contacted after being referred

	Total (n)	Total (% of referrals received)
Total number of referrals with available outcome data	742	-
Number of individuals contacted who accepted an appointment	351	47.3
Number of individuals contacted who declined the service	124	16.7
Unable to contact following receipt of referral	254	34.2
Other (e.g., insufficient details on referral, out of area)	13	1.8

- 65.5% (n=230/351) of those who accepted the service set a quit date
- Four-week quit rate amongst these individuals was 57.4% (n=132/230)
- 40.0% (n=92/230) did not quit
- 2.6% (n=6/230) lost to follow-up
- Four-week quit rate amongst all individuals referred was 17.8% (n=132/742)

	Total (n)	Total (% of individuals who set a quit date)	Total (% of individuals who accepted the service)	Total (% of referrals)
Total number of quit dates set	230	-	65.5%	31.0%
Total number of four weeks quits - overall	132	57.4%	37.6%	17.8%
<i>Total number of four week quits – CO validated</i>	64	27.8%	18.2%	8.6%
<i>Total number of four week quits – self reported only</i>	68	29.6%	19.4%	9.2%
Total number of non-quits	92	40.0%	26.2%	12.4%
Total number lost to follow up	6	2.6%	1.7%	0.8%

- 47% acceptance of appointment with SSS following referral
- Two-thirds of individuals who accepted SSS appointment seriously attempted to quit by setting a quit date
- Four-week quit rate amongst these individuals was 57%
- Four-week quit rate amongst all individuals referred was 18%
- For comparison, long-term abstinence rates amongst untreated smokers are reportedly 3-5% after a quit attempt\*

\*Hughes JR, Keely J, Naud S. Shape of the relapse curve and long-term abstinence among untreated smokers. *Addiction*. 2004 Jan;99(1):29–38

- Longer term abstinence rates in SUMMIT being assessed
- Our data suggests that 'opt-out' policies which proactively refer individuals who smoke tobacco to SSS following interaction with a LCS programme may be beneficial

# Acknowledgements



- Professor Sam Janes
- Dr Neal Navani
- Dr Samantha Quaife
- SUMMIT Study team
- Summit Study participants
- GRAIL, LLC
- University College London Hospitals NHS Foundation Trust
- UCL Cancer Trials Centre

