# The effect of smoking in old age on total life expectancy and disability free life expectancy

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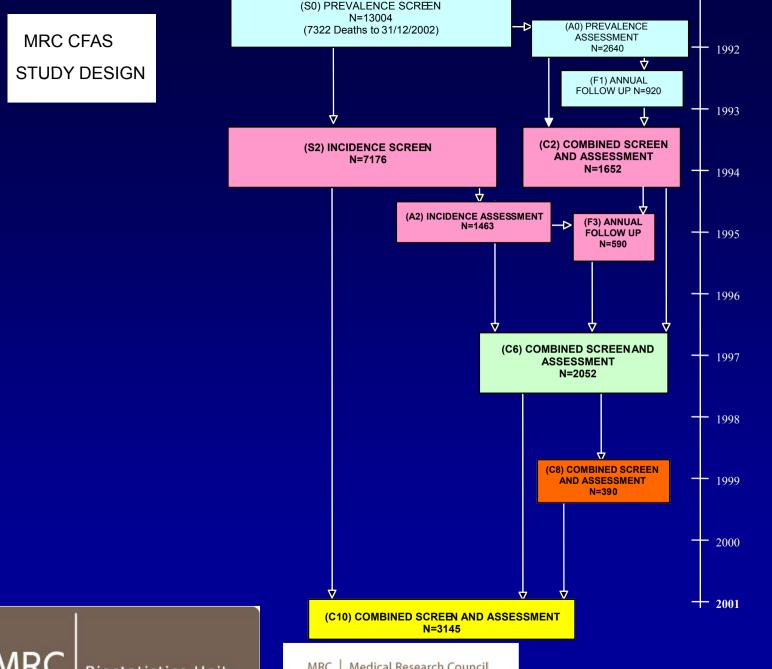
# Introduction

- In UK smoking cessation programme
- Not targeted at the older population
- No consensus in publications

# MRC Cognitive Function and Ageing Study (MRC CFAS)

- Five centres
- Stratified random sample aged 65+
- Includes those in institutions
- Ten years of follow-up
- Death information from ONS





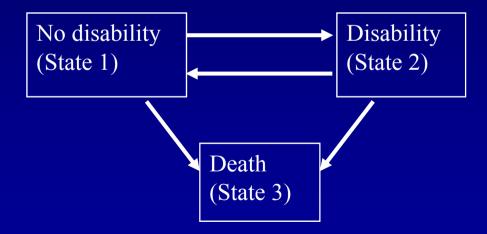
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# Methods

- IMaCh used to estimate disability free life expectancy
- Separately in men and women
- Weights used to adjust for study design
- Deaths to end of 2005 included

#### Multi state models

- Discrete time Markov model
- Irregular observation times



### Measures

- Smoking history at age 60
  - Current
  - Ex-smoker
  - Never smoker
- Disability inability to undertake one these tasks
  - Transfer to and from a chair
  - Put on shoes and socks
  - Cook a hot meal
  - Get around outside
  - Have a bath or wash all over
- IMaCh used for disability transitions

#### Data

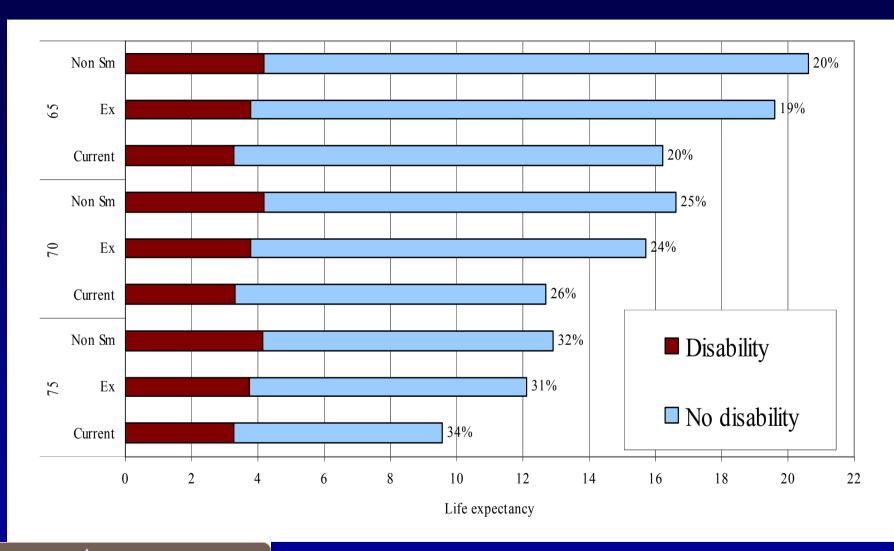
- 4475 non smokers (715 men)
- 3509 ex smokers (1880 men)
- 4628 smokers (2470 men)

### Results

- Non-smokers have the greatest TLE
- Current smokers have shortest TLE

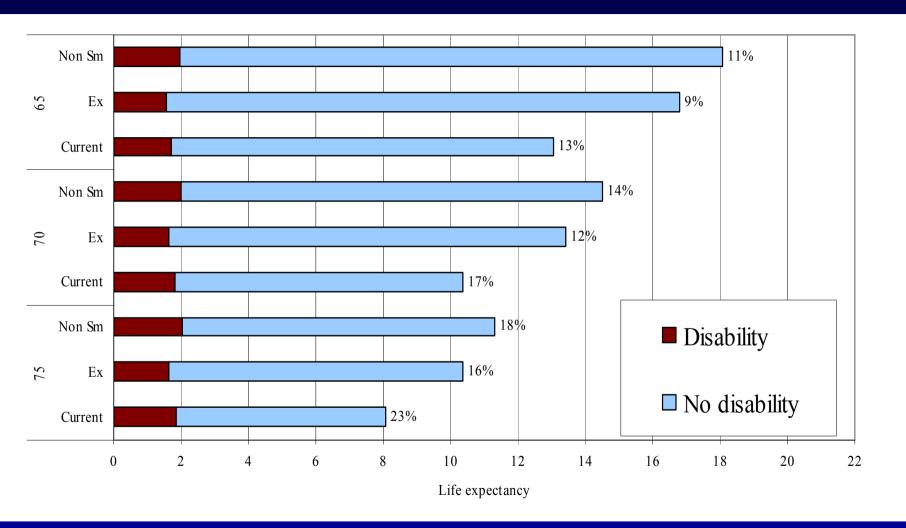
- Disability similar in non and ex smokers
- Current smokers have high proportion of disability

# Women





# Men



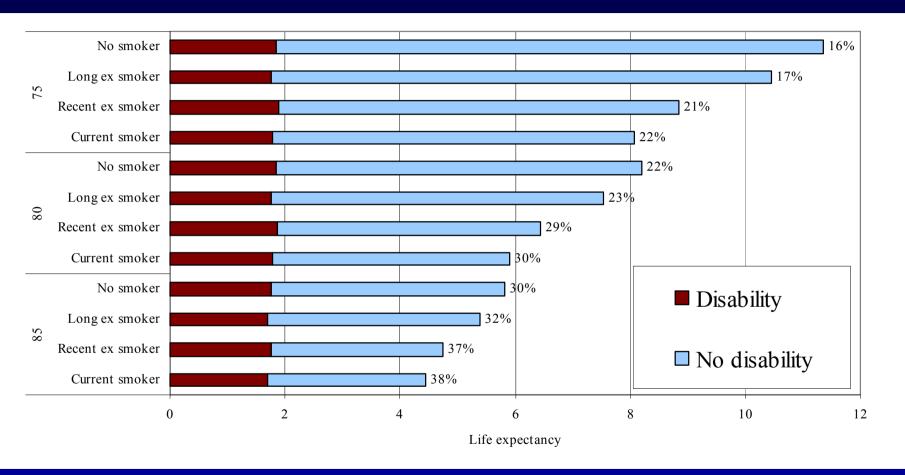


## Other results

- Results not modified by excluding
  - Cognitively impaired
  - Chronic disease sufferers
- In men can investigate late cessation of smoking
  - Men age 75
  - Split ex smokers
    - Early before age 60
    - Late between 60 and 70



# Split ex smokers - Men





### Context

- Previous results have been inconsistent
- Methodological differences
- Population differences
- Smokers are like never smokers
  - 5 years older in men
  - 5-10 years older in women
- Even late cessation has benefits

# Conclusion

- The effect of smoking on TLE and DFLE continues into old age
- Smoking accelerates ageing, and increases % time in disability.
- Given that more people will be spending longer in old age, these results have implications for lifestyle modifications in the elderly.

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