

# **Evaluation of the NHS Bowel Cancer Screening Programme**

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#### Background



- NHS Bowel Cancer Screening Programme began on the 4<sup>th</sup> July 2006 and rolled out incrementally achieving national coverage in 2010
- Initially all aged between 60 and 69 offered screening but now being extended up to 74 (although older people may also self refer)
- The Bowel Cancer Screening Programme (BCSP) is a major NHS investment costing >74 million per year

• Vital to avaluate the pregramme's performance

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**British Journal of Cancer (2012) 107,** 757–764 © 2012 Cancer Research UK All rights reserved 0007 – 0920/12

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A retrospective observational study examining the characteristics and outcomes of tumours diagnosed within and without of the English NHS Bowel Cancer Screening Programme

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#### Screening process



- Eligible individuals are sent a faecal occult blood test (FOBt) screening kit
  - NB. Test soon to change to more sensitive faecal immunochemical test (FIT)
- Kit completed by the participant and returned to the relevant hub
- Individuals whose test is positive are offered a colonoscopy or further investigations at their local screening centre
- If adenomas found individual put into surveillance
- If cancer found referred to local colorectal MDT
- Those who test negative are screened again after 2 years



#### **Evaluation**



- Tumour categories can be detected by linking the NHS Bowel Cancer Screening Programme data set on screening histories to the National Cancer Registration Dataset
- This enables all colorectal tumours in England to be categorised into the groups
  - Screen-detected
    - Standard or surveillance
  - 2. Interval
- FOBt or diagnostic test
- 3. Non-participant
  - FOBt, diagnostic test or surveillance
- 4. Never invited
  - Roll out, under age or former invitee



#### Results

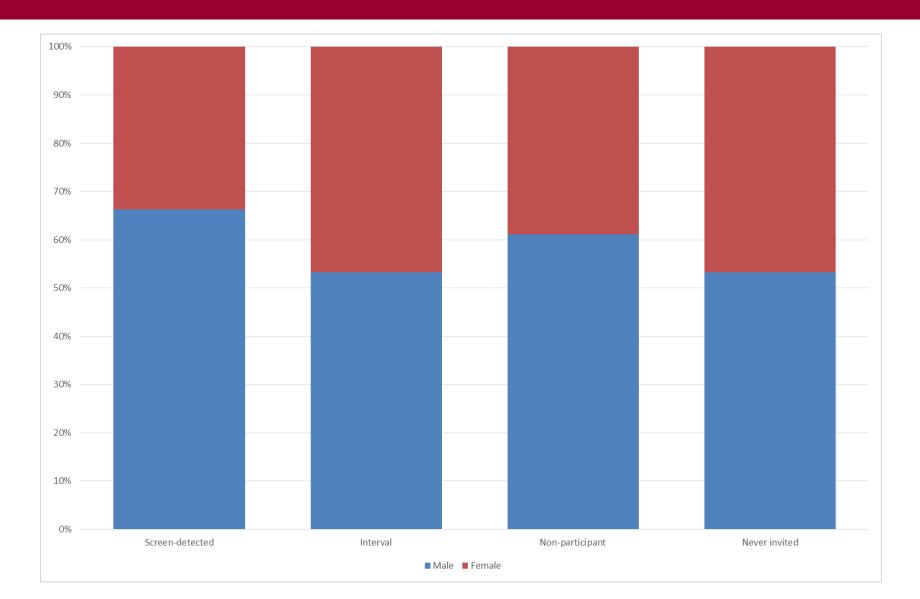


- 293,030 colorectal cancers diagnosed from 4<sup>th</sup> July 2006 until mid 2014
- 68,532 (23.4%) were in individuals who were both eligible for and invited to participate in the screening programme
- 19,980 (29%) were screen-detected cancers
  - 19,744 (28.8%) from standard screens
  - 146 ( (0.2%) from surveillance screens
- 16,370 (24%) were interval cancers
  - 16,050 (23.4%) from negative FOBt tests
  - 256 (0.4%) from negative diagnostic tests
  - 64 (0.1%) from negative surveillance tests
- 32,272 (47%) were cancers diagnosed in non-participants
  - 31,412 (45.8%) from non-participants of FOBt
  - 860 (1.2%) from non-participants of a diagnostic test



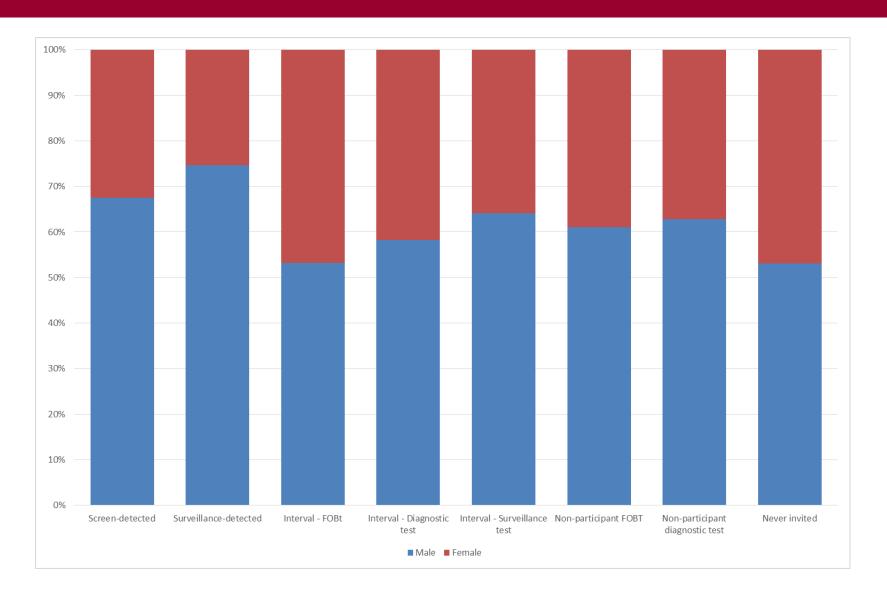
## Characteristics of the groups 1. Sex





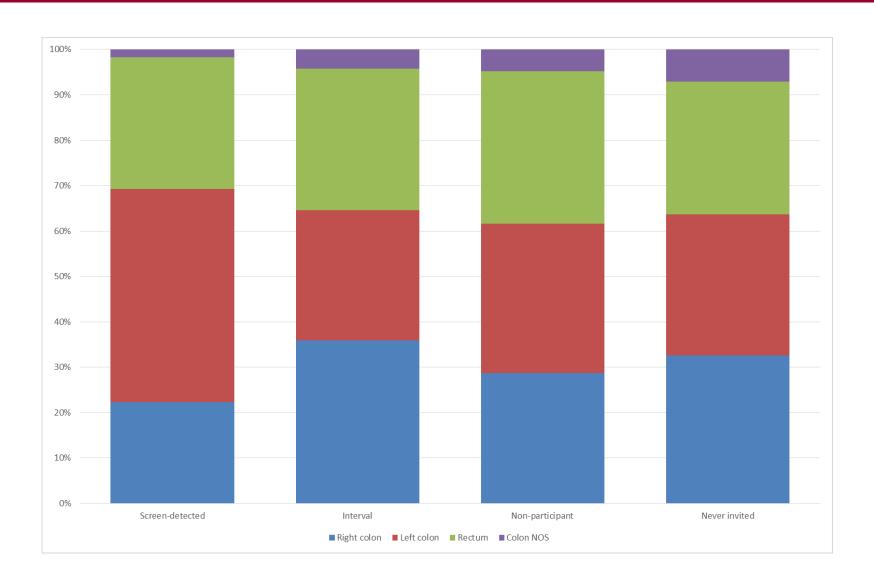
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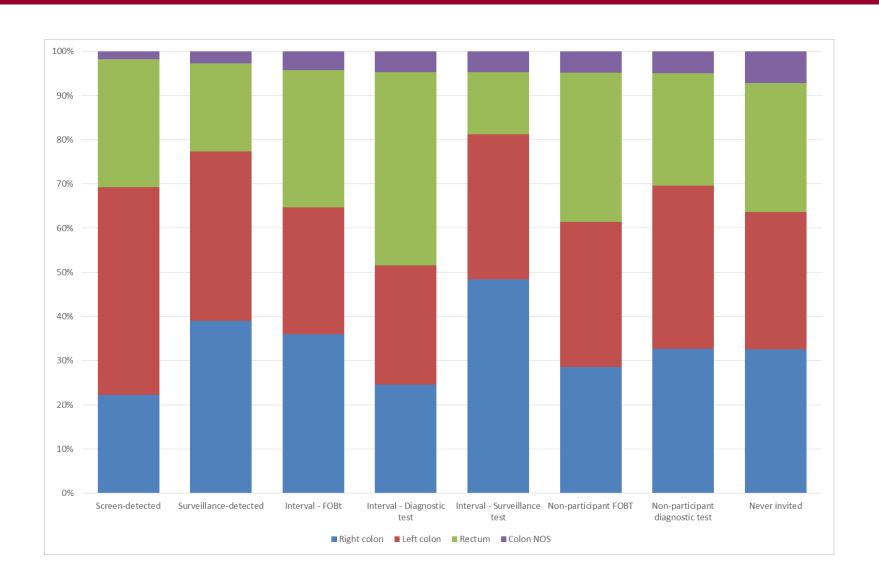
### Characteristics of the groups 2. Tumour site





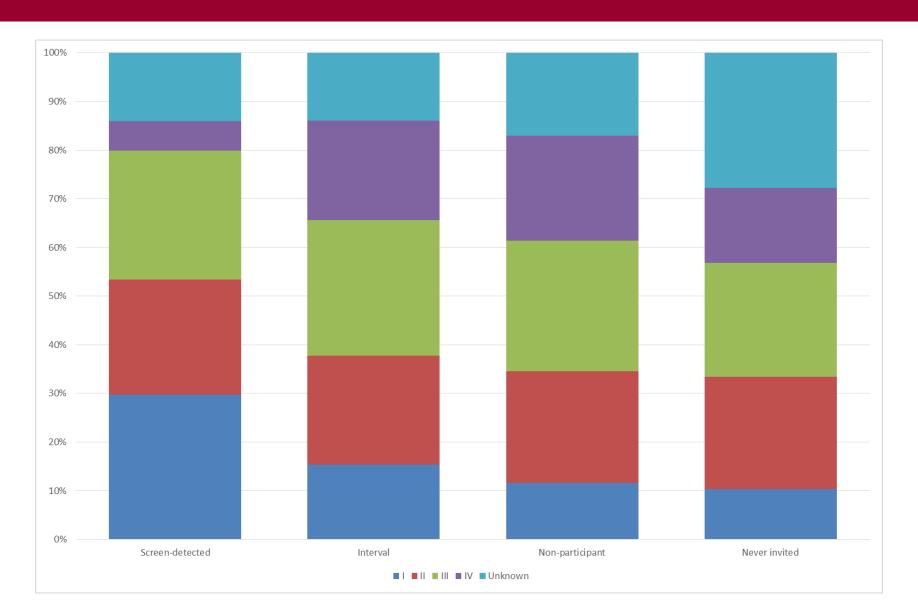
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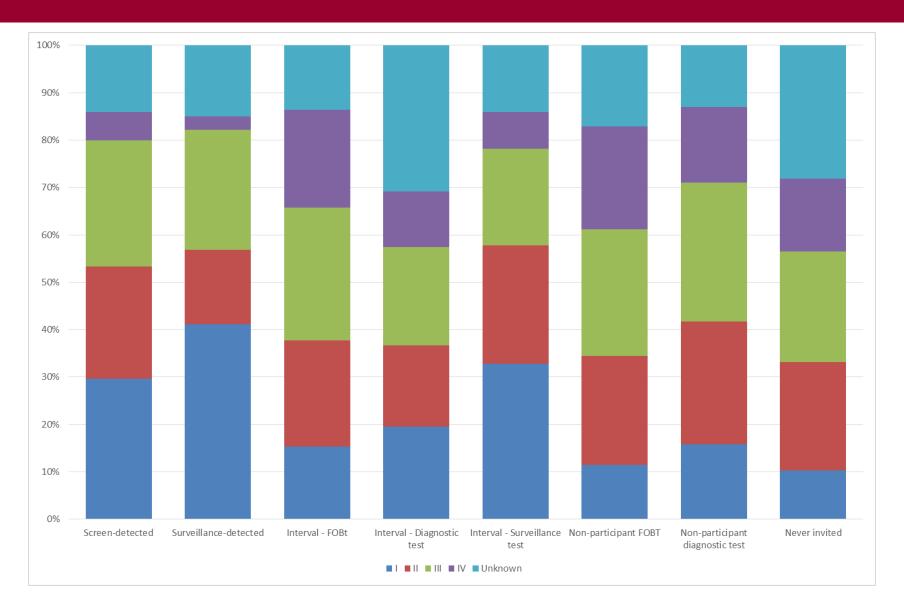
# Characteristics of the groups 3. Stage at diagnosis





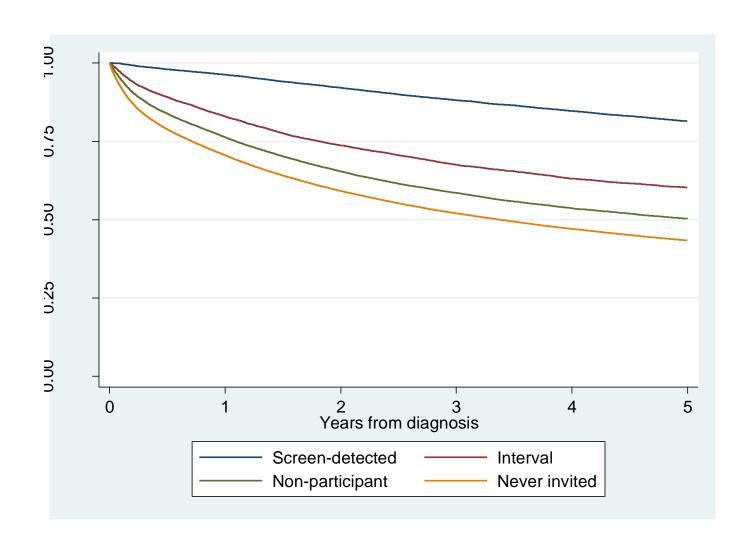
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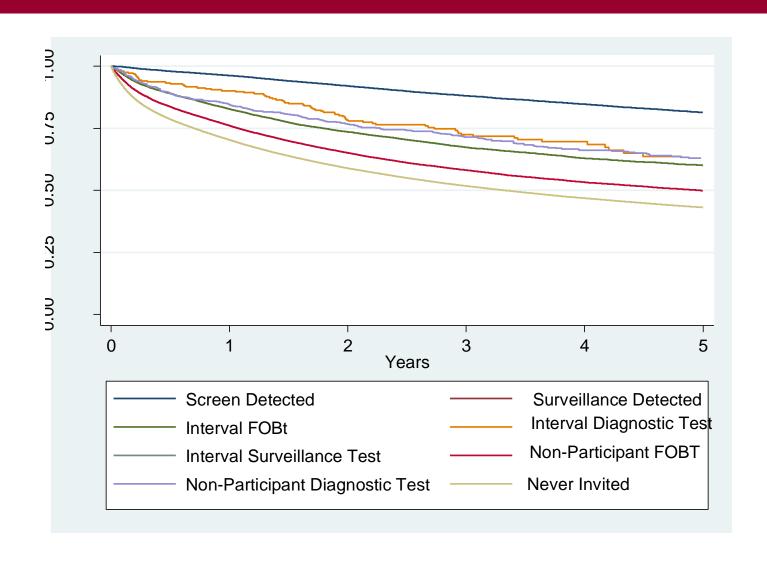
### Characteristics of the groups 4. Survival





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#### Further work



- Finalise these analyses
- Review to be undertaken by the NHS Bowel Cancer Screening Programme of all interval cancers diagnosed after a negative diagnostic test
- Comparison of the quality of colonoscopy within and without of the programme
- Management of pT1 cancers
- Full programme of screening evaluation to be undertaken in partnership with Public Health England

