EVIDENCE BRIEFING ON RECENT RESEARCH: Chemoprevention

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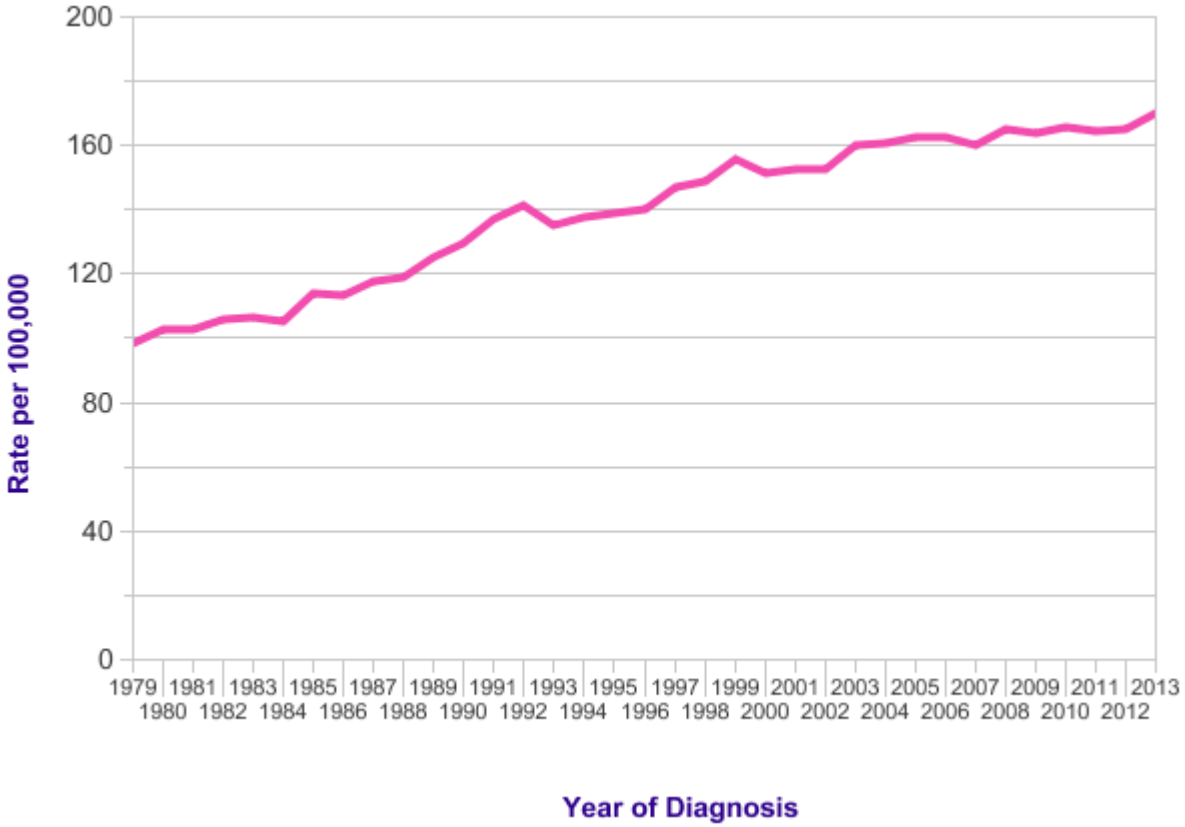
Health and wellbeing gap

Breast Cancer (C50): 1979-2013

European Age-Standardised Incidence Rates per 100,000 Population, Females, Great Britain



Prevention is becoming a priority

Selective Oestrogen Receptor Modulators (SERMs)

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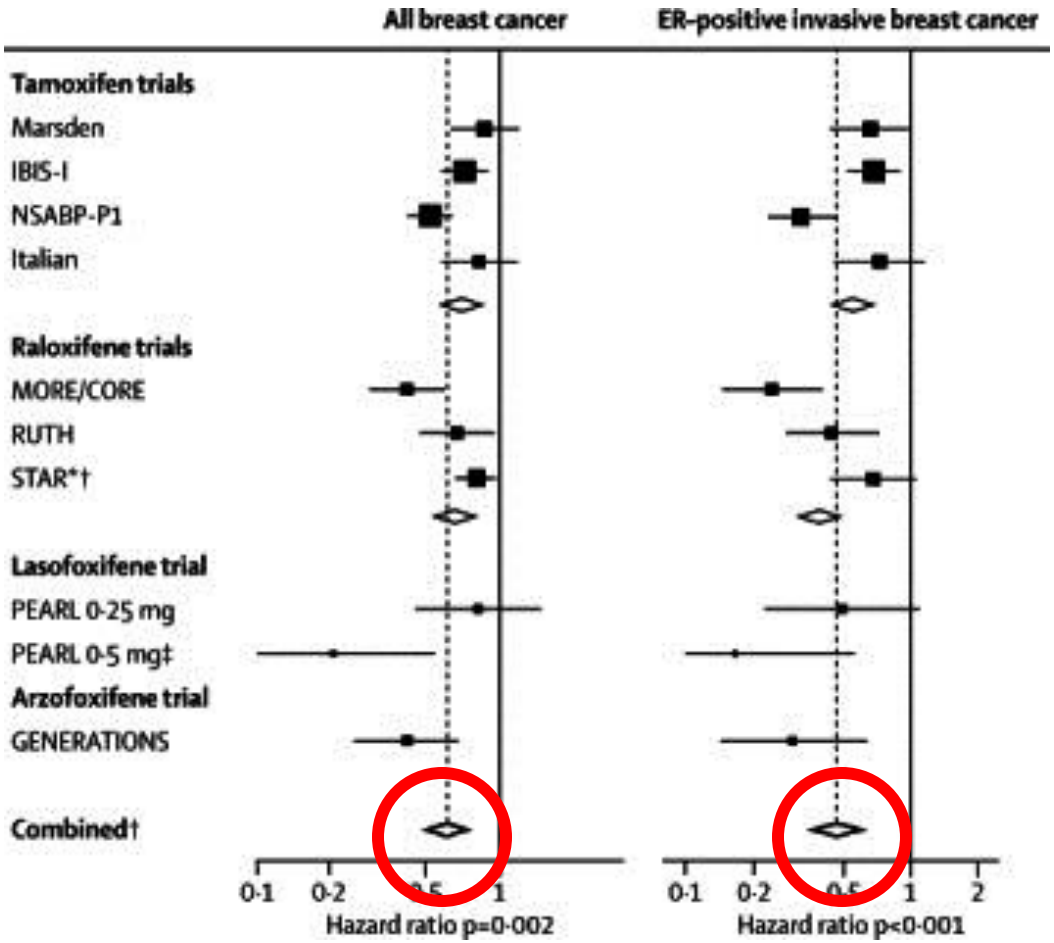
- Nine randomised trials[1]
- Median 5 year follow up

- 38% reduction (breast cancer)
- 51% reduction (ER+)

- Thromboembolic events
- Endometrial cancer
- Menopausal side-effects

- Preventive effect lasts 20 years (Tamoxifen)[2]
- No mortality reduction…



1. Cuzick et al., (2013) Lancet
2. Cuzick et al., (2015) Lancet Oncol

Care and quality gap

NICE 2013 Guidelines

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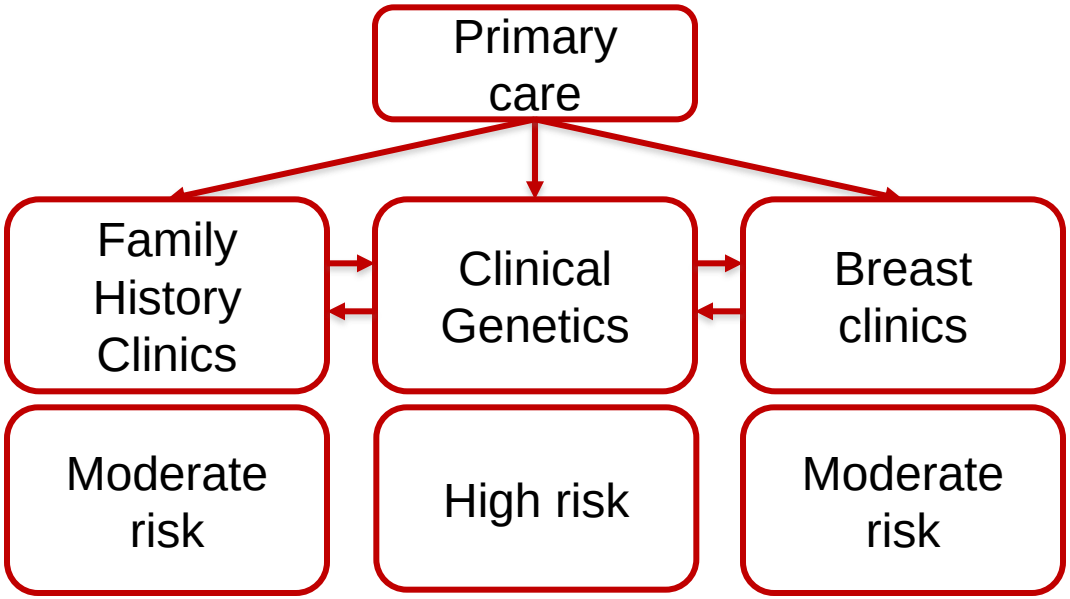
- Offer tamoxifen or raloxifene for 5 years to women at high risk of breast cancer

- Consider offering either tamoxifen or raloxifene for 5 years to women at moderate risk



Uptake: Meta-analysis

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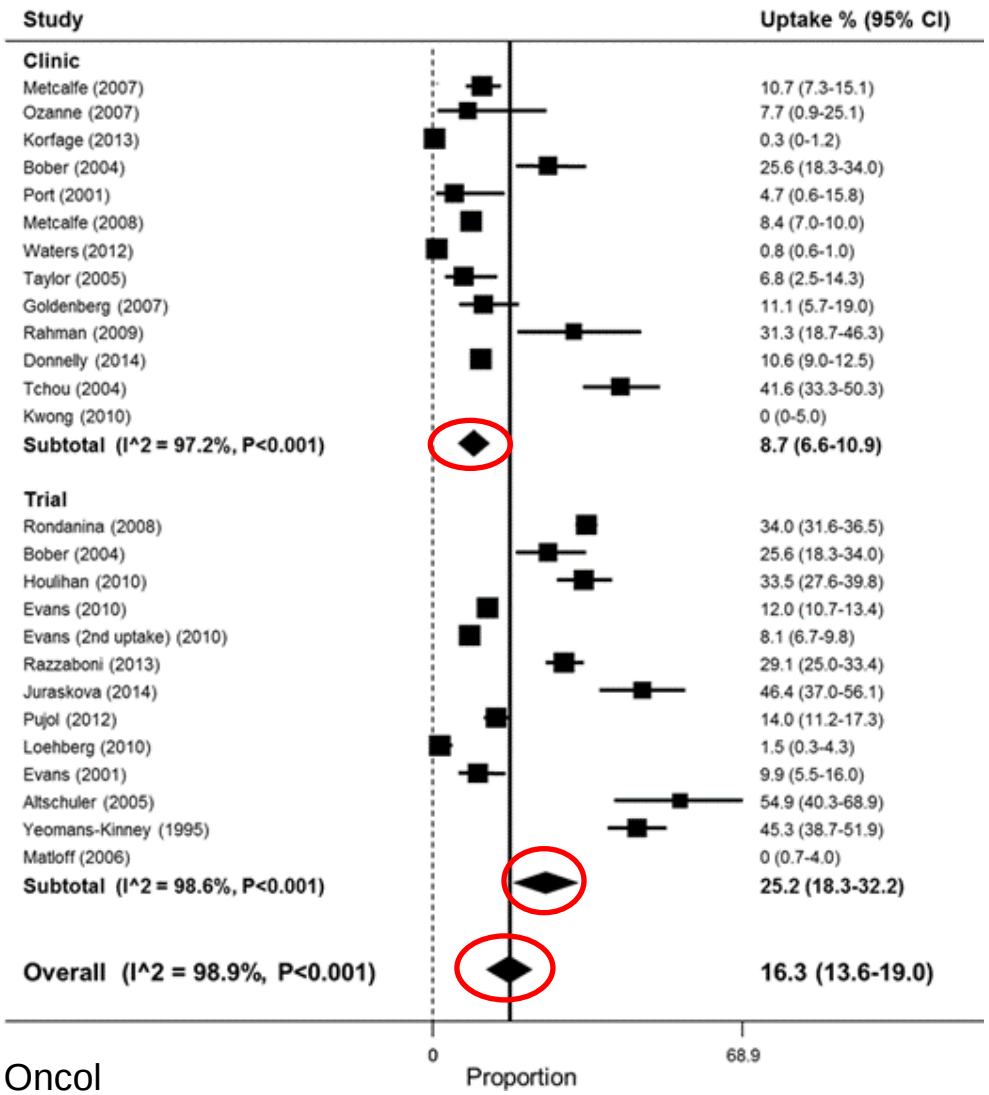

Smith et al., 2016 Ann Oncol

Implementation problems

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Smith et al., 2016 Public Health Genomics

- Qualitative study
  - GPs, genetic counsellors, breast physicians, surgeons (n=25)
- Tamoxifen not licensed for prevention
- Familiarity
  - Geneticists unfamiliar with prescribing, genetic counsellors not trained
  - GPs unfamiliar with chemoprevention
- No clear prescribing pathway
- Not in British National Formulary

National survey

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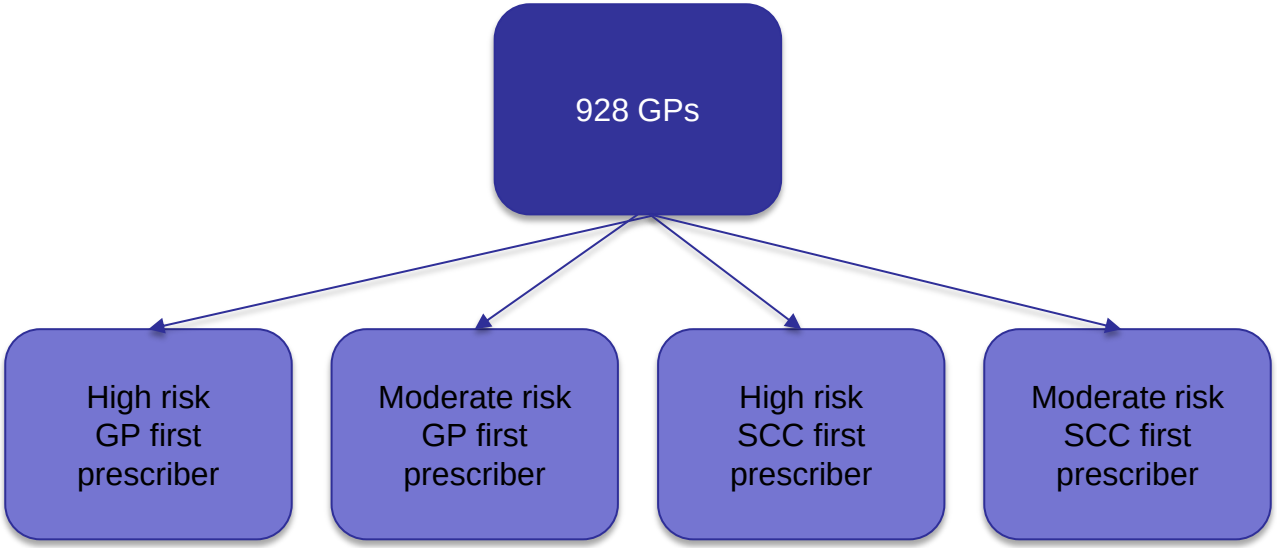
Smith et al., accepted. BJGP

- National survey (n=1007) in 2016

- Vignette describing hypothetical patient
  - Manipulated risk level and initial prescriber



Sarah is a 45-year-old woman with a family history of breast cancer. A family history clinician assessed her as having a high risk of breast cancer. This means she has a lifetime risk of ≥30%. Sarah has discussed the potential harms and benefits of taking tamoxifen. Sarah is premenopausal with no menstrual dysfunction, is not planning pregnancy, has no contraindications, and is taking no other medications. The family history clinician supports her decision to take tamoxifen and has also referred her for additional screening. The family history clinician requested that you write the first prescription and continue to act as the main prescriber.

Results - Awareness

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- 52% aware of prevention indication for tamoxifen
- 24% aware of NICE guideline (CG164)
- Majority of GPs:
  - willing to prescribe (77.4%)
  - comfortable managing patient (66.4%)
  - comfortable discussing harms / benefits (58.3%)
- Attitudes vary significantly by context…

Willingness to prescribe for patient (% willing) (N=928)

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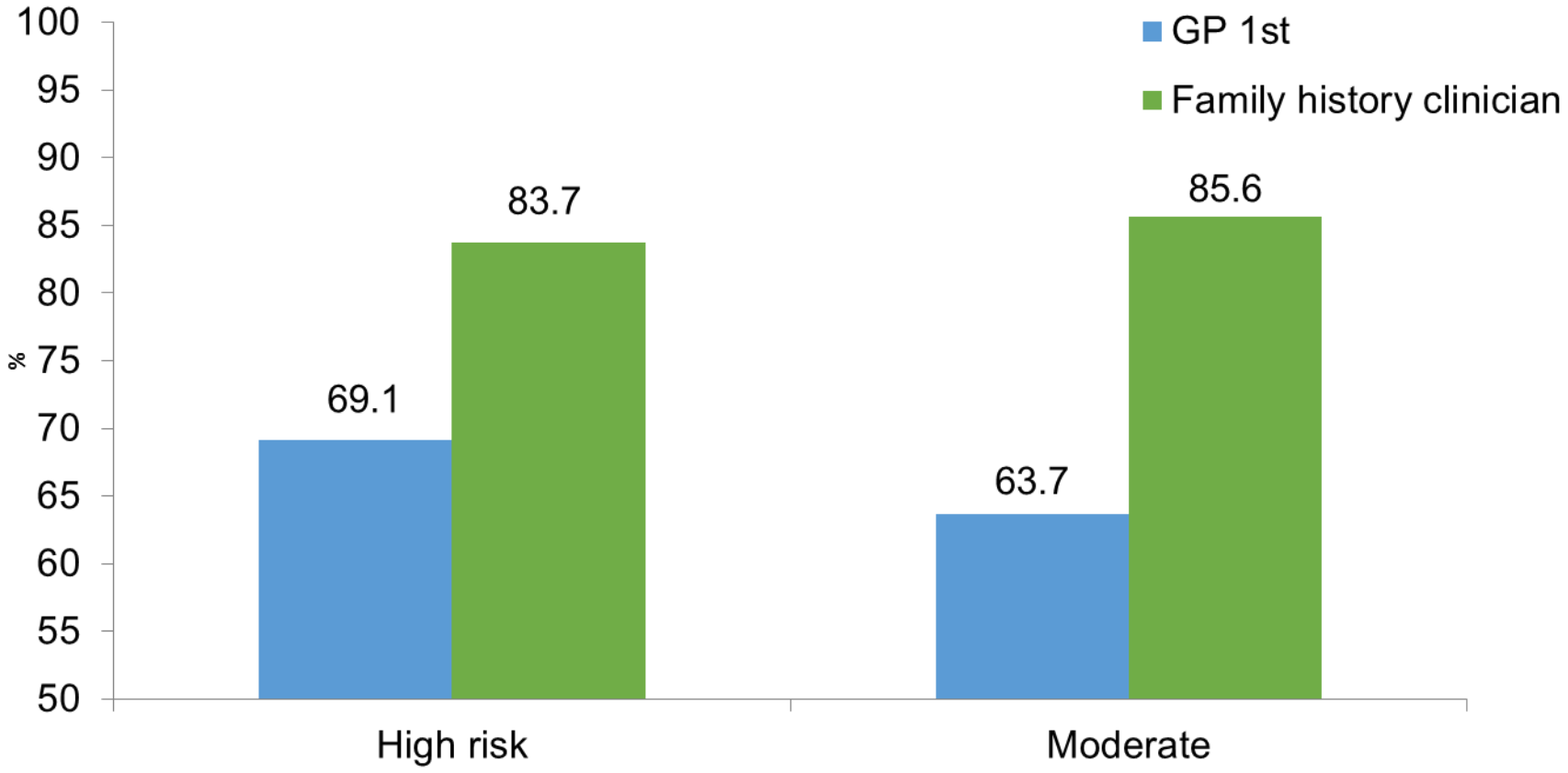
Prescriber: p<0.001
Risk: N.S
Interaction: N.S.



Factors affecting the prescribing decision among unwilling GPs

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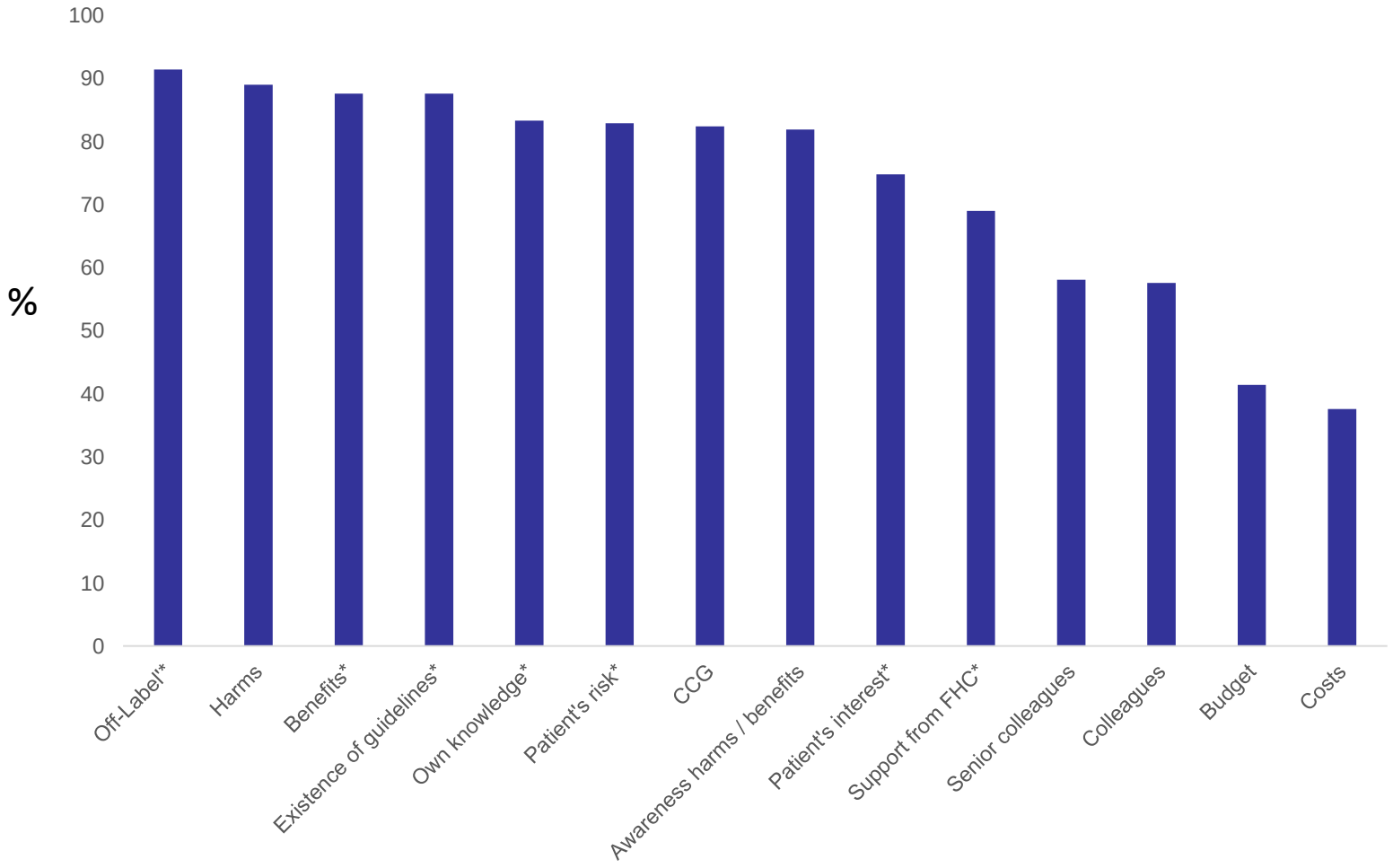

Funding and efficiency gap

	Tamoxifen		Anastrozole	
Costs and effects per 1,000 post-menopausal patients				
	Moderate	High	Moderate	High
Total incremental cost	£154,647	£97,346	£61,743	-£34,539
Breast cancer cases prevented	16	21	27	35
Cost per case prevented	£9,606	£4,621	£2,314	£-984
QALYs per case to be cost effective	0.48	0.23	0.12	dominant
Averse events per 1,000 post-menopausal patients				
Endometrial cancer	1	1	0	0
Thromboembolic events	3	3	1	1
Fractures	-4	-4	4	4

NICE Clinical Guideline 164.1 (consultation)

Health and wellbeing gap

Lynch Syndrome (LS)

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- LS characterised by development of colorectal, endometrial and other cancers at unusually young age
- ~1M individuals at risk for Lynch Syndrome in Europe - **most common form of inherited CRC predisposition**
- No UK guidance, but…European guidelines recommend low-dose aspirin (European Guidelines for the clinical management of LS, 2013)
- CAPP2 trial: 2 years of treatment sig ↓ CRC

Dose non-inferiority: CaPP3

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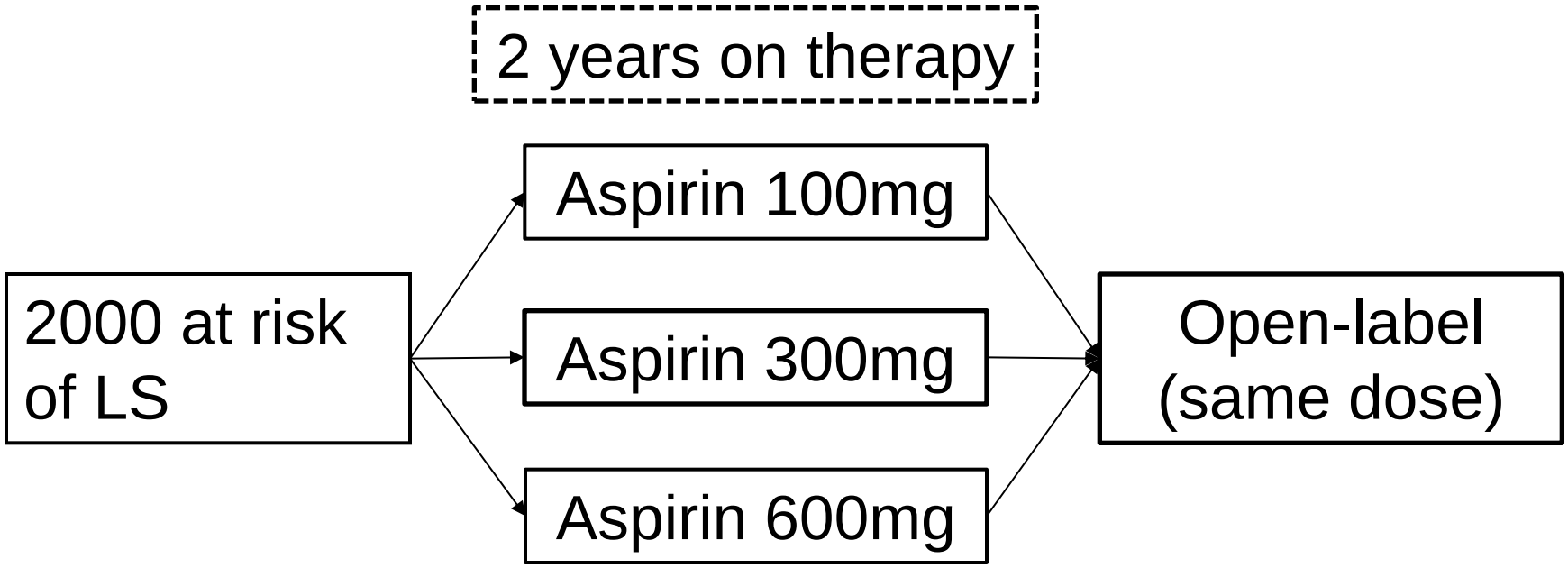
- Expert consensus aspirin should be offered to gene carriers, but debate regarding dose



Care and quality gap

Results

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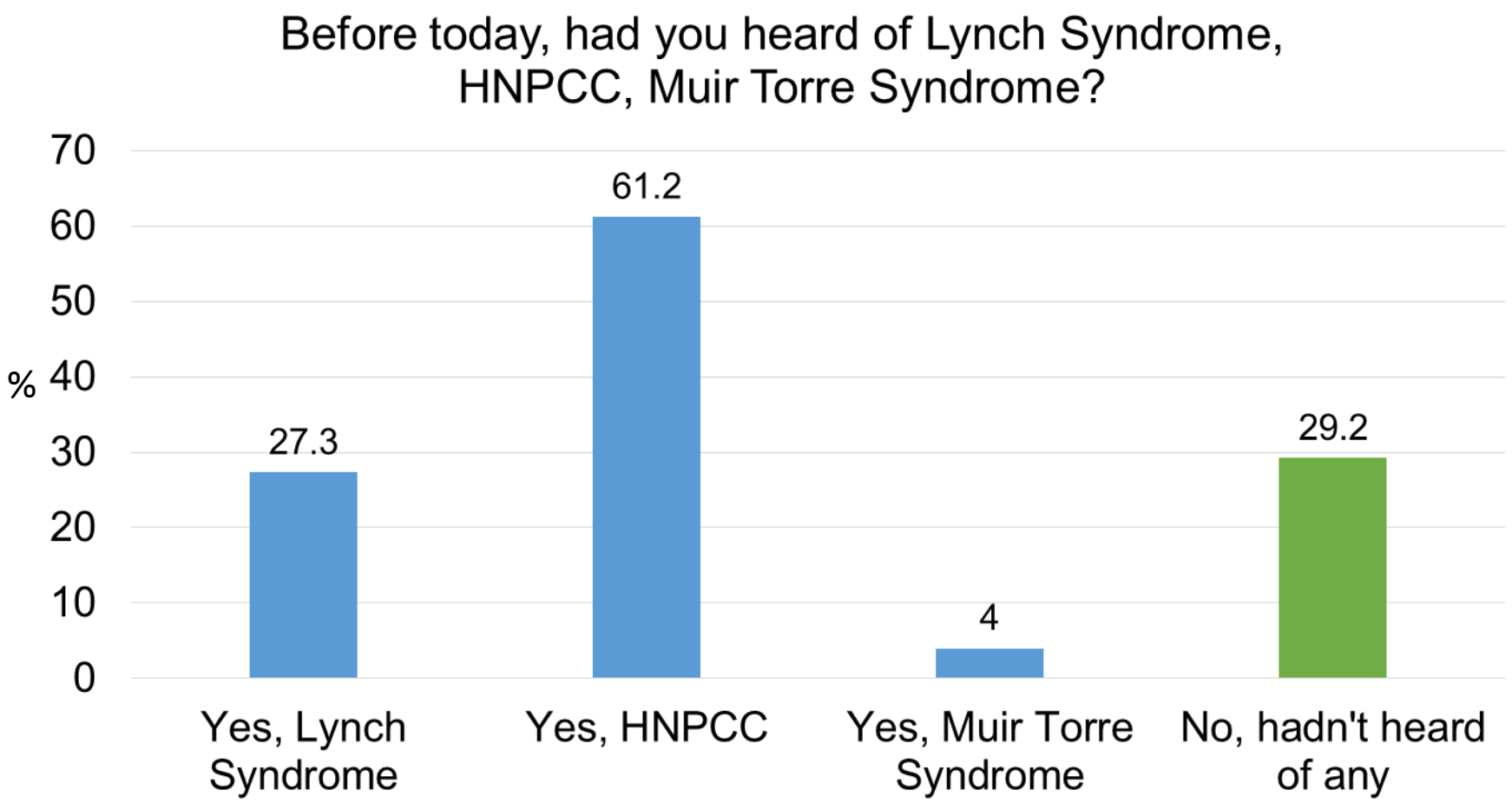

Multiple answers permitted

Results

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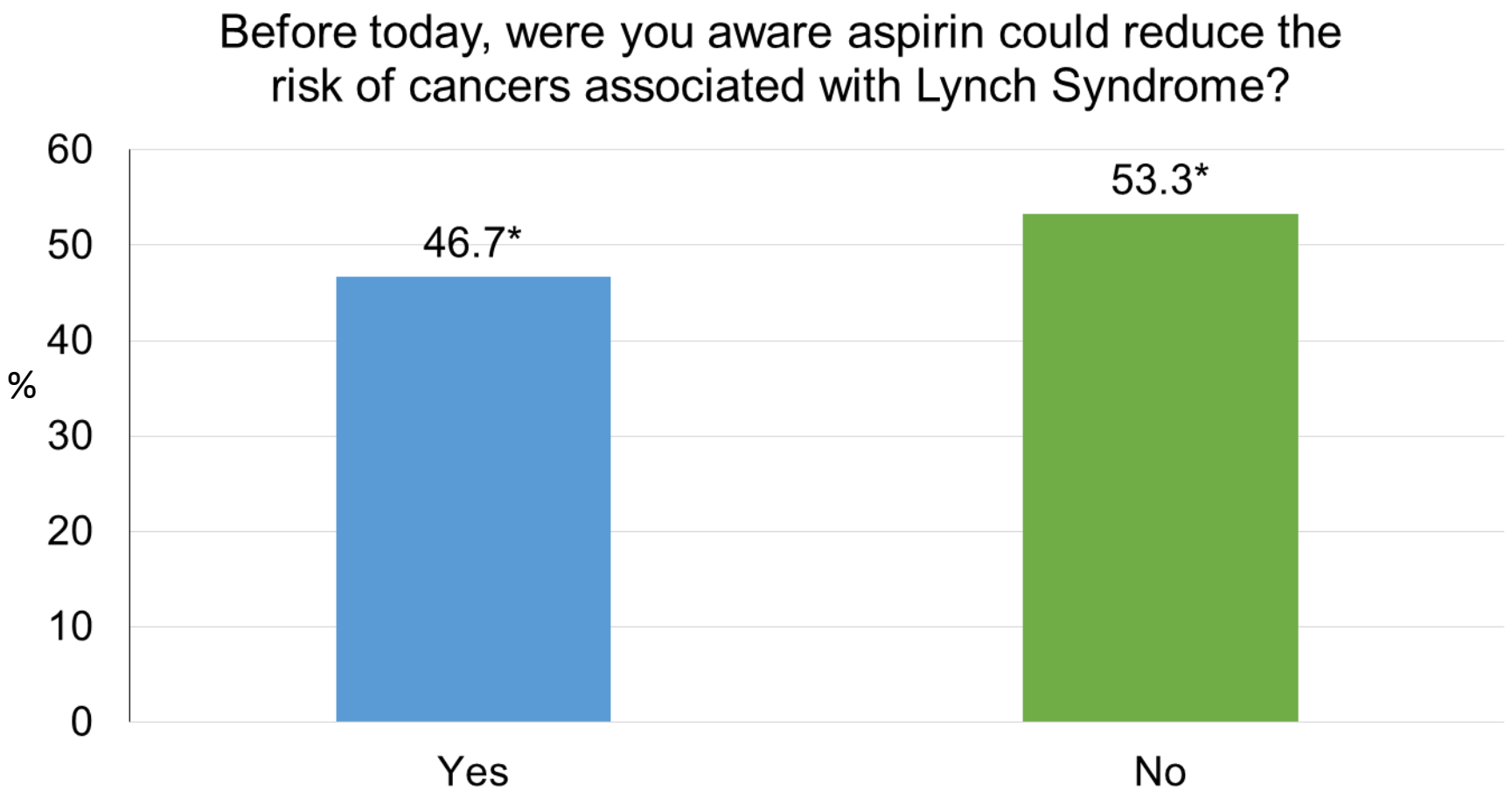

* Among those aware of Lynch Syndrome

Willingness to prescribe at CaPP3 doses

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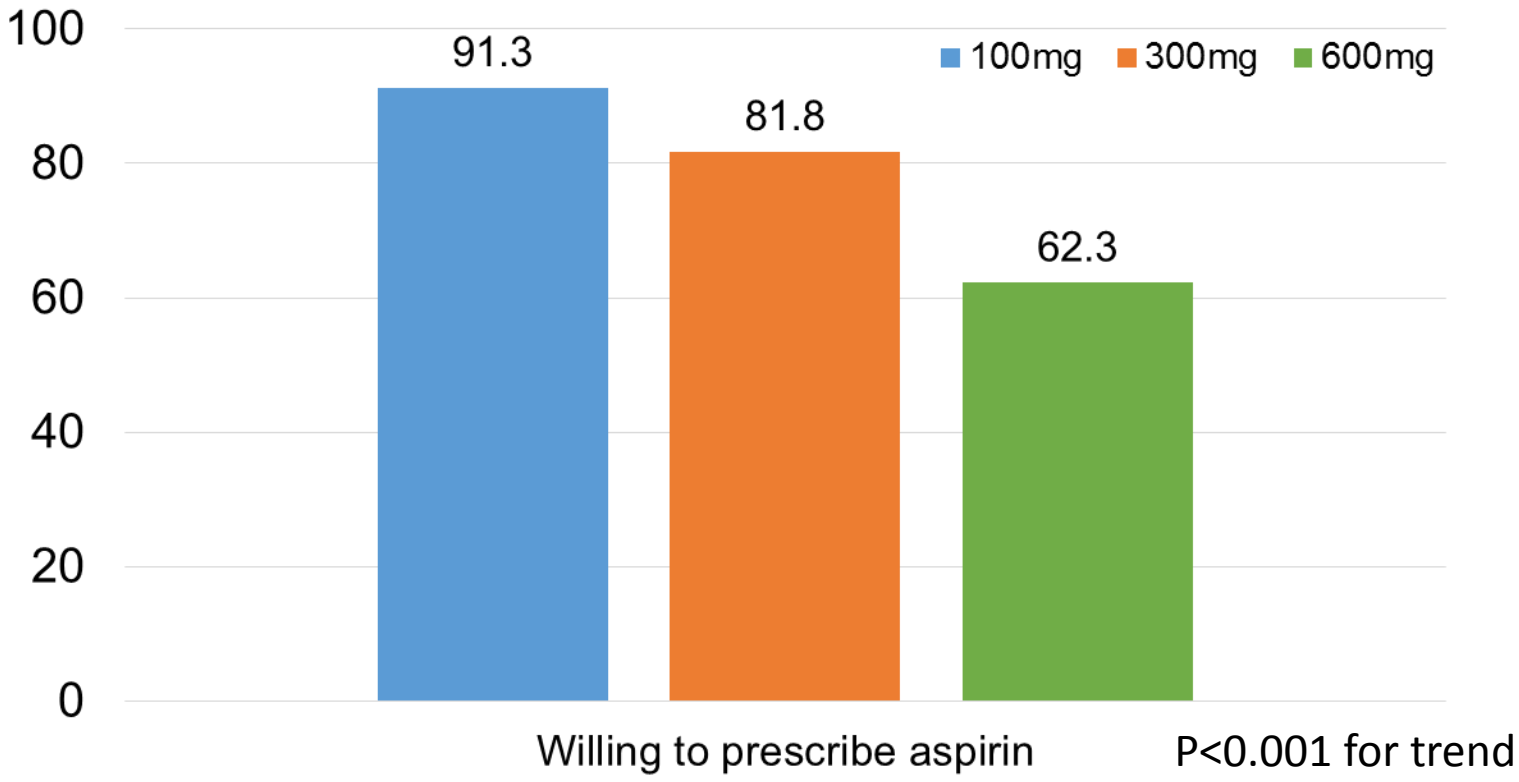
Imagine the CAPP3 study shows that 100mg/300mg/600mg of aspirin is the optimal dose for reducing the incidence of cancer in Lynch Syndrome carriers. How willing would you be to prescribe aspirin for a patient with Lynch Syndrome?



Recommendations

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- GP education
  - Standardised pro-formas for secondary care
- ‘Shared care’ agreements for prescribing
  - CCGs, Medicines Management Groups
  - Manchester case study
- List prevention as indication for tamoxifen in BNF
  - Possibly happening, watch this space
- Develop national guidelines for managing Lynch Syndrome.
  - Including guidance on screening, diagnosis, and use of aspirin

EVIDENCE BRIEFING ON RECENT RESEARCH: Cancer screening

Health and wellbeing gap

Recommendations

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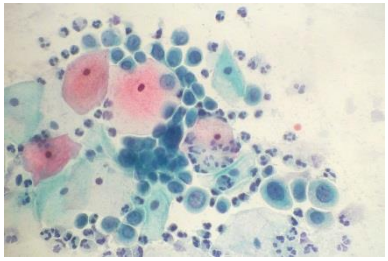
Uptake ~54%
~43%

Uptake ~71%



Uptake ~78%

- Inequalities in uptake are greatest for NHS Bowel Cancer Screening

FOBT kit return by IMD score

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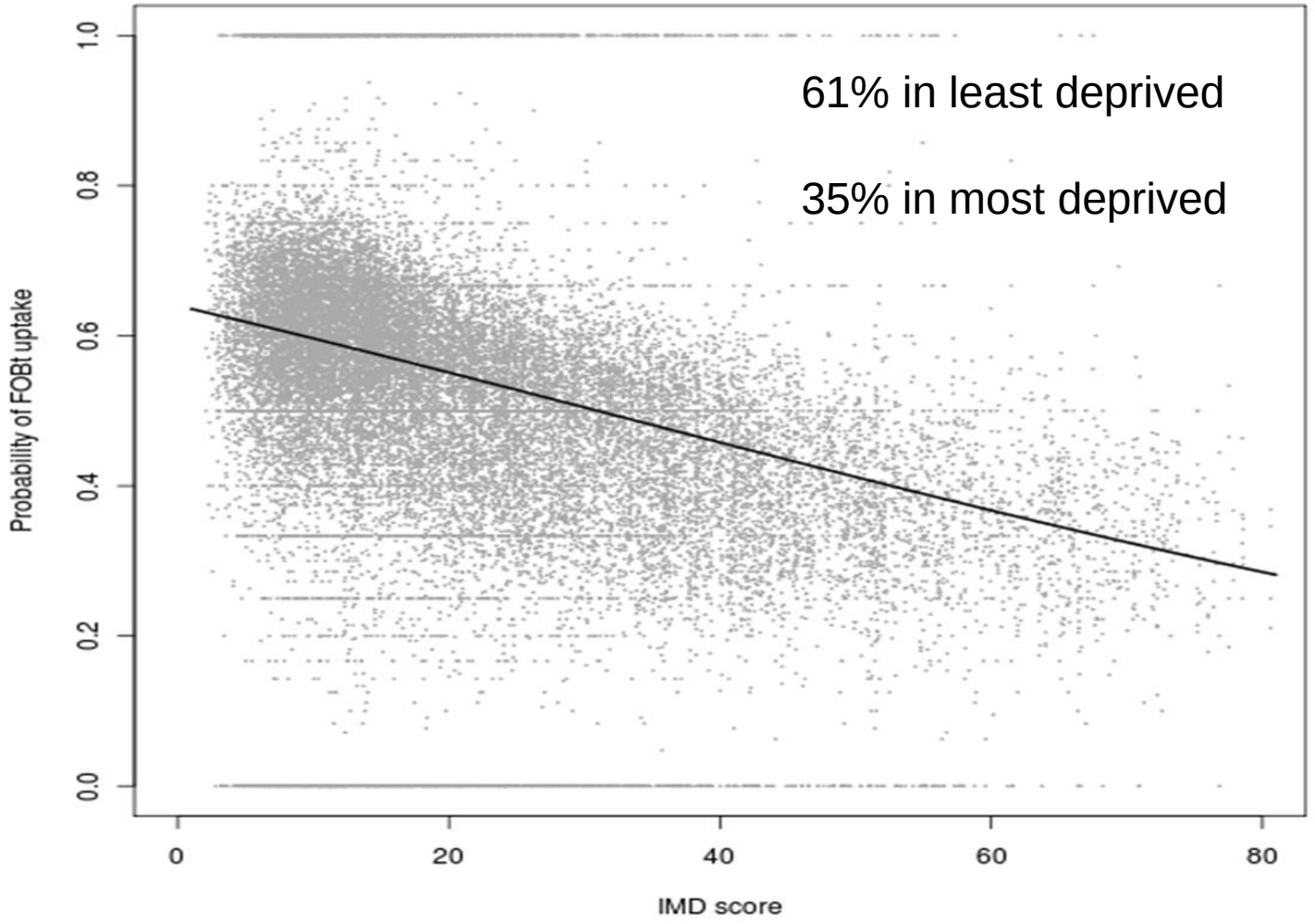
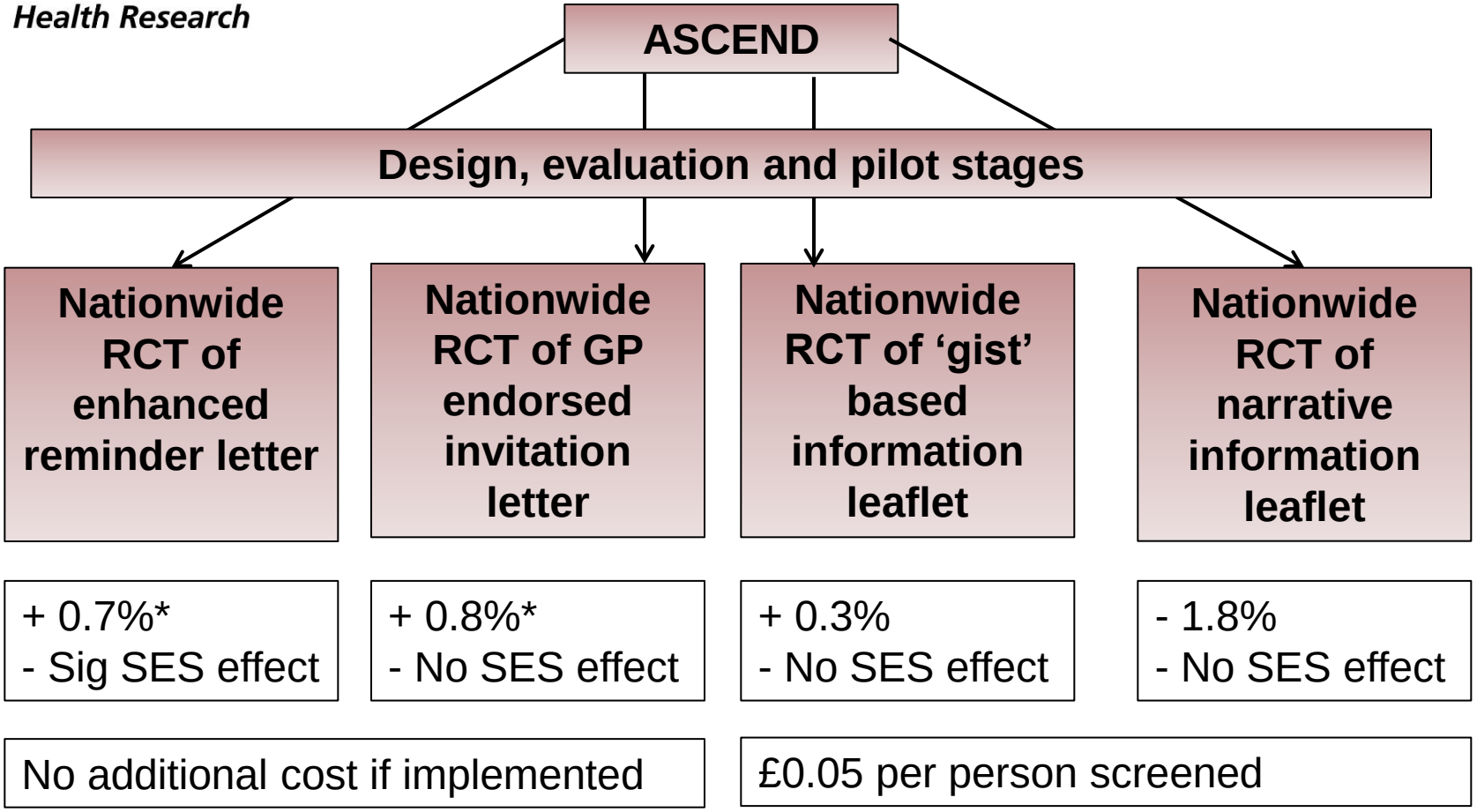


von Wagner et al., 2012 Int J Epi

Care and quality gap

NHS
National Institute for Health Research



Wardle et al., 2016 Lancet

NHS Bowel Cancer Screening Programme

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Enhanced reminder implemented

GP endorsement implemented
Software available for nationwide rollout

Evidence Gap – watch this space!

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 AUGUST 4, 2011 VOL. 365 NO. 5

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

The National Lung Screening Trial Research Team*

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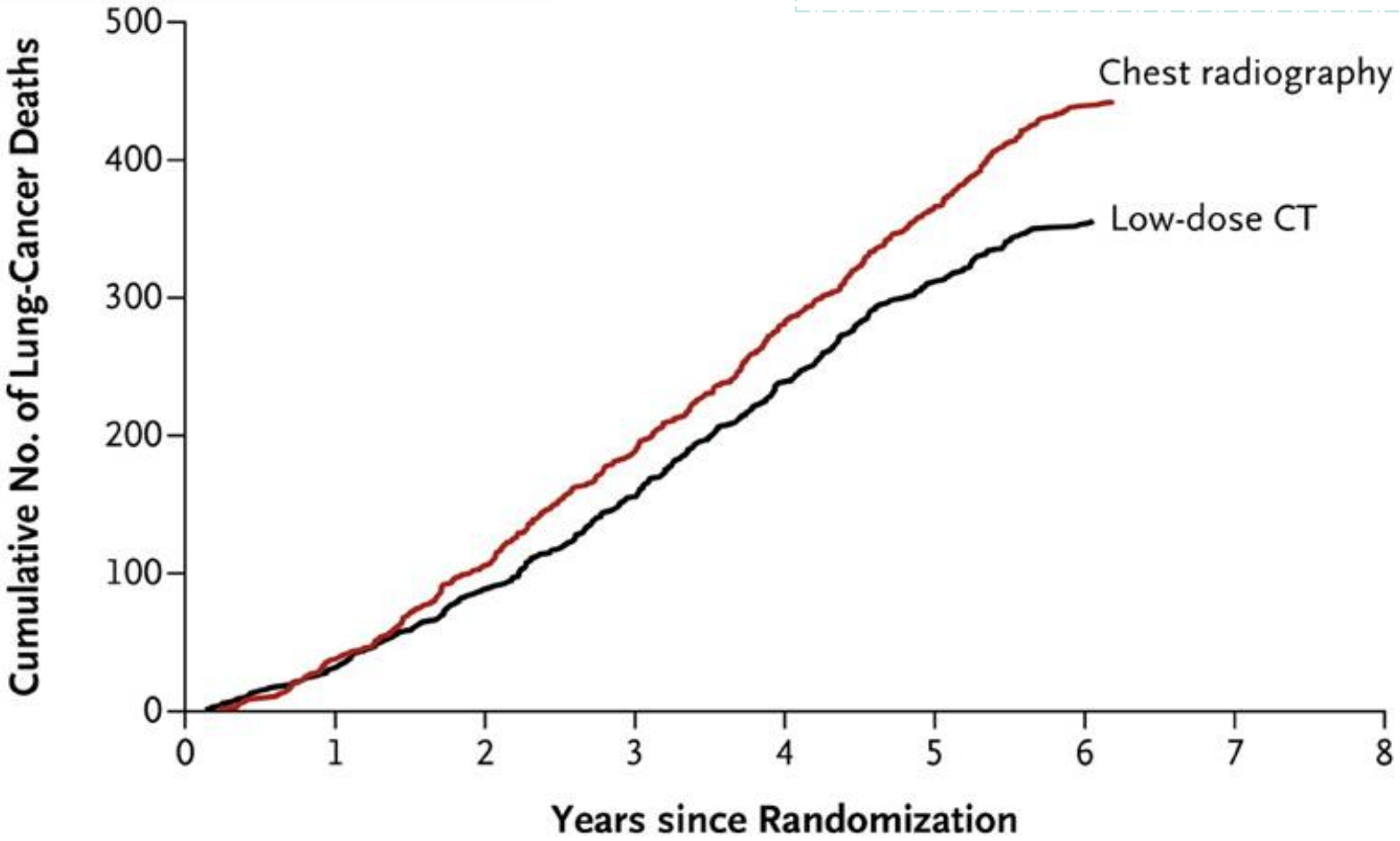
Aged 55-74 years,
Current smokers,
Former smokers (quit≤15 years)
30 pack-year smoking history



- New £5.2M investment from Yorkshire Cancer Research
- Mobile screening vans
- Starts in 2018
- Down staging treatment costs a priority:
  - £7952 (Stage 1) to £13,078 (Stage 4)

Recommendations

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- Negotiate with local bowel cancer screening hub regarding GP endorsement of FOBt invitation
- Encourage GP practice and patient participation in the Leeds Lung Screening Trial
- Continue to promote informed uptake of cancer screening, provide accurate information and maintain involvement throughout patient pathway