Screening and reducing barriers to uptake

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Screening and reducing barriers to uptake

• Christine Campbell, University of Edinburgh
  – The influence of a negative screening test result on response to symptoms among participants of the bowel screening programme

• Laura Marlow, University College London
  – Understanding cervical screening non-attendance among ethnic minority women

• Kate Brain, Cardiff University
  – Uptake and psychosocial outcomes of the UK lung cancer screening trial
Understanding uptake vs intervening to increase uptake

**Research designed to ‘understand’ non-participation**

- Using record data to examine demographic correlates of uptake
  - age, SES, ethnicity
- Surveys to examine cognitive and attitudinal correlates of uptake (intended, reported or recorded)
  - Knowledge, fatalism,
- Interviews with non-participants to explore ‘reasons’
  - Barriers, misconceptions

**Research designed to reduce non-participation**

- Modifying the test
  - FIT vs FOB, HPV self-test vs cervical smear
- Modifying the screening offer
  - Time of appointment, GP endorsement, leaflets, additional reminders
- Public education on screening
  - Media campaigns
Coverage/uptake across the 3 cancer screening programmes (FOB screening for CRC)
FOBT kit return in the first 2.6 million invitations

Von Wagner et al, 2011, IJE
Coverage/uptake by PCT-level deprivation in England

Breast

Cervical

CRC
Knowledge, beliefs and attitudes as predictors of non-participation

- Knowledge
  - Lower knowledge about cancer and screening
  - Lack of awareness that screening is for asymptomatic individuals
- Cancer fatalism
  - Higher in non-attenders
- Perceived personal benefits
  - Small differences in perceived benefit of early detection
  - Small differences in perceived reassurance with a negative result
- Risk
  - No consistent associations
- Worry/fear
  - No consistent associations
Interviews with non-attenders: what have we learned?

• A few people are really set against screening
  – Can’t face doing this test
  – Can’t face a cancer diagnosis (at this point)
• Some describe ‘barriers’ (e.g. disgust, invasive), more for CRC
• Many people have not yet ‘got around to it’
• Some feel they don’t need the test, often based on misunderstanding
  – Not a common cancer
  – Don’t have symptoms
• Some have no recollection of being asked
• Many never read the information/invitation

Not necessarily a rational decision
The Precaution Adoption Process Model; emphasising the pre-decision stages

- Unaware
- Unengaged
- Undecided
- Decided to act
- Acting
- Decided Not to act
- Repeat

Weinstein 1988)
Applying the Precaution Adoption Process Model to the screening decision process

1. **Unaware**
   - Don’t notice the offer

2. **Unengaged**
   - Don’t read the information

3. **Undecided**
   - Postpone decision/action

4. **Decided to act**

5. **Acting**

6. **Repeat**

Deviations:
- Don’t believe in screening
- Concerned about risks
- Don’t want to know
- Fearful/fatalistic
- Misconceptions
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  - GP endorsement
  - Additional patient leaflets
  - Additional reminders
  - Patient navigation
- Public education
  - Media campaigns
Why we need a Better Test for Haemoglobin
(on behalf of Professor Stephen Halloran)

- No Automation
- Can’t adjust positivity
- Reacts to animal haemoglobin
- 3*2 faecal samples!

Operator Variability
The FIT Pilot Trial in 2 Hubs (FIT instead of FOBT in 1 in 28 tests; Stephen Halloran, Steve Smith, Sue Moss and colleagues)

- **Both**
  - FIT: 70%
  - gFOBT: 62%
  - Increase: 7.4%

- **Southern**
  - FIT: 75%
  - gFOBT: 68%
  - Increase: 7.4%

- **Mid & NW**
  - FIT: 65%
  - gFOBT: 58%
  - Increase: 7.5%
Uptake of each test by deprivation group

- **IMD 1 (Posh)**
  - gFOBt: 65%
  - FIT: 75%

- **IMD 2**
  - gFOBt: 60%
  - FIT: 70%

- **IMD 3**
  - gFOBt: 55%
  - FIT: 65%

- **IMD 4**
  - gFOBt: 50%
  - FIT: 55%

- **IMD 5 (Poor)**
  - gFOBt: 45%
  - FIT: 40%
Relative screening compliance in HPV self-testing vs PAP tests for never/underscreened women (Racey et al. 2013)
Primary care endorsement and patient leaflet to improve FOB uptake

Hewitson et al, 2011
Integrating intervention with processes of screening decision-making

Community education

Unaware

Unengaged

Undecided

Decided

Deciding

Not to act

Ensuring it’s a good decision

Screening offer

Reminders

Results framing and re-invitation

Acting

The test

Repeat
Integrating descriptive and intervention research

a) developing interventions to promote timely and informed decisions

b) examining the effects of system-based interventions on the decision process
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Pulling out all the stops to deliver the screening offer

• Usual care
  – Case flagging when screening was due, FOBT (single sample FIT) kits given out when patient attended, clinician feedback + incentives compensation \boxed{Uptake = 37.3\%}

• Intervention
  – Automated phone call and text to say screening was due and kit would be arriving
  – FIT mailed to home with letter from GP
  – Plain language information + graphics
  – Repeat calls and texts if FIT not returned by 2 weeks
  – Screening navigator called if FIT not returned by 3 months + new kit sent if patient wanted \boxed{Uptake = 82.2\%}