Implementation of risk stratification within bowel cancer screening: A community jury study exploring public acceptability and communication needs

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1. Background

- There is increasing interest in moving towards a risk-stratified approach to screening to improve the balance of harms and benefits, whilst optimising the distribution of limited healthcare resources.[1]
- Risk stratification must be acceptable to the public before implementation and changes must be communicated effectively as success will depend on sufficient uptake.[2]
- Risk stratification of bowel screening could be achieved using:
  - Age, sex and FIT results - data already available.
  - Additional data - including lifestyle and genetic factors.

Risk stratification could be incorporated at three points on the bowel screening pathway (figure 1):

1. Eligibility - age at first invitation (juries 1 &2).
2. Threshold - feacal haemoglobin (FHb) concentration at which someone is referred for colonoscopy (juries 3 & 4).
3. Interval - the frequency of screening (juries 3 & 4).

2. Aims

- To explore the social and ethical considerations relating to using risk stratification at three points on the bowel cancer screening pathway using the community jury method.
- Secondarily, to understand how best to communicate the preferred screening strategies to the wider public.

3. The community jury method

Community juries (CJs) are a deliberative democratic method in which participants receive information about the topic and then deliberate and reflect as a group in order to reach a final verdict or consensus on the research question(s).[3]

Expert presentations → Q & A → Facilitated deliberation → Unfacilitated deliberation → Final verdict

- Participants are able to make well-informed recommendations.
- Encourage consideration of societal views and needs, beyond individual views.
- Useful for complex topics that require time to understand values, evidence and constraints.

We conducted four community juries with 7-9 participants in each, exploring three points on the bowel screening pathway.

4. Results

- Risk stratification of bowel cancer screening was acceptable to the informed public.
- Using readily available data was considered a logical improvement to bowel screening, and collecting additional data was preferable to age-based screening.
- Participants identified benefits, as well as acknowledging potential caveats (figure 2).
- There is strong desire for clear and effective communication about screening programme changes and individual risk feedback.
- Participants distinguished between information that should be shared by default and additional details held elsewhere.

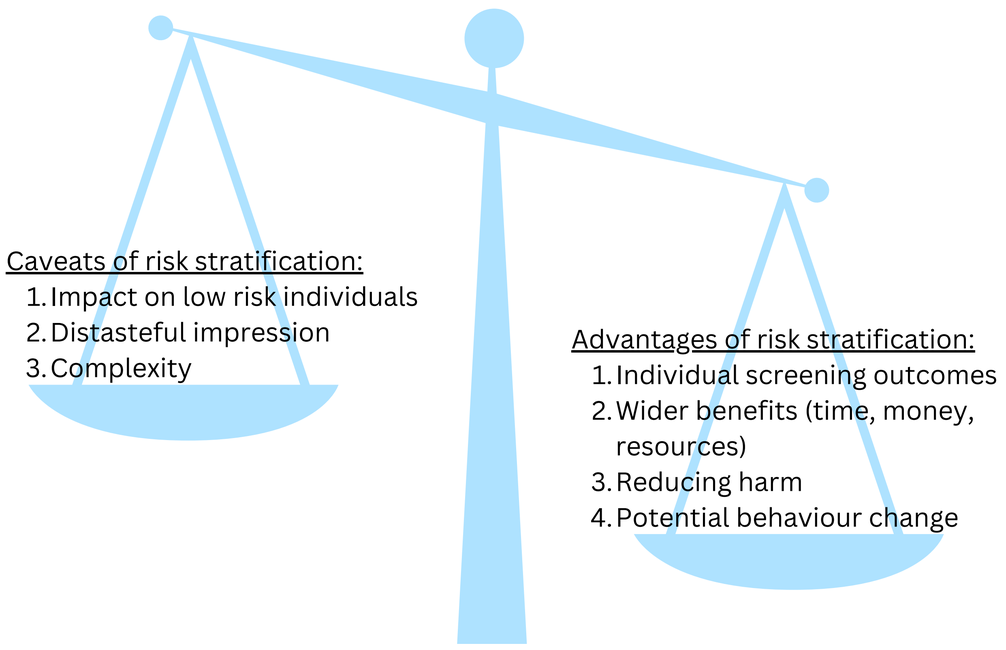

Figure 2. Advantages and caveats of risk-stratified bowel cancer screening.

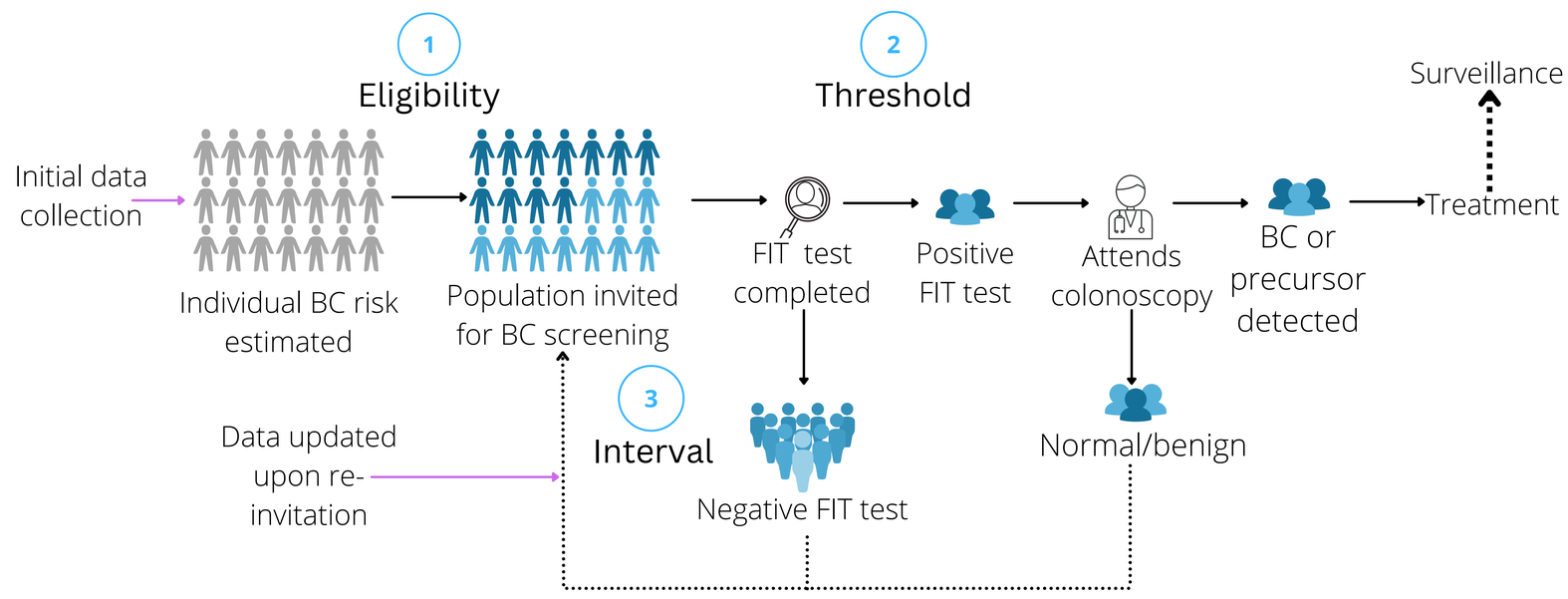

Figure 1. Opportunities for implementation and data collection across the bowel cancer screening pathway.

5. Conclusions

- Participants preferred risk stratification of eligibility criteria, FIT threshold and/or screening interval to current screening practices.
- The use of data already available within the system was favourable and could be implemented immediately from the perspective of public acceptability.
- Using lifestyle and/or genetic risk factors as part of a risk model is acceptable but was considered a long-term goal for practical reasons.
- Non-modifiable risk factors may be more acceptable to use in risk modelling than modifiable risk factors.
- Public desire for information about a risk stratified programme and personal risk is high and future research should consider how to communicate this successfully.

Overall, risk stratification of bowel cancer screening at all three points on the screening pathway was acceptable to the public.

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