

UK National Screening Committee

Bowel cancer Screening – Optimisation

29 June 2018

This covernote introduces the agenda item addressing bowel cancer screening.

Background

In 2015 FIT was approved by the UK NSC for use as the primary screening test for bowel cancer in the UK. This posed the question of whether flexible sigmoidoscopy should be included in UK screening strategies.

The School of Health and Related Research (SchARR) were commissioned to produce a disease and cost model exploring the options for this. The modelling work is being undertaken in two phases. Phase one looked at what combination strategies involving Bowel Scope and faecal immunochemical testing (FIT) are most cost-effective and what FIT roll-out strategies are feasible considering endoscopy capacity constraints. Phase 2 will develop a patient level model to allow evaluation of further screening options such as different surveillance protocols, targeted screening uptake interventions, and patient level screening strategies (e.g. altering FIT sensitivities or screening intervals depending on age, gender, ethnicity or previous screening results). Phase 1 is complete and the model has been circulated for information with the papers for this meeting.

The phase 1 model has been the subject of two special meetings attended by UK NSC members and bowel screening experts. Considerable revisions and updates were included as a result.

A three month consultation on the revised model as a basis for decision making was held on the UK NSC website. Two service options arising from discussions on the model were the focus of the consultation. The options presented for comment were:

- A. Combine BS at trial uptake and quality standards to 58-60 year-olds with a lower sensitivity FIT
- B. Offer FIT to 50-74 year olds at thresholds below 93 $\mu\text{g/g}$ and decommission (or not start) BS.

The consultation closed recently and the responses will be received by the UK NSC on June 29th.

The options paper and the consultation responses have been circulated for consideration at this meeting of the UK NSC. These were considered at the recent meeting of the ARG.

Consultation responses

Thirty six responses were received and the majority of those who stated a preference expressed a preference for option B.

However, this preference was often stated with concerns. Some of these concerns and / or themes were shared by respondents who preferred option A and those whose preference was not clearly stated.

Across the responses the stated concerns related to a number of issues including:

- whether it was appropriate to make policy recommendations on the basis of modelling *per se*, (there is a lack of empirical data relating to FS and FIT) on the basis of the SchARR model in particular or the current phase of the modelling work
- whether the programme strategy should be defined by cost effectiveness
- the need to address to the practicalities of workforce capacity and training issues as part of the delivery of the chosen strategy
- the need to set appropriate timescales for implementation and consider a phased approach
- consideration of further improvements to screening practice, for example by expanding screening to include Lynch Syndrome and by updating post screening surveillance guidance

It should be noted that comments on the detail of the model, for example on the input values, have been addressed by the SchARR team. The responses have been circulated to this meeting of the UK NSC and were discussed at a recent meeting of the English Bowel Cancer Screening Programme Research Advisory Committee.

Summary

The following 12 points set out the main issues

1. There is robust evidence from Randomised controlled trials (RCTs) of guaiac biennial faecal occult blood test (gFOBT) screening and one-off flexible sigmoidoscopy (FS) screening that both reduce colorectal cancer (CRC) mortality and that FS also reduces incidence.
2. Throughout the UK, gFOBT is being replaced by quantitative faecal immunochemical testing (FIT).
3. In England, screening consists of FS offered at 55yrs, and FOBT from 60-74. However, roll-out of FS has yet to be completed so there is considerable variation in access to FS across the country. In addition, both disease detection rates and uptake of FS have been lower than that observed in RCTs. However, there has been some debate over the disease detection rates and whether or not it would be possible to increase uptake by repeated screening.
4. There have been no head-to-head trials of one-off FS vs biennial gFOBT or FIT, and limited evidence relating to a combination of FS and gFOBT or FIT.
5. The ideal age for FS is around 60.
6. Although gFOBT/FIT screening in the 50-60 age range finds fewer cancers and polyps than in older age groups because of lower uptake and less disease all RCT evidence includes this age range and there are more quality and life years gained in younger people.
7. The SchARR report concludes that FIT screening in the 50-74 age range at as low a threshold as possible (down to FIT20) is the most cost-effective approach.
8. The SchARR report also states that there is uncertainty around *combining* FS and gFOBT or FIT.

9. A recent trial in Scotland (as yet unpublished) of FS offered at age 60 in a population being screened by FOBT from 50-74 years was associated with low uptake and a low yield of pathology. It is not clear, however, if these findings are country specific.
10. Most stakeholders who have expressed an opinion are in favour of a FIT only programme, but the advocates of FS retention are a significant and important group.
11. There is a strong lobby for extending screening to age 50, but this could only be achieved by FIT *and* there is a strong lobby for retaining FS owing to the RCT evidence. Both points of view are valid.
12. We do not have robust evidence of the effectiveness of combining biennial FOBT or FIT at 50-74 years with FS at around 60.

Proposal

It is proposed that the UK strategy for bowel cancer screening should be:

- I. Biennial FIT offered at 50-74 years at as low a threshold as possible (down to FIT20). This will need to start at a manageable threshold but, the aspiration would be to drive the threshold down with time. The feasibility of doing this would have to be carefully considered and planned for, especially from a colonoscopy and pathology workload viewpoint. It will be important to harness the power of quantitative testing, and the possibility of varying the screening interval on the basis of FIT results should be explored once the FIT programme has been implemented.
- II. Considering decommissioning FS screening as it is currently configured.
- III. Commissioning research into combinations of FIT and FS. Primary outcomes would be uptake and yield of pathology. This would allow assessment of the effectiveness of FS in this context and would ultimately provide information on the benefit of continuing with FIT screening following a FS.

Action

The UK NSC is asked to consider and approve this strategy.