Patient Preferences In Colorectal Adenoma Surveillance

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Objectives
Colorectal cancer (CRC) is the second most common cancer. Early diagnosis, in tandem with primary and secondary prevention among people with adenomas or pre-cancerous lesions, removes, is currently the main ways to improve the outcome from the disease. As we learn more about the influences dietary and lifestyle factors on development of CRC, increased efforts are being made to optimize strategies for prevention. We set out to elicit how patients with adenoma (pre-cancerous lesions, removed at screening) can trade-offs and weigh up their choices between different hypothetical surveillance strategies, including support for diet and lifestyle change. We set out to:
- examine the patient and healthcare-related characteristics that could influence these choices;
- determine whether preferences of patients with adenoma vary by literacy or other non-health related factors;
- examine the concordance of preferences with studies of adherence to exercise programs for individuals with pre-cancerous lesions.

Methods
Postal invites were sent to known persons with intermediate/high risk polyps removed during CRC screening testing. Respondents took part in a pilot online discrete choice experiment, nested within a baseline survey, developed following literature searches and PPI feedback. Each completed 8 sequential un-labelled choice grids.

Choice grids contained information about 5 attributes related to hypothetical future surveillance programs:
- **diet & lifestyle programme support options** (4 levels: no support, telephone support, group support or 1-1 support)
- **risk reduction of death** (7 levels, from 25-80%)
- **clinical test type** (2 levels: invasive/ non-invasive)
- **frequency of testing** (5 levels, from 17-42 months)
- **estimated out-of-pocket costs for participation** (4 levels, from £0-£45)

The analyses estimates an error component random parameter logit model to explore their choices and retrieve the preferences. From this RPL, we calculate the relative attribute importance to allow the ranking of preferred programme attributes. Models included an error component to account for correlation between designed alternatives.

Results
Of n=231 respondents (of 1200 invited) complete data was available for n=182 for analysis. The sample had a majority of male and married respondents. 25% were university educated; Self reported comorbidities included: 28% with high blood pressure, 25% with high cholesterol, 10% with cardiac problems. 37% of participants were unaware of their own risk status following polypectomy, despite 41% receiving their results on the day of their procedure by their treating health professional. 38% were willing to make changes to reduce their risk of cancer. Changes to diet and lifestyle, with 35% already making lifestyle changes. These results are consistent with adherence described in previous systematic review of exercise in older persons, which were generally higher in supervised programs (Picorelli et al, 2014). Males bear higher risk of CRC, therefore their willingness to participate in this research is particularly welcome and provides a useful starting point to understanding the preferences and personal characteristics of those in surveillance. Other risk factors, are currently the main ways to improve the outcome from the disease.

Pedagogical interventions for behaviour change should ensure a shared decision making approach. The willingness to change scores indicate this is a teachable moment, however low overall response rates for online participation indicates a degree of digital aversion in this age group, which suggests the method of engagement is key to success.

Respondent characteristics

Discussion
Results show that participants prefer greater risk minimisation, cost avoidance, early repeat testing and 1 to 1 support for diet and lifestyle changes. These results are consistent with adherence described in previous systematic review of exercise in older persons, which were generally higher in supervised programs (Picorelli et al, 2014). Males bear higher risk of CRC, therefore their willingness to participate in this research is particularly welcome and provides a useful starting point to understanding the preferences and personal characteristics of those in surveillance.

Pedagogical interventions for behaviour change should ensure a shared decision making approach. The willingness to change scores indicate this is a teachable moment, however low overall response rates for online participation indicates a degree of digital aversion in this age group, which suggests the method of engagement is key to success.

Conclusions
Participants report significant preferences for risk minimization and unsolicited engagement in diet and lifestyle changes. Therefore a teachable moment exists for the personalization and optimization of surveillance programmes. Shared decision making when providing clinical results of screening and setting surveillance goals should be considered to achieve this aim.