Appendix 2 (as supplied by the authors): GRADE basis of recommendation decision table for screening for colorectal cancer (CRC)

Recommendations are graded according to the Grading of Recommendations Assessment, Development and Evaluation system (GRADE).[1]

Question: What is the benefit of screening for CRC?		
Population: Adults not at high risk for CRC		
Intervention: Screening for CRC		
Decision domain	Summary of reason for decision	Subdomains influencing decision
Quality of evidence (QoE) *Is there higher or moderate quality of evidence* Yes☒ No ☐	QoE for benefits of screening: Moderate Reduction in CRC mortality with gFOBT and flexible sigmoidoscopy: The NNS for gFOBT is 377 (249-887) and for FS is 850 (673-1205). gFOBT resulted in 2.7 fewer deaths per 1000 and FS 1.2 fewer per 1000 QoE for harms of screening: Very Low	Key reasons for downgrading or upgrading: QoE for benefits: Quality of evidence was downgraded for risk of bias QoE for harms: Uncontrolled observational studies graded as very low quality
Balance of benefits and harms *Is there certainty that the benefits outweigh the harms?* Yes☒ No ☐	Limited harms associated with screening for CRC using FOBT or flexible sigmoidoscopy	Is the baseline risk for benefit similar across subgroups? Yes ☐No☒ Aside from age, no other differences identified between subgroups. Note that there the incidence of CRC in Canada was slightly higher for males than females (0.4%) Should there be separate recommendations for subgroups based on risk levels? Yes☒ No☐ Is the baseline risk for harm similar across subgroups? Yes☒ No☐ Differences identified in the age subgroups have resulted in different recommendations Should there be separate recommendations for subgroups based on harms? Yes☒ No☐Differences identified in the age subgroups have resulted in different recommendations

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Values and preferences *Is there confidence in the estimate of relative importance of outcomes and patient preferences?* Yes☒ No ☐	Three reviews and twenty primary studies identified. A survey about screening test preferences indicated that invasiveness, level of preparation required and pain from the test was an issue, suggesting that some people may prefer FOBT over flexible sigmoidoscopy. When patients have the option of screening tests, sedation needs, perceived test accuracy, confidence in completing the test, bowel preparation and frequency of tests are factors that may influence their decision.	Perspective taken: patient Source of values and preferences: Relative value of the importance of outcomes was determined by the guideline panel. Patient preferences were determine by a literature review. Relative value of the importance of outcomes was determined by the guideline panel. Source of variability, if any: some variability inpatient preferences some variability inpatient preferences Method for determining values satisfactory for this recommendation? Yes☒ No☐ All critical outcomes measured? Yes☒ No☐
Resource implications *Are the resources worth the expected net benefit?* Yes☒ No ☐	1. Diagnostic colonoscopy= $857 (physician and non-physician costs), plus $308 for patient and caregiver time and travel 2. FIT and FOBT $19 and $12 respectively (physician and non-physician costs), plus $36 for patient and caregiver time and travel 3. FS $650 (physician and non-physician costs), plus $105 for patient and caregiver time and travel. Numbers do not include productivity losses.[33]	Feasibility: Is this intervention generally available? Yes☒ No ☐ FOBT testing readily available; flexible sigmoidoscopy availability may vary by region Opportunity cost: Is this intervention and its effects worth withdrawing or not allocating resources from other interventions? Yes☒ No ☐ In comparing alternative methods of screening, FOBT and flexible sigmoidoscopy are cost effective. Is there lots of variability in resource requirements across settings? Yes☐ No ☒

Overall strength of recommendation: STRONGSTRONG and WEAK	There is moderate quality evidence that shows that CRC mortality and incidence of late stage CRC is significantly reduced by screening with FOBT or flexible sigmoidoscopy. In the view of the evidence, the CTFPHC strongly recommends screening with FOBT or flexible sigmoidoscopy for adults aged 60 to 74. Lower quality evidence supports screening those aged 50-59 and thus a weak recommendation is offered for this age range. The CTFPHC does not recommend screening populations outside of these age ranges and does not recommend the use of colonoscopy as a screening test.
Remarks and values and preference statement	This recommendation places a high value on the clear benefits of screening and the limited harms for adults aged 60 to 74 years.

REFERENCES

1. Schünemann H, Brozek J, Oxman A. *Grade handbook for grading the quality of evidence and the strength of recommendations.* ; 2009.