

Appendix 4: Choosing a Testing Method: Factors to Consider

Note: The following table might be a tool to use with your patients, helping them make an informed decision regarding which test is best. All these screening methods are considered cost-effective.

	Fecal Occult Blood Test	Colonoscopy	Flexible Sigmoidoscopy	Double Contrast Barium Enema	CT Colonography
WHAT IS IT	This test checks your bowel movement for blood that you can't see. You will be given a kit with instructions to use at home. You then return the card with stool samples for testing.	This test allows a doctor to look at the inside of your <u>whole</u> bowel using a thin, flexible tube connected to a video camera that is put into the colon via your rectum. The tube can also be used to remove polyps or cancers found during the exam.	This test is the same as colonoscopy, except it allows the doctor to look only at the <u>lower half</u> of your bowel.	Fluid is injected into your rectum so that the lining of your colon will show up on an x-ray. The doctor then looks at the x-ray to find abnormal spots.	This test uses a CT scanner to produce images of your entire colon and rectum. Air is put into your colon with a small rectal tube. Then you hold your breath while the CT scan is done.
Talking Tips for patients					
PROS	<ul style="list-style-type: none"> Can be completed at home Does not require time off work Widely available No risk of bowel perforation No need to restrict most foods or medication, although vitamin C supplements and citrus fruits/juices should be avoided 3 days before and during stool sample collection⁶¹ No need for bowel preparation 	<ul style="list-style-type: none"> Only needs to be repeated every 10 years if test is negative in an adult at average risk \geq age 50 Any identified polyps can be removed during the test. After polyp removal, cancer morbidity and mortality is reduced 	<ul style="list-style-type: none"> Repeat every 5 years if test is negative in an adult at average risk $>$age 50 If a polyp is found, it can be removed during the test Sedation usually not used, so able to return to usual activities shortly after test 	<ul style="list-style-type: none"> Repeat every 5 years if test is negative in an adult at average risk $>$ age 50 Risk of bowel perforation is low⁶² 	<ul style="list-style-type: none"> Does not require sedation³⁵ Very little risk of bowel perforation⁵⁵
CONS	<ul style="list-style-type: none"> Must be repeated every 1–2 years (Appendix 1) Barriers to repeated screening⁶³: forgetting, denial that test is needed (no symptoms), difficulties completing the test Can cause “false positive” results and resulting worry: Nine times in ten, bleeding will come from other conditions (e.g., hemorrhoids). In only 1 of 10 times will it come from a cancer in the colon or rectum. Note: Colonoscopy is necessary to confirm cause of bleeding Can miss polyps or cancers, causing false reassurance 	<ul style="list-style-type: none"> Time off work/other tasks x2 days Need for thorough bowel preparation (day before test, drink liquids and take purgatives to clear bowels) Someone must drive or take patient home after procedure Need for examiner expertise, sedation, equipment Unable to view the entire colon in 5-15% of people^{64;65} Can miss cancer ~5% of the time and large adenomas 6–12% of the time^{66;68} Risks: bowel perforation (about 1 in every 1000 examinations), death (~1/15,000) 	<ul style="list-style-type: none"> Bowel preparation: laxative night before test and 2 enemas on day of test Can be painful (particularly for women), as sedation usually is not used Need for examiner expertise, equipment Can miss 30-50% of lesions because even 60–70 cm flexible instruments do not examine the whole bowel⁶⁹ Risks: bowel perforation (<1 in every 20,000), death rare but not well documented 	<ul style="list-style-type: none"> Same bowel preparation as colonoscopy Temporary constipation or discomfort possible Cannot adequately visualize sigmoid colon⁶² Colonoscopy required if polyps detected Risks: not well documented, but estimate bowel perforation (~1/10,000), death (~1/50,000) 	<ul style="list-style-type: none"> Same bowel preparation as colonoscopy Slight discomfort from air insufflation Some concern re possible risks from radiation exposure³⁶ Colonoscopy required if polyps detected Currently, not widely available and not recommended for widespread screening

Adapted from:

- Colorectal Cancer Screening. Centre for Effective Practice, Cancer Care Ontario, Ontario College of Family Physicians. 2008 <www.ColonCancerCheck.ca>
- Levin B, Lieberman DA, McFarland B, Smith RA, Brooks D, Andrews KS et al. Screening and Surveillance for the Early Detection of Colorectal Cancer and Adenomatous Polyps, 2008: A Joint Guideline from the American Cancer Society, the US Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology CA Cancer J Clin 2008.
- Additional references cited in Table above are provided in module's Reference List.

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