

Colorectal Cancer Screening in Canada: Monitoring and Evaluation of Quality Indicators

Report Highlights

JANUARY 2013 – DECEMBER 2014

Context

Colorectal cancer is the second most commonly diagnosed cancer (excluding non-melanoma skin cancers) and the second leading cause of cancer death in Canada.ⁱ Colorectal cancer screening using a fecal test or flexible sigmoidoscopy enables early detection and more successful treatment of colorectal cancer.^{ii,iii}

Organized colorectal cancer screening programs, available in nine provinces, are intended to maximize the benefits of screening while minimizing potential harms for individuals by providing oversight and evaluation of all aspects of colorectal cancer screening. These programs, some of the newest in the country, ensure that elements such as screening eligibility, interval, modality, and coordination of follow-up, adhere to evidence-based standards. The Canadian Task Force on Preventive Healthcare (CTFPHC) guidelines recommend screening every two years with a fecal test or every 10 years with flexible sigmoidoscopy for average-risk individuals aged 50 to 74.^{iv} CTFPHC guidelines from 2016 also recommend against the use of colonoscopy as a first-line screening test for average-risk individuals.

The National Colorectal Cancer Screening Network, hosted by the Canadian Partnership Against Cancer (the Partnership), regularly collects data on national quality indicators for organized screening programs. The Partnership, in collaboration with the Network, recently released the third iteration of a report that presented data from seven provinces on quality indicators for individuals aged 50 to 74 for the years 2013 and 2014. During this period, some provinces were in the very early stages of

program implementation and program participation rates were defined differently across jurisdictions, which should be taken into consideration when reviewing this report's data.

Key Findings and Implications

Organized colorectal cancer screening programs existed in most provinces though approaches to implementation varied

Between 2007 and 2014, organized colorectal cancer screening programs were introduced in nine provinces. Of the remaining jurisdictions, Quebec and Yukon have announced the implementation of programs and Northwest Territories and Nunavut are assessing feasibility.

During the report period, provinces were in different stages of implementation with some provinces transitioning from pilots to programs. Programs also differed with regards to the type of fecal test offered, threshold values for abnormal screening results, and recruitment strategies. This variability is expected in early stages of program implementation, and must be taken into consideration when comparing program data from across the country. In the future, formal evaluation of these differences may help to inform optimal approaches to program delivery.

The percentage of the eligible population screened in organized programs increased

Participation in organized colorectal cancer screening programs across Canada continued to increase since data were first published for 2009-11^v, even though the national target of 60.0 per cent was not reached.

In 2013-14, organized colorectal cancer screening programs across Canada reported that 8.6 to 53.0 per cent of eligible individuals had a fecal test. However, the percentage of individuals considered up-to-date for colorectal cancer screening* based on the 2014 Canadian Community Health Survey was much higher, ranging from 48.0 to 68.0 per cent.^{vi} Increasing the proportion of those screened within an organized program will help to ensure that individuals benefit from the quality assurance practices and quality monitoring available through organized programs.

Wait times between an abnormal fecal test and a follow-up colonoscopy improved, but individuals still waited too long

Wait times for a follow-up colonoscopy after an abnormal fecal test decreased in most provinces between 2011-12 and 2013-14.

However, the time from an abnormal fecal test to a follow-up colonoscopy** still exceeded the national target in 2013-14. The time interval by which 90.0 per cent of individuals completed a follow up colonoscopy ranged from 104 to 151 days in some provinces and was more than double the national target of 60 days.

Why is this important?

For this report, the Partnership collected available programmatic data on 13 national indicators for colorectal cancer screening for the years 2013 and 2014. Compared to the 2011-2012 report, more provinces were able to contribute and data were available by first and subsequent screens*** for some indicators, enhancing the utility of this report as a source of in-depth information on the status and impact of colorectal cancer screening in Canada. As programs mature and increased consistency in data collection and reporting is achieved across the country, national reporting will help to track program progress and identify opportunities to maximize the quality and benefit of colorectal cancer screening for all eligible Canadians.

ⁱ Canadian Cancer Society's Advisory Committee on Cancer Statistics. Canadian Cancer Statistics 2016. Toronto, ON: Canadian Cancer Society; 2016.

ⁱⁱ Hewitson P, Glasziou P, Watson E, Towler B, Irwig L. Cochrane systematic review of colorectal cancer screening using the fecal occult blood test (Hemoccult): an update. *Am J Gastroenterol*. 2008;103(6):1541-9.

ⁱⁱⁱ Schoen RE, Pinsky PF, Weissfeld JL, Yokochi LA, Church T, Laiyemo AO et al.; the PLCO Project Team. Colorectal-cancer incidence and mortality with screening flexible sigmoidoscopy. *N Engl J Med*. 2012 Jun 21;366:2345-57. doi: 10.1056/NEJMoa1114635.

^{iv} Canadian Task Force on Preventive Health Care. Recommendations on screening for colorectal cancer in primary care. *CMAJ*. 2016 Mar 15;188(5):340-8.

^v Canadian Partnership Against Cancer. Colorectal Cancer Screening in Canada: Program Performance Results Report, January 2009-December 2011. Toronto: Canadian Partnership Against Cancer; December 2013.

^{vi} Canadian Community Health Survey 2014, Statistics Canada, Public Use Microdata File, Statistics Canada.

* Up-to-date means those who reported having had a fecal test in the last two years or a flexible sigmoidoscopy or colonoscopy in the last ten years for any reason, not necessarily for screening purposes. Any reason includes: family history, regular check-up/routine screening, age, follow-up of problem, follow-up of colorectal cancer treatment, other.

** Calculated among those who completed a follow-up colonoscopy within 180 days of an abnormal fecal test.

*** Subsequent screen: Successive screens (screening rounds) after the initial (first) screen in an organized program.

FOR MORE INFORMATION

Visit www.cancerview.ca for the full report or contact info@partnershipagainstcancer.ca

ABOUT THE PARTNERSHIP

The Canadian Partnership Against Cancer was created by the federal government with funding through Health Canada. Since opening our doors in 2007, our sole mandate has been to move Canada's cancer strategy into action and help it succeed.

Production of this report has been made possible through a financial contribution from Health Canada. The views expressed herein represent the views of the Canadian Partnership Against Cancer.