

Colorectal Cancer Screening Report

JANUARY 2011 - DECEMBER 2012

Who are we?

ColonCheck was established in April 2007 to help detect colorectal cancer early and reduce the number of Manitobans who die from the disease. This population-based screening program invites eligible individuals 50 to 74 years of age to screen for colon cancer using a guaiac fecal occult blood test (FOBT), and provides timely follow-up for those with abnormal test results.

In Manitoba, colorectal cancer is the most common cancer diagnosis (14.2% of new cancers) and the second leading cause of cancer death (12.7% of all cancer deaths)¹.

ColonCheck provides screening to reduce mortality, to detect cancer when it is easier to treat, and to remove pre-cancerous polyps before they become cancer.

What do we do?



Increase colon cancer screening rates by mailing screening invitations and test kits, sending reminders, working with primary care providers, and increasing education about colon cancer.



Coordinate follow-up of ColonCheck screening tests, including sending test results, scheduling diagnostic testing (colonoscopy), and providing pre-colonoscopy assessments.



Collaborate to improve operations, increase awareness, and reduce mortality from colorectal cancer.



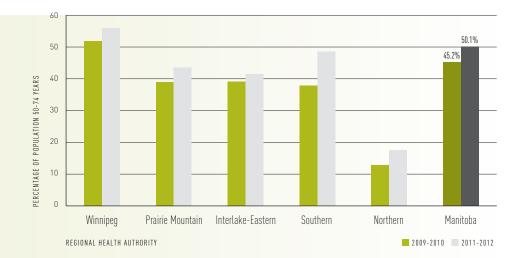
Manage information to identify individuals who are eligible for screening and to support program operations and evaluation.

What do we know about screening rates in Manitoba?

ColonCheck and Manitoba Health data indicate that at least 50.1% of Manitobans are up to date with colon cancer screening (FOBT in the past two years or colonoscopy/flexible sigmoidoscopy in the past five years).

A recent report from the Canadian Partnership Against Cancer indicates that, based on surveys, **64.1% of asymptomatic Manitobans are up to date*** with colon cancer screening. This is the highest rate among all provinces and territories (Canadian average, 42.8%)².

Percentage of Manitobans 50-74 Years of Age Up to Date on Colon Cancer Screening**

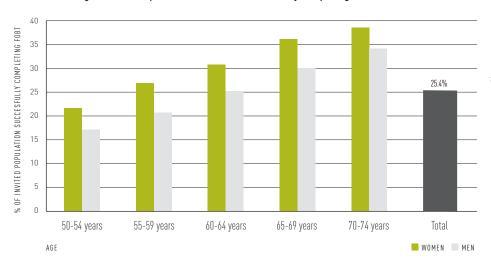


How are we doing?

Invitations

- Nearly 161 000 screening invitations were mailed to Manitobans in 2011-2012.
- > Numerous kits were distributed through primary care providers, in collaboration with the BreastCheck program, and at community events.

Percentage of Invited Population in 2011-2012 Successfully Completing ColonCheck FOBTs



Demographics

- Women were more likely to successfully complete an FOBT than men (28.1% of invited women compared to 22.5% of invited men).
- Participation rate increased with age, with 19.4% of invited 50-54 year olds successfully completing an FOBT compared to 36.5% of invited 70-74 year olds.
- 65.5% of individuals who were recalled (received an invitation subsequent to completing an FOBT two years prior) completed an FOBT.

Screening Outcomes for Individuals Between 50 and 74 Years of Age at Time of Screening January 1, 2011 - December 31, 2012 COLORECTAL CANCER 4.6% (57) ADVANCED ADENOMA **NEGATIVE RESULT** 21.9% (271) 94.5% [38 269] OTHER ADENOMA COLONCHECK FOBT 19.4% (239) COMPLETED POSITIVE RESULT COLONOSCOPY 3.4% (1 358) 90.9% (1 235) OTHER PATHOLOGY*** 40.8% (504) INDETERMINATE RESULT (NO SUITABLE FOBT COMPLETED) NO COLONOSCOPY $OTHER^{\dagger}$ 9.1% (123) 2.2% (886) 0.6% (8) NORMAL 12.6% (156)

FOBT Results

- Most (94.5%) fecal tests were negative (no hidden blood detected in the stool).
- > 3.4% of individuals had a positive FOBT.
- > The positivity rate increased with age, with 3.1% of 50-54 year olds obtaining a positive test result compared to 4.3% of 70-74 year olds.

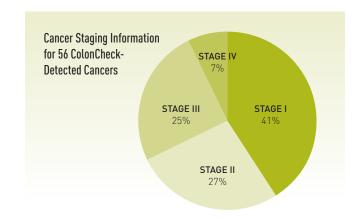
Follow-Up Colonoscopy

- ColonCheck recommends that all individuals with a positive FOBT be referred for colonoscopy.
 - 70.9% of individuals' follow up was coordinated by a ColonCheck Patient Navigator.
 - The remaining 29.1% were referred by their primary care provider.
- 9.1% of individuals with a positive test result did not have a colonoscopy. The most common reasons were patient refusal or medical unsuitability.
- > Beginning in May 2011, a nurse practitioner provided precolonoscopy assessments for ColonCheck participants who were scheduled for a colonoscopy in Winnipeg. This reduced the wait time for those participants.

- The median wait time from FOBT analysis to colonoscopy was 11 weeks (mean wait time 15 weeks).
 - For individuals who live in Winnipeg, the median wait time was 10.3 weeks compared to 12.3 weeks for those who live outside of Winnipeg.

Cancer and Adenoma Detection Rates

- The positive predictive value of the FOBT for those who had a colonoscopy was 4.6% for colorectal cancer and 21.9% for advanced adenoma.
- The colorectal cancer detection rate was 1.4 per 1000 individuals screened.
- > The advanced adenoma detection rate was 6.7 per 1000 individuals screened.



What do we have planned for the future?

In the upcoming years, ColonCheck will prioritize work in three areas: increasing screening participation, improving follow-up colonoscopy, and understanding the program's impact on the Manitoba population.

Increase Screening Participation

- > Review impact of changes to dietary restrictions.
- > Trial a new opt-in program for individuals who did not previously complete an FOBT upon invitation.
- Review the feasibility of a different kind of test, the fecal immunochemical test.
- > Improve and expand education and awareness activities.

Improve Colonoscopy Capacity and Quality

- > Host continuing medical education sessions.
- Provide colonoscopy indicator reports to ColonCheck endoscopists.
- Standardize bowel preparation instructions and colonoscopy reporting requirements.

Understand ColonCheck's Impact on the Manitoba Population

- Review performance measures and targets, conduct ongoing program monitoring and improvement.
- Compare Manitoba results to those in other Canadian jurisdictions.
- > Learn more about who gets colon cancer with respect to their screening history.

How do we measure against national targets?

In 2009, the Canadian Partnership Against Cancer (CPAC) published 20 quality indicators for colorectal cancer screening programs in Canada³. Since that time, the National Colorectal Cancer Screening Network has identified targets for six of the indicators. These targets are based on a review of the scientific literature and international colon cancer screening programs, and are used to facilitate performance monitoring and national comparisons.

Comparison of ColonCheck Outcomes to Canadian Targets

| Performance Measure | Definition | Target ⁴ | ColonCheck Outcome (2009-2010) | ColonCheck Outcome (2011-2012) |
|---|--|---------------------|-----------------------------------|-----------------------------------|
| Screening Participation | Percentage of the invited Manitoba population (50-74 years) successfully completing ColonCheck FOBTs‡ | ≥ 60% | 23.3% | 25.4% |
| | Percentage of the eligible Manitoba population (50-74 years) successfully completing an FOBT | | 31.9% | 34.6% |
| | Percentage of the eligible Manitoba population (50-74 years) who are up to date on colon cancer screening (FOBT, colonoscopy, or flexible sigmoidoscopy) | | 45.2% | 50.1% |
| Inadequate Tests | Percentage of inadequate tests (e.g. unsuitable sample, too much time between sample collection and analysis) among all those who complete an FOBT | ≤ 5% | 2.6% | 2.2% |
| Colonoscopy Compliance | Percentage of individuals with abnormal test results who attend a colonoscopy within 180 days | ≥ 85% | 69.1% | 78.6% |
| | Percentage of individuals with abnormal test results who attend a colonoscopy within 180 days of test analysis (referred for colonoscopy by ColonCheck) | | 83.6% | 93.3% |
| | Percentage of individuals with abnormal test results who attend a colonoscopy within 180 days of test analysis (referred for colonoscopy by primary care provider) | | 65.8% | 74.6% |
| Colonoscopy Wait Time | Number of days from an abnormal FOBT to follow-up colonoscopy for ≥ 90% of individuals | ≤ 60 days | 151 days | 140 days |
| | Median wait time from an abnormal FOBT to follow-up colonoscopy | | 93 days | 70 days |
| Positive Predictive Value for Adenoma Detection | Percentage of individuals found to have adenoma following an abnormal FOBT and subsequent colonoscopy§ | ≥ 35% | 35.7% | 41.3% |
| Invasive Colorectal Cancer Detection | Number of cancers detected for every 1000 individuals screened who have a colonoscopy following an abnormal FOBT result§ | ≥2 | 1.2 | 1.4 |

REFERENCES AND FOOTNOTES

- CancerCare Manitoba (2010). Cancer in Manitoba, 2010 Annual Statistical Report.
- ² Canadian Partnership Against Cancer (2012). *The 2012 Cancer System Performance Report*.
- ³ Canadian Partnership Against Cancer (2009). *Quality Determinants for Colorectal Cancer Screening in Canada.*
- ⁴ National Colorectal Cancer Screening Network (2013).
- * Up to date for screening describes individuals 50-74 years who report having completed a fecal test in the past two years and/or a colonoscopy/sigmoidoscopy in the last five years.
- ** Screening rates may be underestimated, particularly in rural areas, where there may be non-program FOBTs that are processed in public labs but not submitted to Manitoba Health as claims.

 *** Other pathology describes colonic pathology that may be the cause of a positive fecal test (blood in the stool). Most commonly, it refers to hemorrhoids, diverticula, or hyperplastic polyps.
- † Other refers to individuals who require further testing (for example, another colonoscopy or a barium enema) or who are awaiting pathology results before a final outcome can be determined.
- ‡ The CPAC target includes all eligible individuals in the population. The ColonCheck outcome only includes eligible individuals in the population who were invited.
- § The CPAC target only includes information from colonoscopies occurring within 180 days. The ColonCheck outcome includes information from all colonoscopies. 2009-2010 data includes information from people invited in 2009-2010, whereas the 2011-2012 results are based on FOBTs analyzed in 2011-2012.

