Colorectal Screening

PURPOSE OF MODULE

The Ontario Public Health Standards (OPHS) point to the need for increased public awareness of the benefits of screening for early detection of cancers. The Cancer Care Ontario Prevention and Screening Guidelines (2007) recommend that adults 50 years of age or older be screened for colon cancer using a Fecal Occult Blood Test (FOBT) every two years [1]. Cancer Care Ontario's target is to have 40% of Ontarians aged 50-74 screened within the past two years by 2012[2] and 90% screened within the past two years by 2020[3].

KEY FINDINGS

- In 2011, 35% (95% CI, 30-39) of Ontario adults aged 50 to 74 had been screened within the past 2 years for colorectal cancer using an FOBT, while 65% (95% CI, 61-70) had not (see Figure 1 and Table 1). The 65% who had not been screened for cancer within the past 2 years are composed of :
  - 56% (95% CI, 51-60) who had not been tested within the past 2 years (including never been tested); and
  - 10% (95% CI, 7-13) who had been tested, but not for screening purposes.

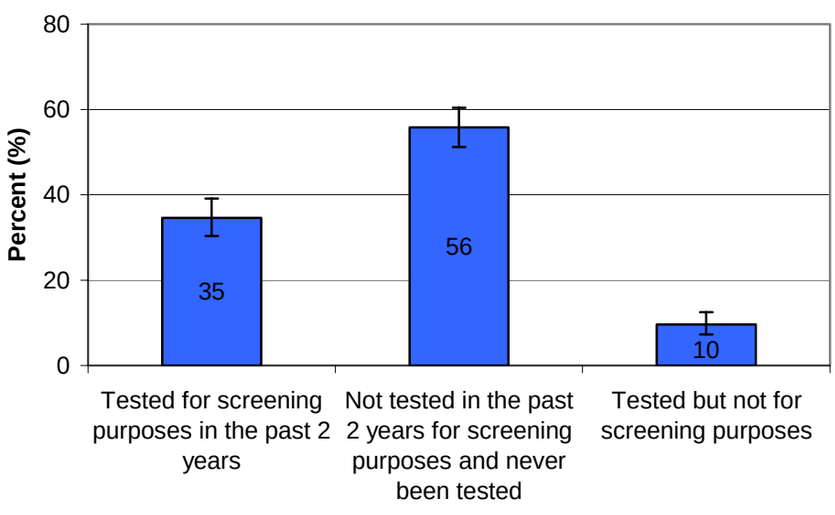
Sex

- In 2011, there was no significant difference in the proportion of Ontario males and females aged 50-74 who had an FOBT test within the past 2 years for cancer screening purposes (see Figure 2).
- In 2011, there was no significant difference in the proportion of Ontario males and females aged 50-74 who had not had an FOBT test within the past 2 years for cancer screening purposes (see Figure 2).
- In 2011, there was no significant difference in the proportion of Ontario males and females aged 50-74 who had been tested using an FOBT, but not for cancer screening purposes (see Figure 2).

Health Units

- In 2011, the proportion of adults who had an FOBT test within the past 2 years for cancer screening purposes was significantly higher in Kingston than in Ontario; and significantly lower in York than in Ontario (see Table 1).
- In 2011, the proportion of adults who had not had an FOBT test within the past 2 years for cancer screening purposes was significantly higher in York than in Ontario; and significantly lower in Kingston than in Ontario (see Table 1).
- In 2011, there were no significant differences between health units and Ontario in the proportion of adults who had been tested using an FOBT, but not for cancer screening purposes (see Table 1).

Figure 1: Colorectal Cancer Screening Using an FOBT, Ontario Adults Aged 50 to 74, 2011



A. RRFSS Provincial Sample Pilot Project (PSPP)

The RRFSS PSPP is intended to provide reliable and representative estimates for 2011 RRFSS indicators for Ontario as a whole, and in so doing:

- Provide a valid comparator for local health unit results for selected indicators;
- Allow for a reduction in RRFSS "core" content;
- Provide a more flexible, timely system by which to collect provincially-relevant risk factor surveillance data than is currently available.

The provincial sample includes over 1800 interviews, with the number of interviews proportionate to the size of the health units' populations. Within households, the adult with the most recent birthday is selected to participate in the survey.

B. PSPP Evaluation

The evaluation of the RRFSS PSPP is supported by Locally-Driven Collaborative Project funding through Public Health Ontario.

The purpose of the PSPP evaluation is to summarize the implementation and results of the RRFSS PSPP, documenting what worked well and why, what the challenges were, what the benefits of the PSPP were and whether or not they were worth the costs.

The information will be used to inform decisions related to future provincial sampling in RRFSS.

C. Data Collection

January – December 2011
(Brant; Chatham-Kent; Durham Region; Haldimand-Norfolk; Haliburton, Kawartha, Pine Ridge; Halton; Sudbury; York)

January – April 2011
(Kingston; Leeds, Grenville and Lanark; Peel)

May – December 2011
(Ontario)

Only RRFSS participating health units who agreed to share their data have been included in this report.

D. Definitions

Screening for colorectal cancer includes being tested because of age, a family history of colorectal cancer, or as part of a regular check-up or routine visit. Screening does not include being tested due to ongoing or past bowel problems or concerns about possible problems.

A 95% confidence interval (CI) refers to the range of values that has a 95% chance of including the 'true' estimate. A large CI means that there is a large amount of variability or imprecision. When CI's do not overlap, estimates are significantly different. CI's were selected as the measure of significance due to their conservative nature and transparency; there is less chance of incorrectly identifying a significant difference, which is important given the multiple tests of significance. CI's are reported in brackets or presented as I in the graphs.

Coefficient of variation (CV) refers to the precision of the estimate. When the CV is between 16.6 and 33.3, the estimate should be interpreted with caution because of high variability and has been marked with an asterisk (*). Estimates with a CV of 33.3 or greater are not reportable.

E. Limitations

RRFSS results are self-reported and may not necessarily be recalled accurately. Individuals not living in households (such as those in prison, hospitals, or the homeless) are excluded. Similarly, individuals who live in a household without a landline telephone (about 12% of all Ontario households[4]) will not be reached through RRFSS. Thus the percentages may not represent the true estimates for the general population as respondents may have different characteristics than people who have not been included in the survey.

Household (HH) weights were used for any questions related to individuals. The HH weight adjusts for the fact that adults from larger HH are less likely to be selected than individuals from smaller HH. Provincial results were also weighted to account for the actual distribution of adults among health units in Ontario. Estimates were multiplied by the 2006 population for the health unit to adjust for this difference.

Only adults aged 50-74 were included in this analysis since this is when the risk for developing colorectal cancer is highest[5].

Don't know and refused responses were excluded from the analysis.

Non-rounded estimates and confidence intervals were used when determining significant differences; however, rounded numbers were used for the presentation of data, thus estimates may not total 100 and confidence intervals may appear to overlap.

F. References

1 Rapid Risk Factor Surveillance System. Colorectal Screening – Module Information. Retrieved August 2012 from http://www.rrfss.ca/resources/datadictionaries/Colorectal%20Screening%20DD_February%202011.doc

2 Cancer Care Ontario (2012). Colon Cancer Check. Retrieved August 2012 from https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=124403

3 Cancer Care Ontario (2003). Summary of Cancer 2020 Targets and Measures. Retrieved August 2012 from https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=13490

4 Ialomiteanu, A., Adlaf, E. M. (2011). CAMH Monitor 2010: Technical Guide. Retrieved May 2012 from http://www.camh.ca/en/research/Documents/www.camh.net/Research/Areas_of_research/Population_Life_Course_Studies/CAMH_Monitor/CM2010_TechDoc.pdf

5 Cancer Care Ontario (2008). Insight on Colorectal Cancer. Retrieved August 2012, from https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=34627

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Figure 2: Colorectal Cancer Screening Using an FOBT, Ontario Adults Aged 50 to 74, By Sex, 2011

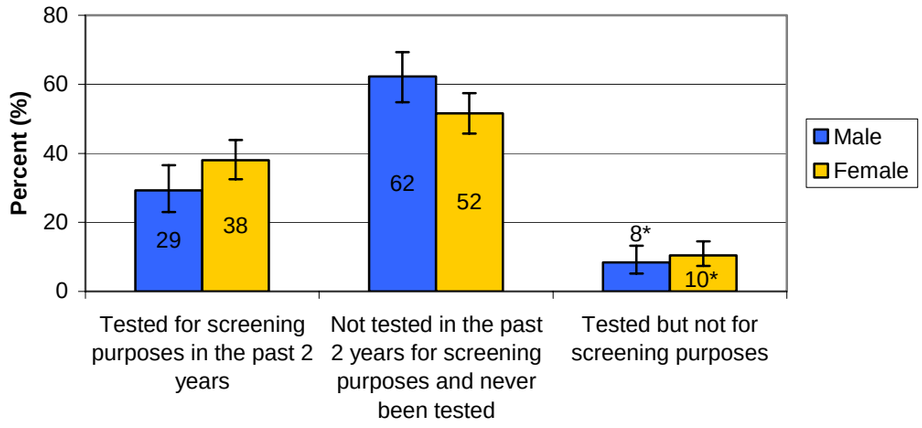

Table 1: Colorectal Cancer Screening Using an FOBT, Ontario Adults Aged 50 to 74, By Health Unit, 2011

Health Unit/Province	Tested for screening in the past 2 years		Not tested in the past 2 years for screening purposes and never been tested		Tested but not for screening purposes	
	Percent (95% CI)	↑↓	Percent (95% CI)	↑↓	Percent (95% CI)	↑↓
ONTARIO	**35 (30-39)**	**-**	**56 (51-60)**	**-**	**10 (7-13)**	**-**
Brant	34 (30-39)		57 (52-61)		9 (7-12)	
Chatham-Kent	32 (28-36)		60 (55-64)		9 (7-12)	
Durham Region	34 (30-37)		54 (50-58)		12 (10-15)	
Haldimand-Norfolk	36 (33-40)		52 (48-56)		12 (10-14)	
Haliburton, Kawartha, Pine Ridge	33 (29-36)		57 (53-61)		11 (9-14)	
Halton	33 (29-38)		58 (53-62)		10 (7-13)	
Kingston	46 (39-53)	↑	41 (34-48)	↓	13 (9-19)*	
Leeds, Grenville and Lanark	35 (28-43)		56 (48-64)		9 (5-15)*	
Peel	34 (26-43)		57 (48-66)		9 (5-15)*	
Sudbury	28 (24-32)		60 (55-64)		13 (10-16)	
York	25 (21-29)	↓	66 (61-70)	↑	10 (7-13)	

↓ *Health Unit was significantly lower than Ontario* ↑ *Health Unit was significantly higher than Ontario*

Figure 3: Screening for Colorectal Cancer Using an FOBT within the Past Two Years, Ontario Adults Aged 50 to 74, By Health Unit, 2011