Cancer Care Ontario

Cancer Screening Programs

Follow-up to VFM Section 3.01, *2012 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	2	1	1		
Recommendation 2	2	1	1		
Recommendation 3	3	2	1		
Recommendation 4	1		1		
Recommendation 5	2		2		
Total	**10**	**4**	**6**	**0**	**0**
%	**100**	**40**	**60**	**0**	**0**

Background

Cancer Care Ontario is a provincial agency responsible for co-ordinating and overseeing cancer services in Ontario. Cancer Care Ontario directs health-care funding to hospitals and other care providers, with the aim of delivering quality and timely cancer services throughout the province. It is also responsible for implementing cancer prevention and screening programs. Screening that detects certain types of cancer at an early stage can have a major impact on mortality rates. Cancer Care Ontario has implemented cancer screening programs for breast, colorectal and cervical cancers.

In the 2013/14 fiscal year, Cancer Care Ontario incurred total expenditures of $69.3 million ($92 million in 2011/12) for cancer screening programs. Effective April 1, 2012, the Ministry directly pays radiologists for breast cancer screens conducted, whereas these payments were made directly by Cancer Care Ontario before this date. In 2011/12, funding for such payments amounted to $33.8 million, and in 2013/14, it amounted to $31 million. Therefore, a total of $100.3 million was spent on cancer screening by both Cancer Care Ontario and the Ministry in 2013/14.

Our *2012 Annual Report* assessed whether Cancer Care Ontario used established clinical evidence to decide what types of cancer warrant

formal screening programs and how effective Cancer Care Ontario was in achieving high screening participation rates. Overall, we found that Cancer Care Ontario had implemented a number of good processes but was having difficulty meeting its participation-rate targets, especially for those segments of the population deemed to be at high risk for certain types of cancer.

Our major observations with respect to the three screening programs included the following:

- We noted that Cancer Care Ontario appropriately used recognized clinical evidence in deciding what types of cancer warranted formal screening programs. Both the Ministry of Health and Long-Term Care (Ministry), through a $45-million funding commitment in 2010, and Cancer Care Ontario, through its initiatives, recognized the need to increase screening participation rates, especially for people considered to be at increased risk for cancer.
- We found that as of the 2009/10 fiscal year, participation in breast cancer and cervical cancer screening achieved Ministry targets but fell short of Cancer Care Ontario's own targets. Colorectal cancer screening fell short of both the Ministry's and Cancer Care Ontario's targets, and almost half the targeted population remained unscreened. In total, from 2008 to 2010, only 27% of eligible women completed all three cancer-screening tests recommended for their age group. As well, participation in the screening programs appeared to have reached a plateau, and Cancer Care Ontario was looking at ways to address this.
- Wait times existed at various stages of the screening processes for all three types of cancer:
  - Mammography screening wait times for women with average risk for breast cancer ranged from just over two weeks to 10½ months; and Cancer Care Ontario found that for women considered at high risk for breast cancer, wait times for genetic assessments of screening eligibility averaged 84 days.
  - For colorectal screening, almost 30% of cases did not have the follow-up colonoscopies within the benchmark time established by Cancer Care Ontario. Our review of hospital records found instances where wait times were as long as 72 weeks for people with family histories and 17 weeks for those with positive fecal occult blood test results.
  - For cervical cancer screening, a Cancer Care Ontario preliminary review showed that the median wait time for a colposcopy (a follow-up diagnostic procedure on abnormal cervical Pap test results) for high-grade abnormalities was about three months.
- Though older women were at greater risk of dying of cervical cancer, they were screened at a much lower rate than younger women, while many low-risk younger women were screened more often than necessary.
- The level of quality assurance measures for each of the screening programs varied considerably. Cancer Care Ontario has a comprehensive quality assurance program for the breast cancer screening program. However, 20% of screenings took place outside Cancer Care Ontario's program and were not subject to the requirements. Cancer Care Ontario had some quality assurance processes in place for the colorectal cancer screening program, but none for the cervical cancer screening program.

Status of Actions Taken on Recommendations

Cancer Care Ontario and the Ministry of Health and Long-Term Care (Ministry) provided us with information in the spring and summer of 2014 on the current status of our recommendations. Cancer

Care Ontario is in the process of implementing our recommendations, with some recommendations already fully implemented and other recommendations with significant progress made.

Cancer Care Ontario is monitoring wait times for breast cancer screening through monthly performance reports and quarterly performance reviews with Regional Cancer Programs.

Cancer Care Ontario is working to increase participation in colon cancer screening and to improve its colon cancer screening efforts by replacing the guaiac fecal occult blood test with the more sensitive fecal immunochemical test. The fecal immunochemical test also has a better rate of detecting cancer and advanced pre-cancerous lesions. Cancer Care Ontario has completed a pilot project that reviewed the colonoscopies conducted in Independent Health Facilities to determine the colonoscopy activity in these facilities, to assess the impact that increased capacity for conducting colonoscopies had on quality of care and to assess the level of engagement of the facilities to their regional cancer programs.

For cervical cancer screening, Cancer Care Ontario has hired six Regional Cervical Screening/Colposcopy leads to monitor wait times for achievement of performance standards and to assess performance management, including colposcopy access, wait times and quality management in the cervical cancer screening program.

Work is still needed to increase the participation of people who do not have family physicians in screening programs; and to obtain screening data to enable Cancer Care Ontario to assess the work of cancer screening service providers and to measure the results against appropriate quality assurance standards.

The status of the actions taken on each recommendation is described in the following sections.

Cancer Screening Programs

Breast Cancer Screening

Recommendation 1

To improve breast cancer screening services to eligible participants, especially those considered to be at high risk of breast cancer, Cancer Care Ontario should periodically evaluate the wait times at each of its screening facilities.

Status: Fully implemented.

As well, Cancer Care Ontario should take measures to increase its capacity to expedite genetic assessments for women who have been referred to the high-risk program by their doctors.

Status: In the process of being implemented.

Details

In the 2012/13 fiscal year, Cancer Care Ontario began monitoring wait times for each of its Ontario Breast Screening Program (OBSP) facilities as part of monthly performance reports and quarterly performance reviews with Regional Cancer Programs. The wait times are evaluated on a monthly basis, and under-performing sites are discussed with senior management at the Regional Cancer Programs and action plans for improvement are developed.

While the OBSP does not have a standard wait time for mammography screenings, it has set targets for the time between the date a woman receives an abnormal mammogram screening result to the date of her diagnosis. OBSP has set a performance target by which 70% of clients with an abnormal breast cancer screening result are to be diagnosed within five weeks for cases without a tissue biopsy, and a performance target by which 90% of clients with an abnormal screen are to be diagnosed within seven weeks for cases with a tissue biopsy.

Data obtained from Cancer Care Ontario showed that in 2013/14, 92% of clients with an abnormal screening result were diagnosed without a tissue biopsy within five weeks, which improved on the target rate of 70%. However, 73% of clients with

an abnormal screening result and needing a tissue biopsy had their diagnosis made in seven weeks, which is below the 90% target rate. Although the current result of 73% is below the 90% target, the number shows a steady increase from 62% in 2009/10 to its current rate.

Cancer Care Ontario has not set screening targets for women at high risk for breast cancer. This includes women with risk factors such as a specific genetic mutation, a family history that suggests hereditary breast cancer, a 25% or greater lifetime risk confirmed through genetic assessment, and having had radiation therapy to the chest before age 30 or more than eight years ago as treatment for another cancer or condition. Targets do not exist for the number of high-risk women to be screened or wait times for screening for a number of reasons. Cancer Care Ontario indicated that the high-risk program is new, so there is no appropriate basis of comparison to benchmark targets against; the population of high-risk women must be identified through risk assessment by physicians and other clinical staff (e.g., at genetics clinics), which makes it challenging to forecast volumes; and the client pathway through genetic assessment has not been measured well outside of the High Risk Ontario Breast Screening Program to enable target-setting for genetic assessment. Key wait times are now being measured so that the resulting data can be used to inform future target-setting efforts.

In 2012, Cancer Care Ontario conducted an evaluation of the High Risk Ontario Breast Screening Program after one year of operation to identify areas where improvements can be made. The report recommendations were shared with the Ministry in March 2013, and were broadly distributed to Regional Cancer Programs and OBSP sites that assisted in the development of the report.

The evaluation identified concerns with the funding model, program awareness and centralized co-ordination, as well as lower-than-projected referral and screening volumes. Implementation of the recommendations is currently in progress and includes measures to address funding. The funding changes are expected to increase the High Risk Ontario Breast Screening Program's capacity to expedite genetic assessments for women who were referred to this high-risk program by their doctors. In July 2013, Cancer Care Ontario presented its recommendations to the Ministry of Health and Long-Term Care for changes to the funding model. The changes included moving from funding nurses who help clients navigate the system on a rate-per-case basis to funding an allocated position. These changes will help retain staff in these roles and provide a workforce for the High Risk Ontario Breast Screening Program. The payment made for each genetic assessment was also increased from $250 per case to $300 per case, to more closely reflect the costs of administration and clinical support for these assessments.

Colorectal Cancer Screening

Recommendation 2

To increase participation and improve its colon cancer screening efforts, Cancer Care Ontario should:

- *examine and work to address the concerns doctors have with the effectiveness of the Fecal Occult Blood Test as a screening tool; and*
  Status: In the process of being implemented.
- *explore approaches for reducing the wait times for colonoscopy procedures, especially those for increased-risk patients.*
  Status: Fully implemented.

Details

According to Cancer Care Ontario, between 2008 and 2012, overall colorectal cancer screening participation increased from 48.1% to 53.2%. The increase was due to increased colonoscopies and flexible sigmoidoscopy procedures, as the guaiac fecal occult blood test participation rates have levelled off at 30%. To increase participation rates and to address concerns that doctors have about the effectiveness of the guaiac fecal occult blood test, Cancer Care Ontario reviewed evidence on

the fecal immunochemical test (FIT) in 2011 and concluded that the FIT performs more effectively than the guaiac fecal occult blood test. The FIT has increased sensitivity and better rates of detection of cancer and advanced adenomas (pre-cancerous lesions), and the test is favourably regarded by physicians. A two-phase pilot study was conducted to examine specimen stability and the impact of kit distribution and return methods on participation. Cancer Care Ontario planned to implement the FIT on the basis of the results of this pilot study. Cancer Care Ontario's 2014–2017 Annual Business Plan states that Cancer Care Ontario is planning to move from use of the guaiac fecal occult blood test to the FIT. Ongoing discussions to plan this transition are taking place with the Ministry of Health and Long-Term Care. Implementation of the FIT as a screening test for the colorectal cancer screening program ColonCancerCheck is targeted for the 2017/18 fiscal year. Cancer Care Ontario plans to conduct an evaluation after the implementation of the FIT.

In 2013, to explore approaches to reduce wait times for colonoscopy procedures, Cancer Care Ontario completed a two-phase pilot project examining colonoscopies conducted in out-of-hospital premises or clinics. The first part of the review included understanding colonoscopy activity in out-of-hospital premises (for example, the operational processes, patient volumes by indication, quality of care, and staffing trends). The second phase determined the ability of out-of-hospital premises to increase colonoscopy capacity for ColonCancerCheck indicators (abnormal fecal occult blood tests and family history), assessed the out-of-hospital premises' ability to maintain the quality of care provided when their capacity for conducting colonoscopies increased, and assessed the level of engagement between the out-of-hospital premises and their respective Regional Cancer Programs. It was found that the majority of the out-of-hospital premises in this pilot met the benchmarks for wait times, and the quality of colonoscopies performed in these premises were comparable to the quality of those performed in hospitals.

Since our 2012 audit, all colonoscopy agreements between Cancer Care Ontario and hospitals that perform colonoscopies under the ColonCancerCheck program include wait-time provisions. The agreements require hospitals to examine wait-time data on a regular basis, analyze reasons patients are waiting beyond target time frames, and establish processes to monitor and manage wait times for colonoscopies. Hospital wait-time performance is discussed with the Regional Cancer Program through quarterly performance reviews and reports. The Regional Cancer Program also has access to monthly reports of hospitals, and reviews these to monitor and manage wait-time performance, including colonoscopies.

Based on the monthly hospital data collected by Cancer Care Ontario, the percentage of individuals getting a follow-up colonoscopy after a positive fecal occult blood test result has increased from 62% in 2009/10 to 81% in 2013/14. In 2013/14 it exceeded the wait-time benchmark of 75% getting a follow-up colonoscopy within eight weeks of the referral. The percentage of individuals with a family history of colon cancer getting a colonoscopy within the established wait-time benchmarks increased from 76% in 2009/10 to 88% in 2013/14. In 2013/14, more than 80% of these individuals got a colonoscopy within the benchmark of 26 weeks. These improvements are due to increased monitoring of colonoscopy wait times and the increased numbers of colonoscopies performed both at hospitals and at out-of-hospital premises or clinics.

As of March 25, 2014, Cancer Care Ontario had recruited nine of a planned 13 Regional Colorectal Screening/Gastrointestinal Endoscopy Leads. These are new positions that did not exist at the time of our 2012 audit. The role of the leads is to assist regions with performance management and improvement, including colonoscopy wait times.

Cervical Cancer Screening

Recommendation 3

To improve the effectiveness of its cervical cancer screening services, Cancer Care Ontario should:

- *target promotional and educational efforts to increase participation and rescreening rates among older women;*
  Status: In the process of being implemented.
- *educate the public and health-care providers on appropriate cervical cancer screening intervals; and*
  Status: Fully implemented.
- *monitor wait times for colposcopy procedures for timely follow-up of women with abnormal Pap test results.*
  Status: Fully implemented.

Details

In our *2012 Annual Report*, we noted that the highest rates of cervical cancer screening participation were among women aged 20 to 29 years, and the lowest rates were among women aged 60 to 69 years. Older women have increased risk of developing and dying from cervical cancer, yet younger women, who have a lower risk of cervical cancer, have the highest rates of Papanicolaou (Pap) test screening.

Cervical cancer screening data for 2012 and beyond was not available at the time of our follow-up audit. In August 2012, Cancer Care Ontario updated its cervical cancer screening guidelines. The guidelines state that cervical cancer screening is now recommended starting at age 21 and at intervals of every three years until age 70 for women who are or have been sexually active; screening is not recommended for women under the age of 21.

In January and October 2013, government health payments were amended to correspond to the new cervical cancer screening guidelines. Routine cervical cancer screening is now funded once every 33 months if the previous Pap test results were normal. However, government health payments do not provide incentives to increase screening of older women, such as those aged 50 to 69 years.

Cancer Care Ontario has implemented several education initiatives for the public and their health-care providers. It has launched promotional and educational campaigns through media and social media to raise awareness of the new cervical cancer screening guidelines and to encourage Ontarians to speak to their health-care providers. Examples included the "It's Time to Screen" campaign and materials on appropriate cervical cancer screening intervals that the Regional Cancer Programs could customize for their local communities during Cervical Cancer Awareness Week in October 2013. Cancer Care Ontario also created and distributed knowledge products and clinical tools to primary care providers to educate them on appropriate cervical cancer screening intervals.

In November 2013, Cancer Care Ontario implemented the Ontario Cervical Screening Program invitation letter campaign targeting women in Ontario between the ages of 30 and 69, and a cervical screening recall letter campaign targeting women between the ages of 21 and 69 years who were due for screening. As of May 23, 2014, a total of 1,825,000 invitation and recall letters (and reminder letters) were sent to eligible Ontario women. At the time of our follow-up, Cancer Care indicated that the evaluation of the invitation letter campaign is scheduled to commence in the second quarter of the 2014/15 fiscal year.

Cancer Care Ontario will be expanding a tool called the Screening Activity Report, which provides family physicians with screening information on all their rostered patients, to include cervical cancer screening data. This will help physicians to follow up with patients who may require colposcopy after an abnormal screen result.

Cancer Care Ontario monitors colposcopy wait times on an annual basis, and tracks follow-ups for women with high-grade abnormal cytology,

which is reported in the annual Ontario Cervical Screening Program Report.

For women who receive a high-grade abnormal result on a Pap test, Ontario colposcopy standards recommend a colposcopic follow-up in less than eight to 12 weeks. To monitor achievement of performance standards and to assess performance management, including colposcopy access, wait times and quality management in the Ontario Cervical Screening Program, Cancer Care Ontario has recruited six Regional Colposcopy Leads.

Cancer Screening for People with No Family Physicians

Recommendation 4

The Ministry of Health and Long-Term Care should monitor and assess current Cancer Care Ontario initiatives designed to improve participation in screening programs among people who do not have family physicians to gauge their effectiveness.

Status: In the process of being implemented.

Details

In April 2012, Cancer Care Ontario initiated a process to assist participants in its Ontario Breast Screening Program and ColonCancerCheck screening programs who did not have a family physician to enroll with one through the Ministry's Health Care Connect program. Participants in the screening programs who receive an abnormal screening result will receive a letter from Cancer Care Ontario encouraging them to register with Health Care Connect. When registered, participants who have abnormal screening test results are identified by Health Care Connect as a priority for referral to a family physician accepting patients within their local community.

Although ministry data is available on the total number of individuals registered with the Health Care Connect program, data is not available to track the number of patient participants from ColonCancerCheck and the Ontario Breast Screening Program who were referred to a family physician through this program. The Ministry indicated that it will explore the feasibility of tracking future enrollments of unattached patient participants in ColonCancerCheck programs and the Ontario Breast Screening Program through Health Care Connect.

Cancer Care Ontario informs the Ministry of its initiatives designed to increase cancer screening participation among individuals without a family physician. Over the two years from 2010/11 to 2011/12, Cancer Care Ontario conducted regional pilots in five different Local Health Integration Networks (Champlain, Erie St. Clair, North East, North West and Toronto Central) in specific communities that are under-screened or have never been screened, including Aboriginal and immigrant groups. The project goals were to increase cancer screening participation in these communities, increase knowledge about healthy behaviours that decrease risks of getting some types of cancer using culturally appropriate tools, and build partnerships between these communities and large health providers in the area. Cancer Care Ontario's evaluation of these pilot projects in 2014 showed there were some improvements in screening knowledge and screening rates for certain regions through the project efforts, the reports also highlighted the challenges, such as cultural and educational differences, faced by the various groups in these regions.

To increase breast, cervical and colorectal cancer screening participation among people who do not have a physician, Cancer Care Ontario operates mobile coaches in the North West (Thunder Bay) and Hamilton Niagara Haldimand Brant Local Health Integration Network regions. These coaches provide breast cancer and cervical cancer screening services and distribute colorectal cancer screening kits.

In addition to implementing the above initiatives, Cancer Care Ontario has made colorectal cancer screening kits available to unattached patients at pharmacies and via TeleHealth Ontario. Also, in March 2014, Cancer Care Ontario launched an Ontario Breast Screening Program invitation letter

campaign targeting women between the ages of 50 and 74.

The Ministry is working jointly with Cancer Care Ontario to address the need to increase participation through a joint steering committee. In addition, the Accountability Agreement between the Ministry and Cancer Care Ontario sets out the initiatives to be implemented and the dates for completion and evaluation.

Monitoring for Quality of Services

Recommendation 5

To ensure that Ontarians are receiving quality cancer screening services, Cancer Care Ontario should work with the Ministry to:

- *establish monitoring procedures to ensure that quality assurance requirements are met for screening of breast, colorectal and cervical cancers, regardless of whether they are provided under programs established by Cancer Care Ontario or other service providers; and*
  Status: In the process of being implemented.

- *obtain screening data so it can review and assess the work performed by all service providers and measure the results against appropriate quality assurance standards.*
  Status: In the process of being implemented.

Details

To address quality assurance for screening of breast cancer, Cancer Care Ontario has created a "Policies and Procedures" manual, containing expectations for mammography equipment and facilities inspections and audit practices for client charts (patient files), to which all OBSP sites must adhere.

Cancer Care Ontario monitors OBSP sites to ensure that all recommendations from inspections conducted on equipment used to provide OBSP screening services are addressed on a timely basis. These inspections assess whether mammography equipment and facilities achieve or maintain accreditation with the Canadian Association of Radiologists Mammography Accreditation Program (CAR-MAP). Cancer Care Ontario also expects that its manual will help reduce the variation in chart audit practices at OBSP sites.

Cancer Care Ontario completed its 2011 Interval Cancer Reviews in 2013 and addressed the backlog of cases that existed at the time of our 2012 audit. This entailed reviewing cases in which a woman was diagnosed with cancer after having had a previous screening test that reported normal results. The review determines if the cancer was missed at the previous screening or whether the cancer developed subsequent to the screening, and informs OBSP radiologists.

Cancer Care Ontario is currently reviewing and updating the procedures contained in its "Policies and Procedures" manual. The updated manual will be communicated to the OBSP sites in the fall of 2014 and will reflect detailed requirements and expectations for the screening sites.

To ensure that consistent quality standards are in place at all mammography screening sites across the province, regardless of service provider, Cancer Care Ontario has recommended to the Ministry that all screening for breast cancer should be done within the Ontario Breast Screening Program.

Ministry data on mammography screening volumes through OBSP and non-OBSP sites for the three fiscal years from 2011/12 to 2013/14 shows that the number of screens in OBSP sites (and therefore subject to Cancer Care Ontario quality assurance processes) has increased over this period from 74.5% to 79%.

Cancer Care Ontario has worked with the Ministry and the Ontario Hospital Association (Association) to encourage all hospitals to undertake the CAR-MAP accreditation. In August 2012, the Association issued a bulletin to its members to encourage all hospitals to become CAR-MAP accredited, if they had not already done so. In addition, the College of Physicians and Surgeons of Ontario revised the Clinical Practice Parameters and Facility Standards for Independent Health Facilities to include a requirement that equipment

and quality control activities at these facilities meet the CAR-MAP accreditation standards and that all facilities providing mammography services must be accredited by January 2014.

The Ministry has indicated that of the 161 Independent Health Facilities providing mammography services, 77 (48%) are CAR-MAP accredited and 50 (31%) more are in the process of completing the accreditation process. The Ministry does not track the number of non-OBSP hospitals that are CAR-MAP accredited; however, based on the Canadian Association of Radiologists list of CAR-MAP accredited hospitals, the Ministry estimates that 7 of the 29 non-OBSP hospitals providing mammography screening are CAR-MAP accredited. The Ministry is working with Cancer Care Ontario to transition all non-OBSP sites into OBSP sites.

In addition, work is under way between Cancer Care Ontario and the College of Physicians and Surgeons of Ontario to address quality assurance at the physician and facility level in mammography, colonoscopy and pathology. Cancer Care Ontario has also worked with the Ministry to develop the *Quality-Based Procedures Clinical Handbook for Gastrointestinal Endoscopy*, which was effective on April 1, 2014.

To address quality assurance for screening of cervical cancer, work is also underway on quality-based procedures that are scheduled to be implemented on April 1, 2015. Cancer Care Ontario's colposcopy standards recommend that colposcopists perform a minimum of 100 new and follow-up colposcopies each year, including a minimum of 25 new cases per year, in order to maintain competency.

Cancer Care Ontario is working to obtain screening data to facilitate monitoring of quality assurance, as follows:

- For breast cancer screening, Cancer Care Ontario is undertaking a redesign of its integrated Client Management System, the database that provides an integrated set of data for each client screened in the OBSP, for the purposes of program administration, management and evaluation. Cancer Care Ontario has completed a review of breast screening data collection requirements and design. A minimum data set is available, which can be used for future collection of non-OBSP breast cancer screening data. The redesign work is targeted for completion by March 2015.
- For colon cancer screening, Cancer Care Ontario continues to operate its Colonoscopy Interim Reporting Tool, which collects the necessary data to assist in tracking current colonoscopies performed at participating hospitals by both volume and quality.
- For cervical cancer screening, Cancer Care Ontario does not have a colposcopy data registry to collect information such as the reason for colposcopy, the colposcopic findings, the number of biopsies taken, or management decisions or rationale for decisions for use in evaluating quality. A colposcopy data collection tool is planned for 2014/15. At the time of our follow-up, a draft of the minimum data set has been created. This will need to be validated by the Cervical Scientific and Clinical Leads. Once it is validated, Cancer Care Ontario will create a plan for the tool development and implementation. This project is still in early stages.