

# Cancer Screening Programs

## Background

Cancer Care Ontario (CCO), formerly known as the Ontario Cancer Treatment and Research Foundation, was created in 1943 under the *Ontario Cancer Treatment and Research Foundation Act*. In 1997, the agency officially changed its name to Cancer Care Ontario and became governed by the *Cancer Act*. CCO is responsible for co-ordinating and overseeing cancer services in Ontario. It works with each of the province's Local Health Integration Networks (LHINs) to address local and regional needs and advises government on cancer matters.

CCO 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.

CCO has 13 regional cancer programs across the province. These programs bring together health-care professionals and organizations involved in cancer prevention and care. Each regional cancer program is led by a CCO regional vice-president. The regional programs are required to ensure that service providers meet the requirements and targets set out in their partnership agreements with CCO.

Regional Cancer Centres are responsible for cancer screening and treatment services. Prior to

2004, these centres were stand-alone organizations managed by CCO. On January 1, 2004, the centres formally integrated with their partner hospitals to provide more comprehensive care under one location.

In 2011/12, CCO had total expenditures of \$887 million, \$92 million of which was spent on cancer screening programs.

## Audit Objective and Scope

The objective of our audit was to assess whether Cancer Care Ontario (CCO) had adequate policies and procedures in place to:

- monitor and assess whether cancer screening programs were provided in accordance with legislation, agreements and applicable directives/policies; and
- measure and report periodically on achievements of cancer-screening-program objectives.

Our audit objectives and criteria were reviewed and agreed to by CCO senior management.

In conducting our audit, we reviewed relevant legislation and administrative policies and procedures, and we interviewed appropriate CCO head-office staff and Ministry of Health and Long-Term Care (Ministry) staff. We also visited sites in the

following regions: Greater Toronto Area, Hamilton Niagara Haldimand Brant, South West (London), Champlain (Ottawa) and North East (Sudbury) to review files and other summary information available for the Ontario Breast Screening Program and the colorectal cancer screening program. We also contacted these sites to obtain information on the cervical cancer screening program. To obtain a better understanding of and perspective on cancer screening programs, we spoke to various stakeholders, such as the Canadian Cancer Society, the Institute of Clinical Evaluative Sciences, and the Cancer Quality Council of Ontario. We also contacted similar cancer agencies in Manitoba, Alberta and British Columbia.

Our audit included a review of related activities of CCO's Internal Audit Department. We reviewed its recent reports and, when we planned our work, considered its audit work and any relevant issues it had identified.

## Summary

Similarly to agencies in other jurisdictions such as Australia, New Zealand, the United Kingdom and other Canadian provinces, CCO has implemented cancer screening programs for breast, colorectal and cervical cancers. The key objective for each of the three cancer screening programs is to reduce the number of deaths from cancer through early detection and treatment. The mortality rates from these three types of cancer have fallen in Ontario over the past two decades. In this regard, Ontario's mortality rates are similar to the Canadian averages for these types of cancer.

Our major observations with respect to these three screening programs were as follows:

- We noted that CCO appropriately used recognized clinical evidence in deciding what types of cancer warranted formal screening programs. Both the Ministry of Health and Long-Term Care, through a \$45-million fund-

ing commitment in 2010, and CCO, through recent initiatives, have clearly recognized the need to increase screening participation rates, especially for people considered to be at increased risk for cancer.

- Participation in breast cancer and cervical cancer screening achieved ministry targets but fell short of CCO's own targets. As of 2009/10, colorectal cancer screening in Ontario fell short of both the Ministry's and CCO's targets, and almost half of the targeted population remained unscreened. In total, between 2008 and 2010 only 27% of eligible women completed all three cancer screening tests recommended for their age group. As well, participation in the screening programs appears to have reached a plateau, and CCO is looking at ways to address this.
- There were wait times for screening services for all three types of cancer:
  - In visits to regional offices, we found mammography screening wait times for women with an average risk for breast cancer but no symptoms ranged from just over two weeks to 10½ months. CCO found that, in its program that targets women considered at high risk for breast cancer, the wait time for genetic assessments of screening eligibility averaged 84 days.
  - For colorectal screening, almost 30% of cases did not have a follow-up colonoscopy within the benchmark time established by CCO. The data showed that, in 2011/12, the median wait times for a colonoscopy were 12 weeks for individuals with family histories of colon cancer and six weeks for those needing to be followed up after a positive Fecal Occult Blood Test (FOBT). However, we found instances in hospital records we reviewed where the wait times were as long as 72 weeks for individuals with family histories of colon cancer and 17 weeks for those whose FOBT was positive.

- For cervical cancer screening, a recent CCO preliminary review showed that the median wait time for a colposcopy (a diagnostic procedure following up on abnormal cervical Pap test results) for high-grade abnormalities was about three months.
- Even though they are at greater risk of dying of cervical cancer, older women were screened at a much lower rate than younger women. CCO has said that physicians too often link Pap testing for cervical cancer to annual health exams, contraception counseling and screening for sexually transmitted infections. Because older women often have fewer contraceptive and lifestyle reasons to see their doctor, they often do not get tested. Meanwhile, many low-risk younger women were being screened more often than necessary.
- The level of quality assurance measures for each of the screening programs varied considerably. CCO had developed a comprehensive quality assurance program to assess and monitor the breast cancer screening program, but 20% of screenings took place outside CCO's program and therefore were not subject to the requirements. CCO had set up some quality assurance processes for the colorectal cancer screening program, but none for the cervical cancer screening program.
- CCO did not analyze and monitor whether individual endoscopists (specialists who look inside a body cavity or organ using an endoscope) met performance requirements. For instance, endoscopists are required to perform at least 200 colonoscopies annually to achieve or maintain competency. From data for the years 2008/09 to 2010/11, we found that more than 20% of endoscopists had not met this competency requirement.
- There was a significant backlog for follow-up reviews of mammography images in cases in which a woman was diagnosed with cancer after having had a breast cancer screening test

that reported normal results. These follow-up reviews are done to see if the cancer was missed at the previous screening or whether the cancer actually developed after the previous screening (this is referred to as an interval cancer). In 2009, 225 reviews were completed, of which 81 warranted further investigation. Of these 81 cases, about half were subsequently classified as missed-at-screening. No interval cancer reviews were done from the end of 2009 to July 2011, because CCO's Ontario Breast Screening Program radiologist-in-chief had retired and a new radiologist-in-chief was not hired until July 2011. At the time of our audit, a backlog of almost 900 interval cancer cases needed to be reviewed. CCO informed us that it expected to complete its follow-up review of these cases by December 2012.

- CCO measured and reported on its achievement of cancer-screening-program objectives, including annually publishing its program indicators for its three screening programs through the Cancer Quality Council of Ontario's Cancer System Quality Index and periodically issuing performance evaluations of its three cancer screening programs.

## OVERALL CCO RESPONSE

Cancer Care Ontario (CCO) welcomes the recommendations in this audit. The audit acknowledges the sound processes CCO has in place to assess whether a cancer screening program is needed and recognizes the Ontario-wide commitment to establish high-quality, evidence-based screening programs for breast, cervical and colorectal cancer.

Screening is most effective when offered through a high-quality organized program that promotes participation; identifies and follows the target population through the screening journey; sends eligible people invitations, results letters and recalls to screening;

incorporates follow-up processes for those with abnormal test results; ensures access to high-quality diagnostic services; and includes program evaluation and reporting.

The audit identifies areas that CCO is already working to address, reinforcing the value of its current work and its future directions. CCO will continue to work closely with the Ontario Ministry of Health and Long-Term Care to ensure that Ontarians have access to high-quality cancer screening services.

## OVERALL MINISTRY RESPONSE

The Ministry acknowledges the recommendations contained in the Auditor General of Ontario's cancer screening report and thanks him for conducting this timely audit. The Ministry is committed to the development and implementation of innovative initiatives and solutions that address the impact of cancer and other chronic diseases on Ontarians. We welcome any insights and recommendations from the Auditor General that may help to further inform our ongoing planning and implementation of cancer screening programs and services.

Breast, cervical and colorectal cancer screening saves lives when these cancers are detected in early stages. The Integrated Cancer Screening (ICS) program, delivered by the Ministry in partnership with CCO, is integrating existing breast, cervical and colorectal cancer screening programs and services into one co-ordinated provincial program to support the public, providers and health-system planners in improving the quality and uptake of screening.

CCO reports that between 1990 and 2007, breast cancer mortality rates declined by 35% for women aged 50–69 and by 29% for all ages. Since the program was launched in 1990, the Ontario Breast Screening Program (OBSP) has provided more than 4.1 million screens to more than 1.2 million women aged 50 and older

across Ontario and detected more than 22,000 cancers, the majority in the early stages. In March 2011, the OBSP was expanded to include women aged 30–69 years who are at high risk for breast cancer due to genetic factors, medical or family history.

As for colorectal cancer screening, the 2012 Cancer System Quality Index (CSQI) reported that in 2010, just over half of Ontarians aged 50–74 were up-to-date with Fecal Occult Blood Test, flexible sigmoidoscopy and/or colonoscopy. The Ministry and CCO are committed to further increasing participation in colorectal cancer screening, including evaluating new screening technology for use in Ontario.

## Detailed Audit Observations

### STRATEGIC INITIATIVES

Over the years, Cancer Care Ontario (CCO) has developed a number of strategic initiatives to reduce the incidence and mortality from cancers. In 2003, CCO in collaboration with the Canadian Cancer Society issued *Cancer 2020, Targeting Cancer: An Action Plan for Cancer Prevention and Detection*, a report that provided a long-term provincial plan for reducing the number of people diagnosed with, and dying from, cancer by 2020. In addition to this long-term plan, CCO developed and released three separate three-year Ontario Cancer Plans to provide a more detailed road map for cancer care.

In 2010, the Ministry of Health and Long-Term Care (Ministry) initiated an Integrated Cancer Screening (ICS) strategy. The Ministry committed \$45 million to CCO from the 2010/11 through 2012/13 fiscal years to implement the strategy, which aims to, among other things, increase patient participation in screening, make primary-care providers aware of their role in the process, expand information systems to better identify eligible and

high-risk people, and better monitor and report on the screening process.

CCO has implemented three cancer screening programs—the Ontario Breast Screening Program, ColonCancerCheck and a cervical cancer screening program. Our review showed that CCO had sound processes in place to assess whether a cancer screening program should be established and that its decisions were based on clinical evidence that demonstrated that screening was effective in reducing mortality. According to a national body’s expert panel, Canadian Partnership Against Cancer (CPAC), a “reduction in cancer mortality is the definitive requirement to confirm that the screening test is effective.”

We noted that the criteria used to determine which types of cancer warranted screening programs were in accordance with principles established by the World Health Organization (WHO). These criteria included, for example, an assessment of whether the condition is an important health problem, whether a suitable screening test or examination exists, and whether the overall benefit of the screening program outweighs potential harm from its application. For instance, in the case of prostate cancer, the balance of evidence has suggested that the harm of implementing an organized prostate cancer screening program may outweigh the benefits. CCO has indicated that it is continuing to monitor the current research work in this and other types of cancer, such as lung cancers.

## CANCER SCREENING PROGRAMS

There is substantial evidence to demonstrate that early screening and detection is critical in helping to reduce deaths from cancer. Early detection of cancers can lead to less invasive treatments and improved health outcomes.

As agencies in other jurisdictions such as Australia, New Zealand, the United Kingdom and other Canadian provinces have done, CCO has implemented cancer screening programs for breast, colorectal and cervical cancers.

A review of the mortality rates from 1992 to 2012 showed a decrease in the rates for each of the three types of cancers over the period. However, the rates of decline have slowed in recent years, as shown in Figure 1. According to Canadian Cancer Society data, Ontario’s mortality rates for these three cancer types are comparable to those of most Canadian provinces, with British Columbia, Alberta and New Brunswick having slightly lower rates.

CCO told us that its efforts under the Integrated Cancer Screening strategy to improve screening participation rates and the quality of screening services would help accelerate the reduction of cancer mortality rates.

## Participation in and Access to Cancer Screening Programs

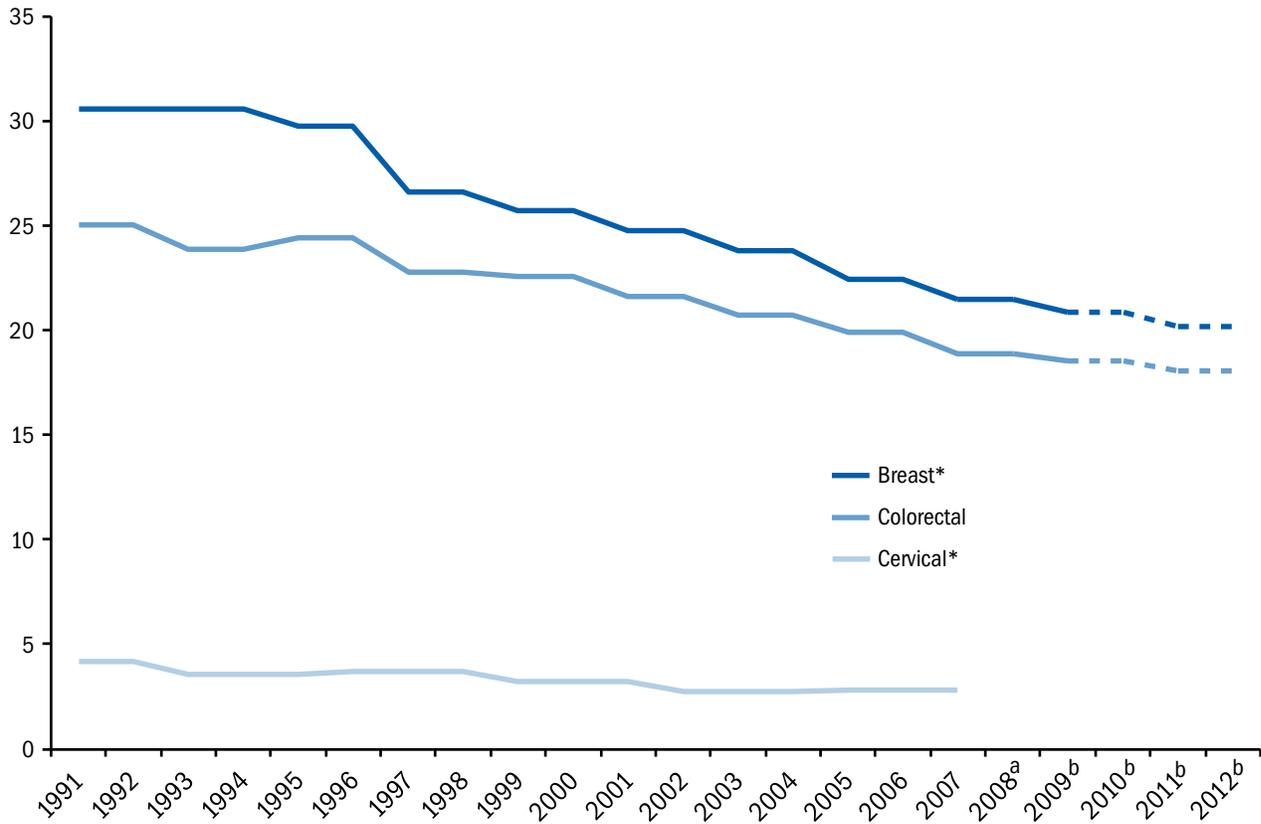
Screening programs are effective if they reach a sizeable percentage of the target population. Over the years, many different target participation rates have been established to guide cancer screening.

The *Cancer 2020* report in 2003 set participation rate targets of 90% to 95%, but CCO subsequently established what it deemed were more realistic target rates in its three-year Ontario Cancer Plans. Then, the Ministry, seeing that participation rates for all three programs had been levelling off, worked with CCO to develop an Integrated Cancer Screening (ICS) strategy to improve participation in screening for breast, cervical and colorectal cancers. The strategy included targets for gradually increasing participation rates from 2009/10 to 2013/14. For example, the breast cancer screening target increases from 66% in 2009/10 to 73% in 2013/14.

Participation target rates apply only to people deemed to be eligible for the screening. Eligibility criteria are based on such things as an age range or a person’s other risk factors in developing a particular cancer, such as family history. At the time of our audit, the most recent CCO participation rate data available was for 2009/10, as shown in Figure 2.

**Figure 1: Mortality Rates for Breast, Colorectal and Cervical Cancer in Ontario (per 100,000 Ontarians)**

Source of data: Cancer Care Ontario



\* Breast and cervical cancer mortality rates are per 100,000 women in Ontario.  
 a. Cervical cancer mortality rates for 2008 to 2012 are not available.  
 b. Breast and colorectal cancer mortality rates for 2009 to 2012 are estimated.

To promote public awareness of the cancer screening programs, the Ministry spent a total of \$13 million from 2007/08 to 2011/12 for communication and promotion; CCO spent \$5.9 million over the same period to promote the screening programs to various health-care providers and stakeholders.

The Ministry and CCO were jointly responsible for the promotion of the cancer screening programs. An overall framework was developed to ensure a consistent and focused message, with the Ministry leading public communications and CCO leading provider education. The Ministry and CCO worked together on certain specific initiatives.

Our specific observations with respect to participation in and access to each of the cancer screening programs are as follows.

**Figure 2: Target and Actual Participation Rates in Cancer Screening Programs (%)**

Source of data: Cancer Care Ontario

Cancer Screening Program	CCO Plan Target Participation Rates	ICS Target Participation Rate for 2009/10	Actual Participation Rate for 2009/10
Breast	70	66	66.8
Colorectal	40	32	27.4
Cervical	85	72	72.0

### Breast Cancer Screening

The Ontario Breast Screening Program (OBSP) was implemented in 1990, and the eligible population was women aged 50 to 69 years (changed to 50 to 74 years in November 2011) with average risk of developing breast cancer. Average risk means there is no risk factor other than being a woman and being older.

In July 2011, Ontario became the only jurisdiction in Canada to integrate screening for women at high risk for breast cancer into an organized breast cancer screening program. The eligible population is women aged 30 to 69 who are at high risk of developing breast cancer. High-risk factors include having 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.

The average-risk program has tended to meet its participation targets, while the high-risk program was well below its target, although it should be acknowledged that the program is relatively new.

Breast cancer screenings and assessments are provided by more than 150 OBSP affiliate sites in hospitals and independent health facilities. About 523,000 women were screened through the OBSP in 2011/12. (Women can be screened outside of this program. In the 2010/11 fiscal year, the most recent year for which figures are available, about 112,800 women received mammogram services outside of the OBSP in independent health facilities.) About \$78 million was allocated to OBSP for breast cancer screenings.

For women with average risk of breast cancer, guidelines recommend cancer screening with mammography every two years. For women at high risk, the guidelines recommend annual screening with magnetic resonance imaging (MRI) or ultrasound, as well as mammogram.

In 2009/10, the most recent year for which statistics are provided, the participation rate for the eligible population at average risk of breast cancer was 66.8%, which meets the Integrated Cancer Screening strategy target, but is short of the CCO's target of 70% in its Ontario Cancer Plans.

In 2011/12, the Ministry allocated about \$11.6 million for screening of high-risk women. Of this, approximately \$6.5 million was provided to CCO, including \$4.7 million for an expected 20,000 screening exams and associated costs, and \$1.8 million for genetic assessments.

To access genetic assessment services, a woman must be referred to the OBSP by her doctor. Women confirmed as being at high risk for breast cancer will be booked for both a breast MRI and mammography. A May 2011 announcement indicated that screening these women with annual breast MRI and mammography will detect approximately 17 cancers per year in every 1,000 women screened.

Program data for the first nine months of the program, from July 1, 2011, to March 31, 2012, showed that about 5,000 women aged 29 to 69 were referred to the OBSP high-risk program. Of this total, about 600 women were screened. This number is well below the 20,000 that the Ministry expected for the program. CCO stated that the low number could be because the program started in the summer, or because women first had to get a referral from their family doctor to the program and many of them then had to have a genetic assessment. Of the \$4.7 million allocated for high-risk screenings and related services, CCO identified \$3.3 million that needed to be returned to the Ministry after the end of the fiscal year. CCO told us it has lowered its projection for 2012/13 to 5,000 screens.

### Wait Times for Breast Cancer Screening Services

Each OBSP affiliate site or regional office manages its own mammography screening bookings. The OBSP does not have a standard wait time for such services. At the three regional offices we visited, we found variations in the wait times ranging from just over two weeks to 10½ months. One reason that women in the program wait could be due to the high number of screenings and assessments done at these sites for women who are not eligible for the breast screening program. One site we visited did 20,500 mammograms in the 2010/11 fiscal year, of which only 9,400 were for those women defined as being eligible under the OBSP criteria. CCO has data on the provincial totals of non-OBSP screens conducted, but it did not collect such data on a site-by-site basis to help it assess the capacity of its more-than-150 breast cancer screening facilities.

In addition, data from 2008 (the most recent year for which data is available) shows that 56% of abnormalities identified in mammograms as requiring biopsy were followed up within seven weeks. This is below the national target established by the Public Health Agency of Canada of 90% within that time frame. CCO's comparison with other jurisdictions found that no other province had achieved this national target. Public Health Agency of Canada data from 2005/06 shows that only Nova Scotia did better than Ontario on this measure, with 58% of instances followed up on time, as compared to 57% in Ontario.

On our regional visits, we found there were wait times associated with various stages of the screening for those considered at high risk for breast cancer—up to six months at some sites. CCO conducted a survey at the end of 2011 of all genetic assessment clinics that determined eligibility for high-risk breast cancer screening. The survey found that wait times from when a woman received her referral to her first appointment averaged 84 days. Most clinics in the survey indicated that the waits were primarily a result of their not having enough staff to do the genetic assessments more quickly.

### 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 (CCO) should periodically evaluate the wait times at each of its screening facilities. As well, CCO 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.

### CCO RESPONSE

CCO agrees that a reduction in wait times at all screening sites is important in order to improve breast cancer screening and assessment services. CCO will work with the regions to evaluate and improve wait times for screening and follow-up of abnormal screens.

CCO is conducting a one-year evaluation to identify areas where improvements can be made to the Ontario Breast Screening Program's new high-risk program. This is to be completed by March 2013. This evaluation will include wait times for MRIs and genetic assessments (i.e., counselling and testing) for women in the high-risk screening program. Based on the outcomes of the one-year evaluation, CCO will implement improvements to the program, with a special focus on reducing wait times for MRIs and breast assessments, where needed, beginning in 2013/14.

### MINISTRY RESPONSE

The Ministry supports the evaluation of wait times for breast screening at each of its screening sites. The Ministry will work with CCO to evaluate and improve wait times for screening and follow-up of abnormal screens at all screening sites.

The Ministry has provided CCO with resources to conduct an evaluation of the Ontario Breast Screening Program to identify improvements, with a special focus on reducing wait times for MRIs and assessments as appropriate.

## Colorectal Cancer Screening

In 2007, the Ministry committed \$195 million for colorectal cancer screening over the five-year period from April 1, 2007, to March 31, 2012. CCO then launched the ColonCancerCheck program with total committed funding of \$72 million for the same five-year period. The eligible population of the program was men and women aged 50 to 74.

The program chose the guaiac Fecal Occult Blood Test (FOBT) kit as the primary colorectal cancer screening tool for Ontarians considered to be at average risk. This would include those with no family history of colorectal cancer or symptoms. FOBT testing is recommended every two years.

When an FOBT is positive, the primary-care provider should refer the patient for a colonoscopy follow-up.

The program also includes people considered to be at increased risk—these are people with one or more immediate relatives who have, or have had, colorectal cancer—but the protocol is different. People at increased risk can bypass the FOBT and are fast-tracked to have a colonoscopy. If no cancer is detected during the colonoscopy, a person is encouraged to be tested again every five to 10 years.

In 2011/12, 63 hospitals signed agreements with CCO and received incentive funding of \$4.6 million to participate in the ColonCancer-Check program. The hospitals performed a total of 14,300 colonoscopies in that year.

### Participation in Colorectal Cancer Screening

ColonCancerCheck reports that the participation rate among the eligible population (men and women aged 50 to 74) in 2009/10 was 27.4%, short of the ICS target of 32% and CCO's Ontario Cancer Plan target of 40%. However, the program measured only the rate of participation in the FOBT. In our visits to regional offices, and to some hospitals in these regions, we were told that the low rates might be partly due to the fact that many doctors think the FOBT is not reliable enough as a screening tool, and they were instead referring many average-risk people directly for colonoscopy screening. Indeed, a Ministry-commissioned survey in 2010 found that 37% of physicians believed the FOBT was not reliable enough to be used as a population-based screening tool. Accordingly, there were likely many more average-risk people being screened than were participating in the FOBT. (CCO told us at the time of our audit that it was conducting a pilot project using another stool-based test kit, the Fecal Immunochemical Test, or FIT, which has a higher sensitivity than the approved FOBT kit being used to that point; the different kit may address physicians' concerns about using the FOBT to screen for colorectal cancer.)

As well, because the participation rate figure did not include the direct colonoscopy screening of people considered at increased risk for colorectal cancer, the overall participation in colorectal cancer screening in Ontario was understated.

In December 2011, a Joint Steering Committee of the Ministry and CCO approved a method of calculating the colorectal cancer screening rate that includes people screened with FOBT, flexible sigmoidoscopy or colonoscopy, and decided that this calculation would be reported in addition to the FOBT participation rate. However, this method of calculation will result in overstating the screening participation rate because it also includes all individuals receiving treatment for colorectal cancer or precancerous lesions, and such treatment is not considered to be screening.

Under this new calculation method, the colorectal testing rate was reported in 2012 as 53% for 2010. It included everyone who had completed an FOBT in the previous two years, or who had had a flexible sigmoidoscopy in the previous five years, or colonoscopy in the previous 10 years, from all sources, including private colonoscopy clinics. Thus, about half of the eligible population remained unscreened.

### Colonoscopy Wait Times at Hospitals

When the colorectal cancer screening program commenced in 2007/08, 57 hospitals participated in the program. This increased to 74 in the 2008/09 fiscal year and then dropped to 64 in 2010/11 and 62 in 2011/12.

The Canadian Association of Gastroenterology set a goal of two months to complete a follow-up procedure for a positive FOBT, a benchmark adapted by CCO as eight weeks. For people with a family history of colorectal cancer, the benchmark for the time from referral to colonoscopy was set by the Association as six months, adapted by CCO as 26 weeks. The ColonCancerCheck program set a provincial target of 75% for the eight-week benchmark and a provincial target of 80% for the

26-week benchmark for those with a family history of colorectal cancer.

The Cancer System Quality Index (CSQI), recently published by the advisory group Cancer Quality Council of Ontario, reported that in 2011 73% of positive FOBT cases met the eight-week wait-time benchmark, an improvement over 60% in 2009. As stated in CCO reports, 80% of family history cases met the 26-week benchmark in 2010/11, an improvement over 71% in 2008/09. Our review of records at hospitals found that wait times exceeded the benchmarks of eight weeks for positive FOBT follow-up and 26 weeks for family history cases. Our review identified instances where individuals with positive FOBTs waited as long as 17 weeks for a follow-up colonoscopy and those with family history of colon cancer waited as long as 72 weeks for a colonoscopy.

While there was improvement in the two wait-time rates, almost 30% of participants did not receive a follow-up colonoscopy within eight weeks of a positive FOBT result and within 26 weeks of a referral for increased risk. Some people were screened at private clinics, but CCO did not have access to the referral dates to private clinics to assess the wait times of participants.

CCO attributed the shortfall in meeting its targets to a number of things, including physicians who did not follow up with participants, reluctance of some people to have a colonoscopy, and physicians who told patients with positive FOBT results to repeat the test when they should have been referred at that point for a colonoscopy.

## 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

- explore approaches for reducing the wait times for colonoscopy procedures, especially those for increased-risk patients.

## CCO RESPONSE

CCO agrees with this recommendation and is working to increase participation and improve the colorectal cancer screening program. It will continue to educate primary-care providers about the highest-quality evidence supporting FOBT screening. In addition, it will continue to evaluate the feasibility of introducing other screening tests that have recently been shown by highest-quality evidence to reduce colorectal cancer mortality—namely, a more sensitive stool-based test (the Fecal Immunochemical Test, or FIT) and flexible sigmoidoscopy. Both methods are appropriate for average-risk screening and may be more acceptable to primary-care providers, including doctors.

CCO will continue to work with the regions to improve wait times for colonoscopy at sites that are not meeting wait-time targets, especially for increased-risk patients (those with a first-degree family history of colorectal cancer), through regular quarterly performance reviews and contract management.

## MINISTRY RESPONSE

The Ministry has provided CCO with funding to conduct provider education and a pilot evaluation of newer Fecal Immunochemical Test technology for use in Ontario.

The Ministry has also provided CCO with funding to:

- expand colonoscopy capacity to reduce wait times for individuals who are at increased risk of colorectal cancer; and
- conduct a pilot to leverage non-hospital colonoscopy clinics to improve capacity for colonoscopy services, as part of the Colon-CancerCheck program.

## Cervical Cancer Screening

The cervical cancer screening program was launched on June 15, 2000. In 2010/11, the Ministry paid \$54.8 million to doctors and labs for Pap tests. Screening is primarily performed with Pap tests done by physicians in their offices as part of routine checkups. When a low-grade abnormality shows up on a Pap test, the woman usually receives a repeat Pap test in six months. When a high-grade abnormality shows up on a Pap test, the woman is usually referred for a colposcopy—a visual examination of the cervix using an instrument called a colposcope. In some cases, tissue is removed in a biopsy, and a pathologist makes a diagnosis. Colposcopies are performed in hospital-based clinics or in private clinics.

CCO has recently issued updated guidelines that recommend the use of the Human Papillomavirus (HPV)-DNA test as a cervical cancer screening tool for women aged 30 years and older. The agency is working with the Ministry to explore how the test can be incorporated into the screening program.

### Participation Rates of Women with Invasive Cervical Cancer

Cervical cancer is largely preventable with HPV immunization, regular screening and appropriate, timely follow-up of abnormal results. Cervical cancer mortality increases steeply from age 45. The most recent Ontario Cancer Registry data, from 2009 to 2011, shows that 83% of deaths from cervical cancer occurred in women over 45.

Our review showed that in spite of the fact that older women were at increased risk of dying from cervical cancer, they were not appropriately targeted for screening and were inadequately screened. For instance, between 2009 and 2011, older women were twice as likely not to have cervical cancer screening in the three years prior to being diagnosed with invasive cervical cancer than younger women. Specifically, two-thirds of women aged 45 to 74 years diagnosed with invasive

cervical cancer did not have cervical cancer screening in the three years prior to being diagnosed, compared to only one-third of women aged 21 to 34 years that were not screened. In fact, half of women aged 55 to 74 years were not screened in the 10 years prior to being diagnosed with invasive cervical cancer.

### Frequency of Cervical Cancer Screening

In general, CCO recommends cervical cancer screening every three years for all women aged 21 to 69 who are or have ever been sexually active. However, if a woman receives an abnormal test result, CCO recommends that she be tested annually until she has three successive normal results.

The overall provincial participation rate for cervical cancer screening in 2009/10 was 72%, which fell short of the Ontario Cancer Plan target of 85%, but met the Integrated Cancer Screening target. There was a significant difference in participation rates among age groups. CCO's program evaluation reported that the highest rates of screening participation were among women aged 20 to 29 years (74%), and the lowest rates were among women aged 60 to 69 years (66%.) Accordingly, younger women, who have a lower risk of cervical cancer, have the highest rates of annual Pap test screening. Our review showed that 16% of women aged 20 to 29 who had normal Pap test results in 2009 were screened again within 12 months. This only occurred in 7% of women aged 70 and older.

Discussions with CCO management indicated that younger women (20 to 34 years) are more frequently screened and rescreened because physicians often link Pap testing to annual health exams, contraception counselling and screening for sexually transmitted infections. The Ministry had identified this as an issue in 1996. Because older women often have fewer contraceptive and lifestyle reasons to see their doctor, they do not get tested often enough, if at all, even though they are at a greater risk of developing and dying from cervical cancer.

CCO officials said the issue of too much or too little screening can also be attributed to lack of an organized system for telling people when they are due to have the test. For the cervical cancer screening program to have an organized call and recall system, it must be allowed to collect health information about individuals without their consent. This requires being approved for Prescribed Registry status by the Ministry and the Information and Privacy Commissioner. CCO obtained Prescribed Registry status for the Ontario Cancer Screening Registry in May 2011. The Information and Privacy Commissioner approved CCO's information practices and procedures in respect of the Registry in October 2011. As a result, the program can now collect data to identify eligible women and send them directly all appropriate correspondence about test results and to invite or recall them for screening.

According to CCO, it would be a better practice to encourage doctors to view the Pap test as a separate service, and not tie it to appointments for contraception counselling, annual health exams and testing for sexually transmitted infections. CCO recommended that the Ministry, through its negotiations with the Ontario Medical Association, align its incentive payments for physicians with its updated cervical cancer screening guidelines, which were released to the public and health-care providers in May 2012. The current physician incentive bonus has been based on the percentage of the target population who received a Pap test in the 30 months prior to March 31 of the fiscal year for which the bonus is being claimed. This is a six-month shorter interval than the 36 months that the CCO recommends between Pap tests, and may encourage over-screening. In addition, there were no financial disincentives to screening women more frequently than at the recommended intervals.

### Wait Times for Colposcopy Services

For screening to be effective, timely follow-up of abnormal Pap test results is critical. The 2012 Cancer System Quality Index noted that 17% of women

aged 20 to 69 did not have a follow-up colposcopy within six months of a high-grade abnormal Pap test. The 2008 colposcopy guidelines specify that less severe cytological findings should be followed up with colposcopy within eight to 12 weeks, while more severe findings should be followed up within a shorter time. As a minimum standard, time from referral to colposcopy should not exceed six months.

During our audit, we found that CCO had not sent out any correspondence to the affected individuals, but CCO informed us that now that it has Prescribed Registry status, it planned, as of fall 2012, to send result letters to all women aged 21 to 69 years with abnormal or unsatisfactory Pap test results.

In February 2012, CCO did a preliminary review of colposcopy data for the years 2008 to 2010 to determine the median time for receiving a colposcopy. This preliminary review showed that the median wait time for high-grade abnormalities was generally about three months.

## 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;
- educate the public and health-care providers on appropriate cervical cancer screening intervals; and
- monitor wait times for colposcopy procedures for timely follow-up of women with abnormal Pap test results.

## CCO RESPONSE

CCO agrees with this recommendation and is actively working to strengthen the cervical cancer screening program. Providers who perform cervical screening are key to ensuring that screening and follow-up are done according to guidelines. In May 2012, CCO disseminated its new cervical cancer screening guidelines to

providers across Ontario, along with information they can distribute to women.

In addition, efforts to increase awareness of cervical cancer screening guidelines among providers and women of all ages will continue through targeted media outreach and correspondence campaigns beginning in July 2012. This includes the development of awareness campaigns with regional partners to promote appropriate screening for under-/never-screened populations and older women.

CCO will work with hospitals and colposcopy clinics to monitor and improve colposcopy wait times, where needed, and will work with primary-care providers to improve follow-up rates for all women with abnormal Pap test results.

### MINISTRY RESPONSE

The Ministry will continue to work with and fund CCO to identify effective strategies for delivery of promotion and education aimed at increasing knowledge and awareness among the public and health-care providers on appropriate cervical cancer screening and clinically recommended guidelines.

### Cancer Screening for People with No Family Physicians

According to the Ministry, about 6% of the adult population does not have a family physician. Currently, when anyone without a primary-health-care provider participates in any of the three cancer screening programs, CCO is responsible for ensuring that abnormal test results are followed up. CCO then encourages these people to contact Health Care Connect to find a physician for ongoing primary care. However, this process does not actively seek out people who do not have family physicians and get them into screening programs.

CCO has recognized that people who never, or rarely, participate in screening programs often

face challenges relating to low incomes, immigrant backgrounds, functional difficulties or sexual orientation. CCO indicated that “current research suggests that local, customized interventions best address the specific barriers to screening experienced by this group.” As a result, CCO received a commitment from the Ministry of \$4.5 million for 2010/11 to 2012/13 to develop initiatives directed to the under- or never-screened population.

In 2010/11, CCO selected five of its 13 regions for projects for under- and never-screened people, and it is providing funding to these five regions for two years, after which time it will evaluate the initiatives to see if they should be expanded. CCO informed us that there are plans to perform more detailed analysis on a LHIN level to expand on the current regional projects in the 2013/14 fiscal year.

In addition, under the Integrated Cancer Screening strategy, CCO has various proposals or pilot projects to help improve participation in screening programs among people who do not have family physicians. Such initiatives include sending colorectal cancer screening kits directly to a sample of eligible people, providing screening invitations and reminders to eligible people, and developing community-based education/recruitment to engage under-screened populations.

### 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.

### MINISTRY RESPONSE

Improving participation in screening programs is a key objective of the Integrated Cancer Screening program. The Ministry provides CCO with the appropriate resources, mandate and public support to carry out its initiatives and activities.

The Ministry and CCO are finalizing the current Transfer Payment Accountability Agreement, which includes appropriate mechanisms for monitoring, oversight and reporting of CCO's activities against clearly defined objectives and targets.

In addition, the Ministry's Health Care Connect program continues to connect unattached people with primary-care providers. Since its inception, Health Care Connect has matched and referred more than 100,000 people.

## CCO RESPONSE

CCO agrees with this recommendation and will work with the Ministry to ensure appropriate monitoring of CCO's activities to improve participation among people who do not have primary-care providers. CCO and the Ministry are working to determine how to increase screening access for all eligible people, including those without providers, such as by allowing self-referral for screening, having other health-care professionals provide screening tests, mailing FOBT kits directly, and providing screening in mobile settings. CCO and the Ministry are collaborating to make necessary regulatory changes to expand access to screening through these channels, such as by permitting laboratories to process screening tests dispensed by non-physicians.

Increasing screening participation for people without primary-care providers must be coupled with ensuring timely follow-up for those who have abnormal test results. CCO is working with the Ministry to implement an organized follow-up model for all those who have been screened, particularly people without primary-care providers.

## MONITORING FOR QUALITY OF SERVICES

Monitoring the quality of cancer screening programs is important to help ensure that the pro-

grams live up to established minimum standards and that a process is in place to assess their reliability on an ongoing basis. Patients and their doctors need to be able to trust the results. Our review of the quality assurance programs in place for each of the screening programs found significant variations. CCO had developed a comprehensive quality assurance program for monitoring the breast cancer screening program, but it had established only limited monitoring for the colorectal cancer screening program, and none for the cervical cancer screening program. As well, our research indicated that other jurisdictions, such as the United Kingdom, have well-defined quality assurance processes that may warrant consideration here in Ontario.

### Breast Cancer Screening

CCO had developed a comprehensive quality assurance program for monitoring the Ontario Breast Screening Program (OBSP).

Sites must meet specific minimum requirements before they can participate in the OBSP. Among other things, they must receive and maintain accreditation from the Canadian Association of Radiologists Mammography Accreditation Program (CAR-MAP). The accreditation covers radiologist and medical radiation technologist qualifications, equipment, quality control, quality assurance, image quality and radiation dose.

However, in 2009/10, 20% of breast cancer screenings were done outside of the OBSP and were performed at non-OBSP sites that were not subject to the monitoring requirements. In discussions at regional offices we visited, we were told that the use of non-OBSP sites could be because doctors were referring women to sites that were close by or even in the same building as the doctor's office, or because doctors and patients are not necessarily aware that there is a difference between OBSP and non-OBSP services. As a consequence, these women did not have access to CCO's follow-up of abnormal test results, reminders or recalls for the next appointment, or to the CCO's quality assurance

processes as did women screened at OBSP sites, although their results were still read by a radiologist and sent to their doctor for follow-up.

We were informed by CCO during the audit that the College of Physicians and Surgeons of Ontario (College) would be requiring CAR-MAP accreditation for non-OBSP independent health facilities by early 2013. The College has since included a requirement for CAR-MAP accreditation by 2014 in the updated Clinical Practice Parameters and Facility Standards for all independent health facilities. Hospitals that provide mammography services are not required to have CAR-MAP accreditation, but CCO has recommended that the Ministry require it. The Ministry has agreed that CCO should strike an expert panel and work with CAR-MAP and the College to further develop this recommendation. Subsequent to our audit, we were informed that the Ministry was reviewing options to ensure that all sites providing mammography services are CAR-MAP-accredited by 2014.

In addition to requiring accreditation, the OBSP has established several quality assurance processes. These include regular reviews of the work of the radiologists who assess the screens, inspections of mammography machines every six months, reviews of the work of medical radiation technologists, and chart audits to ensure information on participants is complete and up to date.

For quality assurance purposes, the OBSP also conducts what are called “interval cancer reviews” of cases in which a woman has been diagnosed with cancer after having had a previous screening test that reported normal results. This is to determine if the cancer was missed at the previous screening or whether the cancer developed subsequent to the screening, which provides feedback to OBSP radiologists.

In 2009, 225 such cases had been reviewed and 81 were further investigated. Of these 81 cases, 42 were subsequently classified as missed-at-screening. No interval cancer reviews were done from the end of 2009 to July 2011, because CCO’s OBSP radiologist-in-chief had retired and a new

radiologist-in-chief was not hired until July 2011. At the time of our audit, a backlog of almost 900 interval cancer cases needed to be reviewed. CCO informed us that it expected to complete its follow-up review of these cases by December 2012.

CCO arranges for independent inspection of mammography machines every six months to make sure their radiation levels are within the acceptable range. We reviewed a sample of inspection reports at three regions we visited. One region had not received all the reports from its sites on how they followed up on any issues that arose in the inspections. Some of these reports were due in August, September or October of 2011. At another region, all issues that were reported had been addressed, and at the third, no significant issues were identified.

Regional offices are required to conduct audits of patient records (chart audits) to ensure that data entered in the screening system is accurate, in accordance with OBSP standards and policies, and consistent with data entered in the provincial information system. We found that the chart audit policy did not specify the sample sizes to be reviewed, the frequency of the reviews, and, when concerns are identified, what the subsequent review frequency must be. At the regions we visited, we found significant variations:

- Only three of the four regions we visited conducted chart audits. The region that did not perform chart audits chose to conduct sample reviews for only cases with abnormal screen results.
- For the three regions that conducted chart audits, the frequency and types of reviews varied. One region conducted chart audits every three years with less extensive chart reviews between the audit years. The other two regions conducted annual chart audits.
- The three regions each reviewed a sample of 20 files for each site they audited, regardless of the number of yearly screens performed at the site. Therefore, a site that performed 10,000 screens annually had the same sample size as a site that performed 500 screens annually.

## Colorectal Cancer Screening

CCO and the Ministry maintain some monitoring mechanisms for colon cancer screening. We noted the following observations.

### Quality of Laboratory Services

In the ColonCancerCheck program, the completed FOBT kits are analyzed at participating community laboratories for the presence of blood in the samples. Test results are then sent to the participant's physician as well as to CCO. The physician informs the participant of his or her screening result. CCO also notifies the participant of his or her result. If a test result is positive, a colonoscopy is usually recommended as a follow-up test.

Labs that want to participate in ColonCancerCheck must sign an agreement with the Ministry that outlines specific requirements, such as that the lab must be accredited by the Quality Management Program Laboratory Services of the Ontario Medical Association, and that it must conform to the Canadian External Quality Assurance Program established by the Ontario Association of Medical Laboratories (Association). Under an agreement between the Association and the Ministry, total Ministry-approved funding is up to \$45 million over five years. A committee of the Association, comprising members from all labs that are participating in ColonCancerCheck, monitors the quality of laboratory performance through monthly proficiency testing.

Not only are there no Ministry or CCO representatives on this quality committee, but neither the Ministry nor CCO received reports on the quality assurance process and related results. The agreement between the Ministry and the Association states that the Ministry will only be informed of concerns that are not satisfactorily resolved by the appropriate laboratory, and must then be referred to the Ministry for action. The Association told us that there have been no incidents that needed to be referred to the Ministry since the quality assurance program began in 2008.

### Quality of Hospital Services

CCO uses colonoscopy as a primary screening tool for people considered at increased risk of colon cancer, and as a follow-up test to positive FOBTs. Only colonoscopies performed at participating hospitals are eligible for incentive funding from the colorectal cancer screening program. In 2011/12, these hospitals performed about 14,300 colonoscopies and received incentive funding of \$4.6 million. Participating hospitals must meet specific quality standards outlined by CCO, including the following:

- endoscopists must perform at least 200 colonoscopies annually to achieve or maintain competency;
- the hospital's rate of bowel perforation must be no higher than one in 2,000 for screening procedures and one in 1,000 for all procedures; and
- the examination of the bowel must meet a particular standard so that the thoroughness of the procedure can be assessed.

We found that CCO collected the necessary data, but it did not analyze and monitor the data with respect to whether individual endoscopists complied with the requirements. Specifically, we found the following:

- From colonoscopy data from 2008/09 to 2010/11, we asked CCO to identify the percentage of endoscopists in the colorectal cancer screening program who did not do the minimum 200 colonoscopies annually. The review showed that more than 20% of endoscopists did not meet the requirement.
- Our review of perforation data from 2009/10 to the third quarter of 2011/12 for three regions we visited showed that the participating hospitals generally met the perforation rate standards. However, the rates were determined based only on perforations that occurred on the procedure date. Our discussion with an expert in the field, as well as a review of research articles, indicated that complications may arise up to 14 days after the procedure. CCO said it did not track

this information beyond the procedure date because it was very challenging to do so.

Other than the professional requirements of the specialists who conduct colonoscopy procedures, as well as the hospitals' requirements, there is no comprehensive quality assurance process. CCO told us that it is considering developing a quality assurance process that is similar to that of the breast cancer screening program.

### Quality of Services at Private Clinics

There are approximately 50 private clinics in Ontario that offer colonoscopy services but are not eligible to receive incentive funding for colonoscopies. Until 2010/11, these private clinics were not subject to any specific program quality standards and data collection requirements, as hospitals are under the colon cancer screening program. In 2010/11, however, the College of Physicians and Surgeons of Ontario began monitoring and inspecting these clinics. CCO is conducting a pilot project to explore how to incorporate these clinics into the screening program.

### Cervical Cancer Screening

As mentioned earlier, CCO received Prescribed Registry status for the Ontario Cancer Screening Registry in May 2011. The Information and Privacy Commissioner approved CCO's information practices and procedures in respect of the Registry in October 2011. Receipt of Prescribed Registry status enables the establishment of a comprehensive quality assurance program. Prior to receiving this Prescribed Registry status, CCO was not able to obtain enough data to establish such a program. We made the following observations.

### Quality of Laboratory Services

Cytology samples are generally obtained through Pap tests done in doctors' offices and are then analyzed by laboratories. CCO relies on the quality assurance processes that govern the accreditation

and proficiency testing of labs by the Quality Management Program—Laboratory Services (QMP-LS), operated by the Ontario Medical Association. In addition, the Ministry licenses laboratories to perform a defined set of tests.

CCO is responsible for quality assurance for the cervical cancer screening program. A quality assurance program would include test quality standards; the collection of data and monitoring of compliance to those standards; performance indicators; and the development of laboratory-related targets. However, CCO had not yet developed a quality assurance program for cervical cancer screening. CCO indicated that it did not have the authority to collect all of the data required for performance management and reporting by providers until it received Prescribed Registry status in October 2011.

We also reviewed how quickly cytology testing should be completed. From 2007 to 2010, the provincial median turn-around time decreased to 15 days from 21. However, turn-around time varied widely among laboratories. For instance, in the 2010 fiscal year, the median turn-around time at individual labs ranged from seven to 33 days.

### Quality of Colposcopy Services

Colposcopy is performed to investigate cervical abnormalities, such as pre-cancerous lesions. In 2010/11, the Ministry reported that 125,400 colposcopy procedures were performed, a 28% increase from the 98,000 completed in 2004/05. Colposcopies are done in hospital-based clinics or in physicians' offices.

In 2008, CCO established colposcopy guidelines, including guidelines on qualifications and training for those who perform the procedure, and on quality assurance measures. However, CCO has not assessed and monitored the quality of colposcopy services to make sure they are provided in accordance with these guidelines. For instance, we found the following:

- According to the guidelines, those performing colposcopy should complete approximately

100 colonoscopies per year to maintain their competency level, with at least 25% of cases being new patients. As discussed earlier, CCO did not have the authority to collect all of the data required for performance management and reporting by providers until it received Prescribed Registry status in October 2011.

- The guidelines call for colonoscopy clinics to undergo annual reviews for quality assurance, and for clinical audits to be done at regional and provincial levels to ensure consistent results and provide appropriate feedback to clinicians. CCO has not implemented a quality assurance program or conducted clinical audits since the program began in 2000.

After CCO was granted authority to collect and review the data to assess quality of services in October 2011, it also signed a data-sharing agreement with the Ministry in January 2012 to access the necessary health information. With access to the Ministry's claims payment data, CCO will now be able to gather information on the number of colonoscopies performed, whether a biopsy was done, the number of physicians performing colonoscopies and the physicians' specialties. However, CCO still will not have data on the results of colonoscopies and biopsies from all sources, including hospitals, clinics and other facilities.

## 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
- 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.

## CCO RESPONSE

CCO strongly agrees that screening is most effective when offered through an organized program that incorporates all service providers and uses robust quality assurance mechanisms to maximize the benefits of screening and minimize the harms. CCO also agrees that other jurisdictions, particularly the United Kingdom, offer excellent models for quality assurance programs. Building on models such as these, CCO will establish regular monitoring procedures to assess performance against quality assurance requirements, such as by tracking screening frequency, cancer detection rates and competency of providers. CCO will work with the Ministry to obtain the data and the mandate required to ensure that quality assurance requirements for screening programs are met by all service providers, regardless of whether screening services are provided under programs established by CCO. This will include primary-care providers, radiologists, colonoscopists, colonoscopists, colonoscopy sites, mammography sites and laboratories.

## MINISTRY RESPONSE

The Ministry will continue to work with and provide CCO with the appropriate resources, mandate and support to carry out effective quality assurance and monitoring of service providers.

Under the *Laboratory and Specimen Collection Centre Licensing Act*, all medical laboratories must, as a condition of licensing, meet the requirements of the quality management program carried out by the Ontario Medical Association (Quality Management Program—Laboratory Services, or QMP-LS). The quality management program carried out by the QMP-LS is for all laboratory testing and includes colorectal and cervical cancer screening tests.

## PERFORMANCE MEASURES AND REPORTING

### Public Reporting of Performance Indicators

CCO publishes annually its program indicators for its three screening programs through the Cancer Quality Council of Ontario's Cancer System Quality Index, a web-based public reporting tool that tracks the quality and consistency of all key cancer services in the province, from prevention and screening through to end-of-life care. The Council makes recommendations for improvements to cancer services to the Ministry, via CCO's board of directors. In May 2012, the Council said CCO needed to continue its efforts to improve the participation in its screening programs. For instance, for 2008 to 2010, only 27% of eligible women completed all the cancer screening tests recommended for their age.

CCO has also conducted formal evaluations of the three cancer screening programs and issued

public reports on its assessments. The *Ontario Cervical Screening Program Report*, issued in 2011, covered 2003 to 2008; *Ontario Breast Screening Program, 20th Anniversary Report*, issued in 2010, covered 1990 to 2010; and *ColonCancerCheck 2008 Program Report* was issued in 2010.

The three cancer screening programs adopted some of the performance indicators that were developed by a national body, either the Public Health Agency of Canada or Canadian Partnership Against Cancer. The indicators used for the breast cancer screening program were in line with these key national indicators. However, both the colorectal and cervical cancer screening programs lacked indicators to assess the programs' follow-up and detection activities and outcomes. Under the Integrated Cancer Screening strategy, CCO is working with the Ministry to set up and report on 13 key performance measures for all three cancer screening programs.