



Annual Report 2002-2003

A Focus on Quality



ontario breast
screening program
a cancer care ontario program

programme ontarien de dépistage
du cancer du sein
un programme de action cancer ontario

OBSP Mission

As part of the overall spectrum of women's health,
our Mission is to reduce mortality from breast cancer by:

Delivering high quality breast screening to Ontario women

**The Ontario Breast Screening Program is
operated by the Division of Preventive
Oncology of Cancer Care Ontario.**

The Division of Preventive Oncology Includes:

- Aboriginal Cancer Care Program Unit
- Cancer Surveillance, including the Ontario Cancer Registry
- Cancer Prevention with emphasis on reducing tobacco use and promoting healthy eating and active living
- Screening programs for breast, cervical and colorectal cancers
- Research into cancer prevention & screening

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A message from the Chief Executive Officer

Cancer Care Ontario (CCO) is evolving from a direct service provider to a leader in providing cancer information, setting and monitoring care practices, and ensuring the quality of cancer care in the province. Cancer prevention, screening and research are among the top priorities for CCO, and I am pleased to note that the Ontario Breast Screening Program reflects many aspects of the vision for CCO. With its emphasis on quality, the Program works closely with its breast screening partners to deliver an excellent service to Ontario women. The program is a model, with its contractual arrangements with existing care providers, consistent evidence-based standards and policies across all 94 sites, comprehensive computer information system, and extensive quality assurance and quality control systems to ensure the best outcomes possible. The success of screening

depends on quality screening and also timely, appropriate follow-up of screen-detected abnormalities. In working towards a seamless integration of screening, diagnostic follow-up and treatment, the OBSP has successfully evolved to promote standards and improvements in breast assessment. Leadership in developing quality indicators, engaging key stakeholders and formalizing breast assessment affiliations with the Program will improve the quality and timeliness of getting to a diagnosis.

Alan R. Hudson, OC

President and Chief Executive Officer, Cancer Care Ontario

A message from the Director

In this year's annual report a new look and logo are introduced for the Ontario Breast Screening Program. As one of Cancer Care Ontario's key provincial programs, the OBSP launched its new corporate visual identity across the province earlier this year. The new Cancer Care Ontario logo and look reflect the evolution of a new focus for the organization.

With the integration of cancer services, Cancer Care Ontario is transferring its direct responsibility for patient care within the regional cancer centers and 8 regional OBSP hub sites to the host hospitals according to specific terms and conditions. The hospital is adding in-patient services, and in some cases additional ambulatory and diagnostic services, to the newly created integrated cancer program, which will all come together under single leadership of a regional vice president (RVP) for cancer services. The RVP will be responsible for the management of the integrated cancer program at the hospital, as well as for providing provincial leadership through Cancer Care Ontario.

Planning for this change was a key activity for the OBSP this year, as we worked with the overall vision of integration while ensuring that the program maintains its provincial program status and all of the quality standards associated with an effective population-based screening program.

Reporting relationships will change for the regional hub sites after transfer of services to the host hospital; however the mandate and provincial nature of the Program will not change. For OBSP affiliates, aside from the new visual identity, the program will continue on with business as usual – provision of high quality breast screening services to Ontario women.

Quality doesn't just happen. It is a reflection of the routine monitoring and evaluation of our services together with performance feedback to sites and practitioners and the implementation of initiatives to improve outcomes. This year's report describes how the program is focused on quality. Our aim is to continue to expand the reach of the OBSP to more women in Ontario, and I am pleased with our progress in affiliating with 9 new screening sites and 5 new breast assessment sites over this past year. OBSP staff have consistently demonstrated a commitment to quality and I would like to thank them for their excellent work to get us to where we are today!

Verna Mai, MD, MHSc, FRCPC

Director, Preventive Oncology, Cancer Care Ontario

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Program Components

Comprehensiveness

OBSP screening is available to all women in the Province who are between the ages of 50 and 74. The OBSP will screen older women on request. Women are not eligible if they have had breast cancer or breast augmentation, or if they currently have symptoms of breast disease requiring diagnostic work-up.

Screening Modalities Include:

- 1 Two-view mammography with staff and equipment that meets the OBSP's standards, as well as those of the Canadian Association of Radiologists (CAR) Mammography Accreditation Program.
- 2 Clinical breast examination at most locations by a specially educated nurse examiner.
- 3 Information on breast self-examination.

Continuum of Service

It is important that screening be linked to a continuum of service that includes multi-disciplinary assessment. An OBSP assessment centre functions on site in Hamilton and other OBSP sites have formed linkages with assessment centres.

Flexibility

The OBSP is flexible in its program components. For example, clinical breast examination is encouraged as a program component, but is not mandatory. A site that cannot provide this service is still welcome to affiliate provided it can meet the Program's mammography standards.

Organized delivery

Recruitment, recall and follow-up.

The OBSP reaches out to all women in its target group. In order to do so, different models are used to address barriers of distance, language and other problems. For example, key materials are translated, special outreach programs promote the OBSP, shuttle buses and a mobile coach serve outlying areas and OBSP staff work with family physicians to encourage them to refer directly, or assist in generating letters of invitation.

A computer system facilitates the recall of eligible clients on an annual or biennial basis.

Quality assurance and quality control.

Quality standards for program delivery are carefully monitored by the OBSP. The nurse examiners performing clinical breast examination are initially trained and then undergo an annual practice review. The OBSP strives to achieve the best quality mammograms possible. The radiologists undergo an annual outcome review and the mammography technologists have an annual film review. The OBSP physics consultants monitor the mammography and film processing equipment.

Evaluation

Screening is closely linked to assessment so that the outcomes of screening can be readily monitored. Data is collected and evaluated related to demographics, health practices, risk factors, referral rates, cancer detection rates, assessment procedures, interval cancers and retention of clients in the Program.

Provincial Overview

The Ontario Breast Screening Program (OBSP) has been in operation since 1990. It meets Canadian and International standards for the early detection of small invasive cancers. The Program has achieved high levels of patient satisfaction and is strongly supported by many family doctors. It has established screening sites that are accessible to almost all women in Ontario.

The OBSP offers eligible women two-view mammography, clinical breast examination at most locations by a specially educated nurse examiner, information on breast self-examination and automatic client recall. Both the woman and her physician are informed of screening results and when screening abnormalities are detected, suggestions for further assessment are provided to the primary care or referring physician.

Screening centres also facilitate appointments for diagnostic imaging upon physician request and obtain follow-up information on reported abnormalities. Most women are re-invited every two years; however, some women are asked to return in one year.

As of the end of March 2003, there were 94 sites across the Province. This includes 85 affiliate sites and 9 regional hubs to ensure women have access to this service Province wide. (See list of regional hubs and affiliated sites, pages 5 - 9.)

The mobile coach in Northwestern Ontario provides screening as well as diagnostic mammography and clinical breast examination to women who live in communities without mammography facilities and who would not normally be eligible for OBSP.

A well run screening program must be able to ensure that patients have access to timely and accurate diagnostic assessment when they are screen-positive. Since 1991, the OBSP has operated an integrated comprehensive assessment program at its Hamilton Centre. Evaluation shows that this clinic can deliver assessment faster than the “usual care” approach at other centres, with substantially fewer surgical biopsies in women with benign lesions. This supports the development of linkages between the OBSP and assessment facilities to serve the needs of all women with suspected breast abnormalities. In addition to the site in Hamilton, 13 assessment affiliates have been established. (See list of assessment affiliates, pages 5 - 9.)

Congratulations to the new screening and assessment sites that joined during the 2002/2003 fiscal year. They are listed below in order of affiliation:

New Screening Affiliates

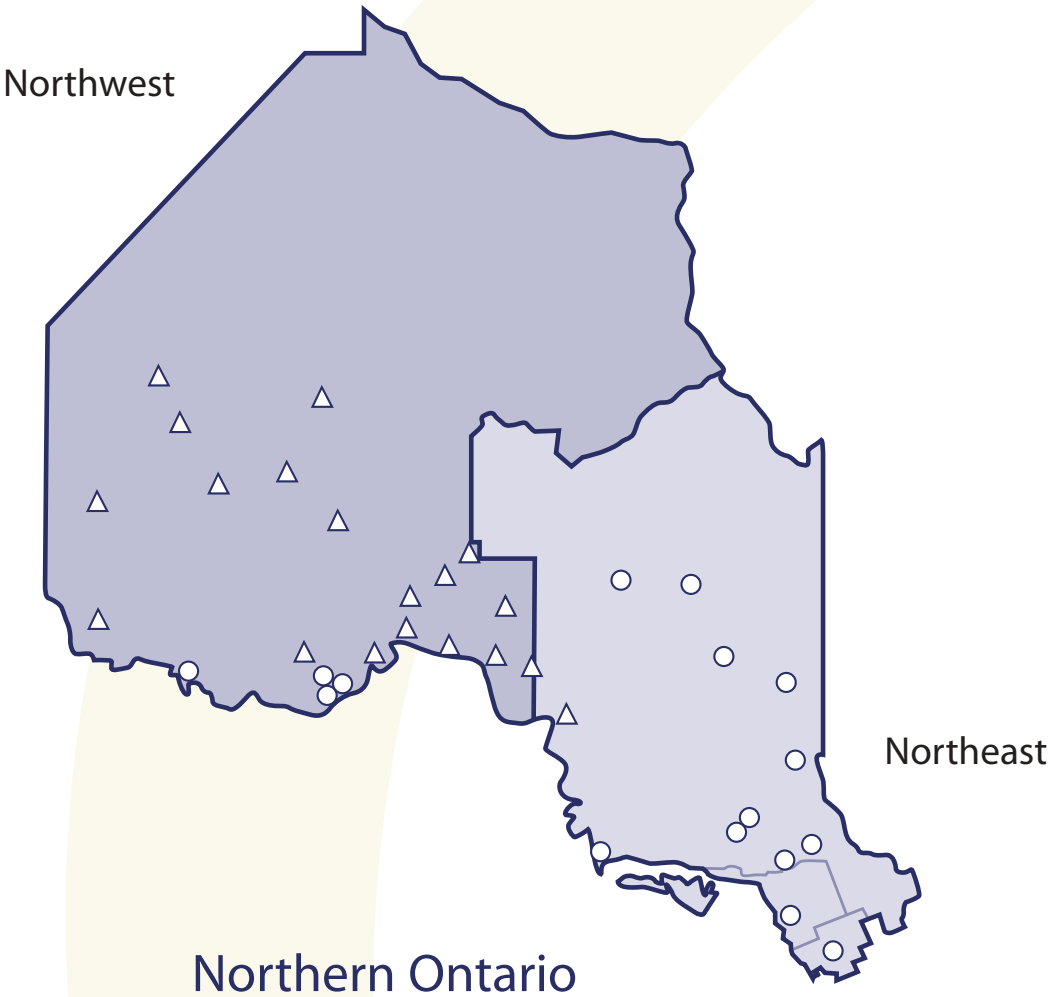
- Quality Medical Imaging – Spadina, Toronto
- Quality Medical Imaging – Bloor, Toronto
- Grand River Hospital, Kitchener
- Alexandra Marine & General Hospital, Goderich
- Ontario Medical Imaging - Huronia, Midland
- William Osler Health Centre, Etobicoke Hospital Campus
- West Parry Sound Health Centre
- Edward Street Radiology Associates - Main, Toronto
- Edward Street Radiology Associates - Yonge, Toronto

New Assessment Affiliates

- Niagara Health System – Greater Niagara General Hospital
- Niagara Health System – St. Catharines General Hospital
- Niagara Health System – Welland County General Hospital
- St. Michael's Hospital Breast Health Centre
- Dixie X-Ray Associates

OBSP Screening Sites & Areas Served by the OBSP Mobile Coach

As of March 31, 2003



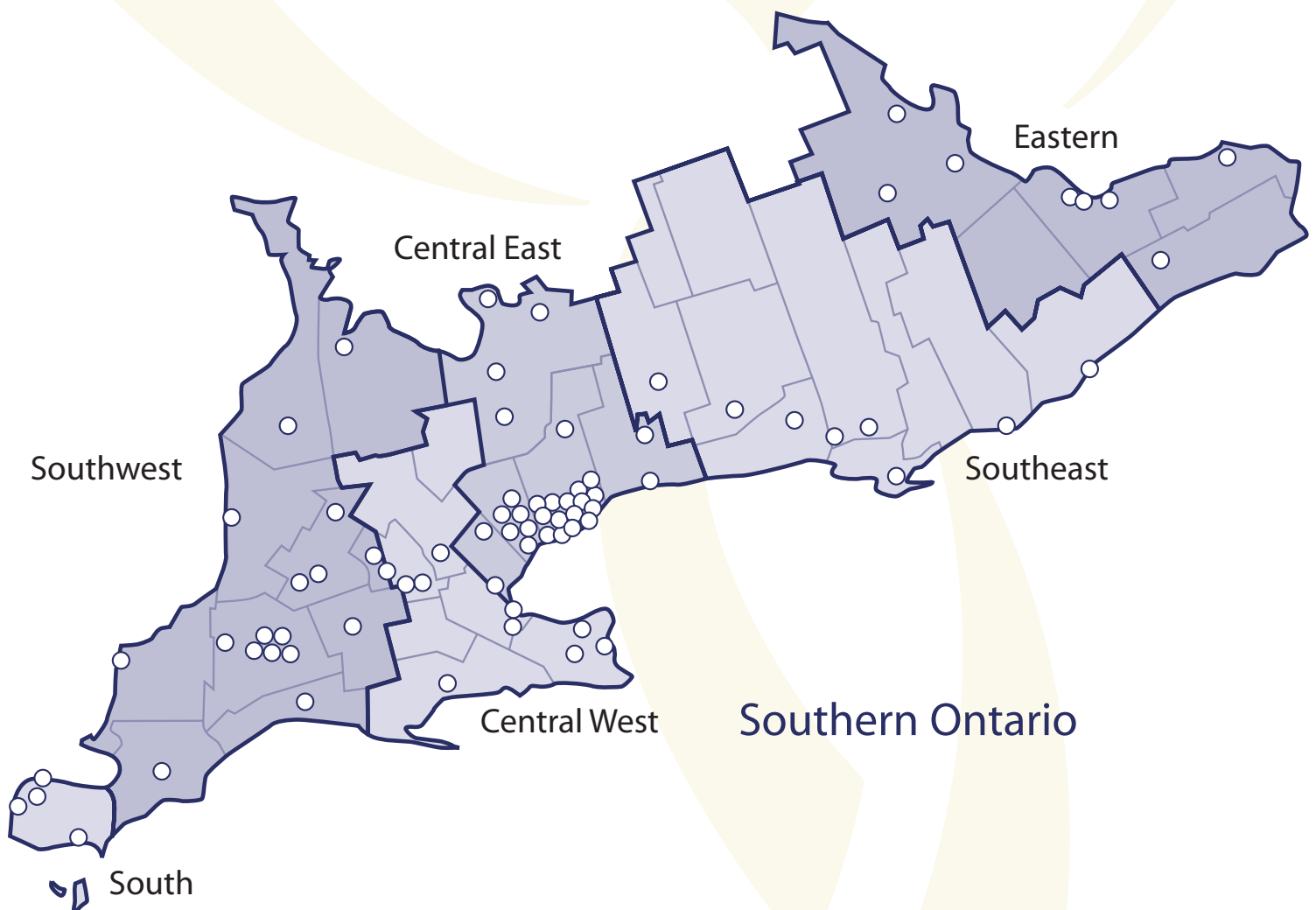
Legend

○ OBSP Screening Sites

△ Mobile Coach Service

Total Screens for the Province of Ontario
Other Procedures

198,613
2,458

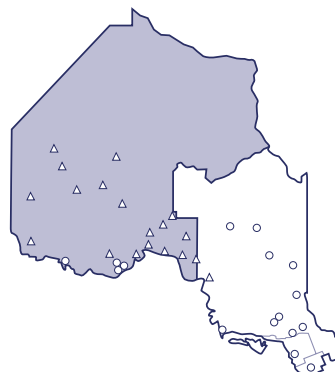


Regional Statistics – OBSP Hubs and Affiliates

April 1, 2002 to March 31, 2003

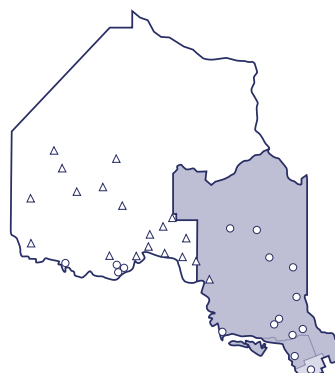
Northwest Region

Administrative Base		Number of Screens
Thunder Bay	➤ Mobile coach serves Northwest Region.	5946
Affiliates		
Fort Frances	➤ Riverside Breast Screening and Education Clinic	527
Thunder Bay	➤ Thunder Bay Medical Centre Diagnostics	513
	➤ DiagnostiCare – Port Arthur Clinic	608
Total		7594
➤ Mobile Coach Diagnostic Procedures		465



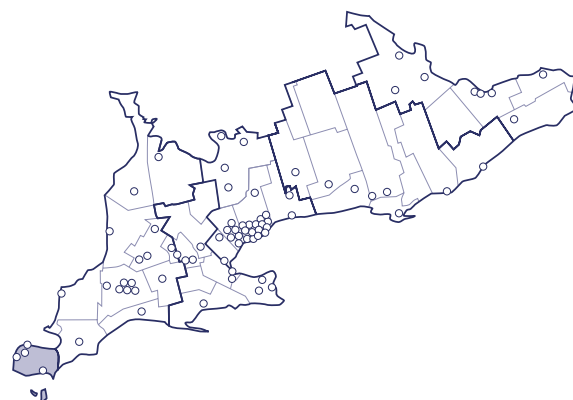
Northeast Region

Hub		Number of Screens
Sudbury	➤ Sudbury OBSP Centre	7644
Affiliates		
Bracebridge	➤ South Muskoka Memorial Hospital	958
Hearst	➤ Hôpital Notre Dame	329
Kapuskasing	➤ Sensenbrenner Hospital	460
Kirkland Lake	➤ Kirkland and District Hospital	507
New Liskeard	➤ Temiskaming Hospital	491
North Bay	➤ North Bay General Hospital	3131
Parry Sound	➤ West Parry Sound Health Centre	0
Sault Ste. Marie	➤ Group Health Centre	4936
Sturgeon Falls	➤ West Nipissing General Hospital	610
Sudbury	➤ DiagnostiCare – Sudbury	381
	➤ Sudbury Regional Breast Health Program*	
Timmins	➤ Timmins and District Hospital	1498
Total		20945



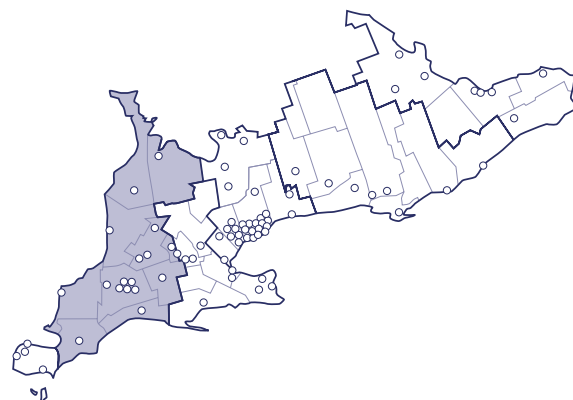
South Region

Hub		Number of Screens
Windsor	➤ Windsor OBSP Centre	5430
Affiliates		
Chatham	➤ The Chatham Kent Health Alliance	3007
Leamington	➤ Leamington District Memorial Hospital	506
Windsor	➤ DiagnostiCare – Windsor	278
	➤ Windsor Regional Hospital	893
Total		10114



Southwest Region

Hub		Number of Screens
London	➤ London OBSP Centre	7843
Affiliate		
Goderich	➤ Alexandra Marine and General Hospital	260
Kitchener	➤ Grand River Hospital	1136
	➤ RDS Victoria/Kitchener Ultrasound, Mammography & X-Ray	1196
Listowel	➤ Listowel Memorial Hospital**	1296
London	➤ DiagnostiCare Women's Imaging Centre	759
	➤ London Health Sciences Centre	565
	➤ London X-Ray Associates	1008
	➤ St. Joseph's Health Care**	823
Owen Sound	➤ Grey Bruce Health Services	4373
St. Thomas	➤ St. Thomas-Elgin General Hospital	1315
Sarnia	➤ Lambton Hospitals Group	2638
Stratford	➤ Jenny Trout Centre, Ultrasound and Mammography Associates of Stratford	948
	➤ Stratford General Hospital	638
Strathroy	➤ Strathroy Middlesex General Hospital	736
Walkerton	➤ South Bruce Grey Health Centre	697
Woodstock	➤ Woodstock General Hospital	1132
Total		27363



Note | * Provides breast assessment only | ** Provides both breast assessment and screening

Regional Statistics – OBSP Hubs and Affiliates

April 1, 2002 to March 31, 2003

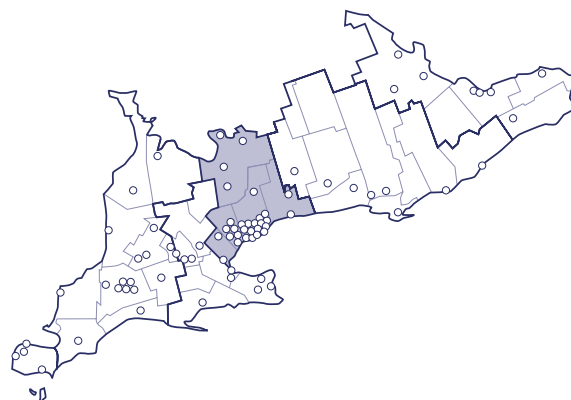
Central East Region

Hubs		Number of Screens
Toronto	➤ North York OBSP Centre	6363
	➤ Scarborough OBSP Centre	5563

Affiliates

Alliston	➤ Stevenson Memorial Hospital	1734
Barrie	➤ The Royal Victoria Hospital	6608
Brampton	➤ Wm. Osler Health Centre, Brampton Memorial Hospital Campus	4878
	➤ DiagnostiCare – Brampton	410
Etobicoke	➤ Wm. Osler Health Centre, Etobicoke Hospital Campus	342
	➤ Wm. Osler Health Centre, Georgetown Hospital Campus	951
Markham	➤ Markham Mammography Clinic Inc.	3425
Midland	➤ Ontario Medical Imaging – Huronia	378
Mississauga	➤ Credit Valley Diagnostic Centre	683
	➤ Credit Valley Imaging Associates	953
	➤ DiagnostiCare/King X-Ray and Ultrasound	897
	➤ Dixie X-Ray Breast Imaging Centre	1148
	➤ RDS Mississauga Diagnostic Imaging & Breast Centre	11
Newmarket	➤ Southlake Regional Health Centre	2110
Orillia	➤ Ontario Medical Imaging	1678
Oshawa	➤ Oshawa Clinic Imaging Centre	1586
Toronto	➤ Dixie X-Ray Ltd.**	5521
	➤ DiagnostiCare – Fairview	1505
	➤ DiagnostiCare – Lawrence	1069
	➤ Edward Street Radiology Associates – Main	16
	➤ Edward Street Radiology Associates – Yonge	11
	➤ RDS Malvern Ultrasound and Mammography	51
	➤ Quality Medical Imaging – Bloor	671
	➤ Quality Medical Imaging – Spadina	899
	➤ Quantum Medical Imaging Services Inc.	2470
	➤ Rosedale Radiology and Ultrasound	261
	➤ St. Michael's Hospital Health Centre**	2803
	➤ Sunnybrook & Women's College Health Sciences Centre, Women's College Hospital Campus	3601
	➤ Victoria Park Mammography	4493
	➤ DiagnostiCare – Unionville	623

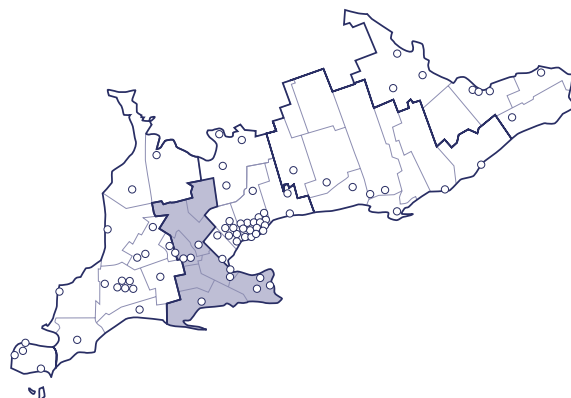
Total 63712



Central West Region

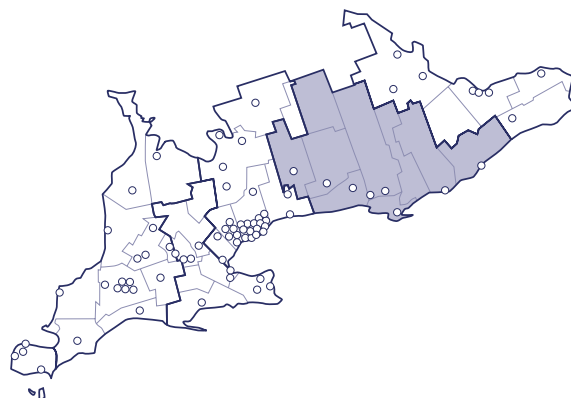
Hub		Number of Screens
Hamilton	➤ Hamilton OBSP Centre**	12075
Affiliates		
Burlington	➤ Burlington Ultrasound and Radiology	2750
Cambridge	➤ Cambridge Memorial Hospital RDS Diagnostics Ltd.	2326 436
Guelph	➤ Baker Street X-Ray and Ultrasound	946
Hamilton	➤ St. Joseph's Healthcare Hamilton, Centre for Ambulatory Health Services	1946
Niagara Falls	➤ NHS – Greater Niagara General Hospital**	3661
St. Catharines	➤ NHS – St. Catharines General Hospital**	3271
Simcoe	➤ Norfolk General Hospital	314
Welland	➤ NHS – Welland County General Hospital**	2152
Total		29877

Hamilton Centre	Assessments	1402
	Recalls	591



Southeast Region

Hub		Number of Screens
Kingston	➤ Kingston OBSP Centre	8168
Affiliates		
Belleville	➤ Quinte Healthcare – Belleville General Hospital	1489
Brockville	➤ Brockville General Hospital	1429
Campbellford	➤ Campbellford Memorial Hospital	526
Kingston	➤ Hôtel Dieu Hospital*	
Peterborough	➤ Peterborough Regional Health Centre, Rogers Street Site	2494
Picton	➤ Quinte Healthcare – Prince Edward County Memorial Hospital	95
Port Perry	➤ Port Perry Imaging**	1601
Trenton	➤ Quinte Healthcare – Trenton Memorial Hospital	1254
Victoria County	➤ Ross Memorial Hospital (Lindsay)	1538
Total		18594



Note | * Provides breast assessment only | ** Provides both breast assessment and screening

Regional Statistics – OBSP Hubs and Affiliates

April 1, 2002 to March 31, 2003

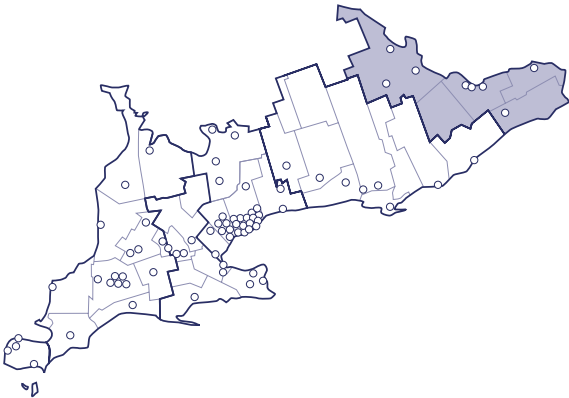
Eastern Region

Hub

Ottawa	Ottawa OBSP Centre	13568
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Affiliates

Barry's Bay	St. Francis Memorial Hospital	500
Hawkesbury	Hawkesbury and District General Hospital	1235
Ottawa	Merivale Medical Imaging	253
	Montfort Hospital	253
	Ottawa Regional Women's Breast Health Centre*	
Pembroke	Pembroke General Hospital Inc.**	1968
Renfrew	Renfrew Victoria Hospital**	1448
Winchester	Winchester District Memorial Hospital	578
Total		20414



Note | * Provides breast assessment only | ** Provides both breast assessment and screening

Breast Assessment

The success of screening is very dependent on the quality of the follow-up of screen-detected abnormalities – that is, the quality and timeliness of the breast assessment process used to reach a final diagnosis. Breast assessment involves the expertise of a team of health professionals working in collaboration to perform diagnostic breast imaging, biopsies, obtain surgical consultation and pathology expertise. Targets have been developed by the Canadian Breast Cancer Screening Initiative[†] of 90% of cases resolved within 5 weeks from time of abnormal screen where there is no open biopsy, and 90% of cases resolved within 7 weeks where there is an open biopsy for women age 50–69. The proportion of OBSP abnormal breast screens diagnosed within the recommended time intervals was 77.3% for screens without a diagnostic open biopsy and 43.0% for women with a diagnostic open biopsy.

The establishment of multidisciplinary, comprehensive breast assessment affiliates to which OBSP clients can be referred has been an initiative of the OBSP over the last several years. Based on the work of the Ontario Breast Assessment Collaborative Group criteria have been established for these affiliations which include:

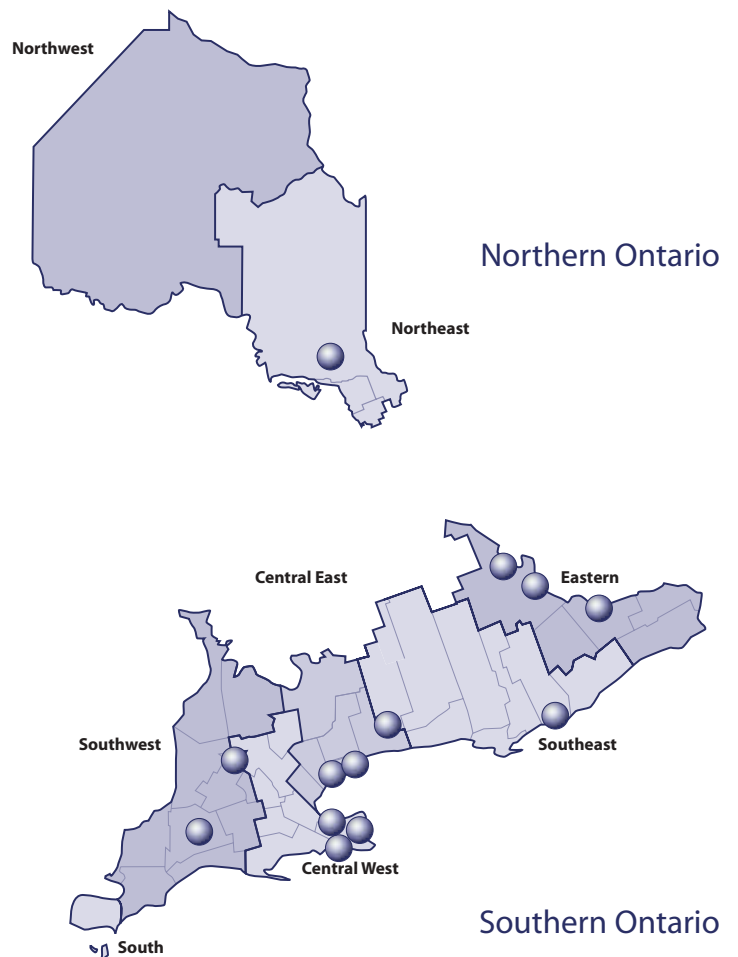
- The integration of family physicians into the breast assessment process
- Achievement of CAR Accreditation for mammography equipment
- The availability of radiologists with breast imaging expertise
- The availability of ultrasound facilities and core biopsies
- The availability of breast pathology expertise
- A designated patient navigator who will coordinate the investigations involved in the diagnosis of the abnormality
- A detailed care map for the coordination of services and expected timelines
- Mechanisms for ongoing evaluation and quality improvement
- Agreement to report the results of assessment according to set standards
- Agreement to achieve set timelines, such as providing the client's definitive diagnosis to her primary care provider within 2 weeks of completing the assessment process.

Note:

- [†] Report of the Working Group on the Integration of Screening and Diagnosis for the Canadian Breast Cancer Screening Initiative (2000).

A breast assessment facility can either perform all the services required for breast work-up or may establish pathways with other facilities to provide the additional services necessary.

During 2002/03, the OBSP established five new assessment affiliates: Niagara Health System (NHS) – Greater Niagara General Hospital, NHS – St. Catharines General Hospital, NHS – Welland County General Hospital, St. Michael's Hospital Breast Health Centre and Dixie X-Ray Associates; bringing the total number of assessment affiliates to 13. While the assessment initiative is directed toward women screened through the OBSP, eventually all women will benefit from a quality driven and standardized approach to care. The OBSP is working with many other Ontario facilities interested in becoming breast assessment affiliates.



Getting with the Program

OBSP Recruitment Strategy Focuses on Physicians, Facilities, and Women

Once a woman visits the Ontario Breast Screening Program, she's very likely to return. In 1997/98, for example, OBSP rescreen rates exceeded the Canadian target of 75% within 30 months: 85.7% of clients aged 50–69 screened returned for at least one rescreen at the program, and 80.6% of these returned within six months of their recommended screening dates.

High rescreen rates, says Dr. Verna Mai, director of screening programs at Cancer Care Ontario, shows that women appreciate the OBSP's women centred, high quality care, and respond to the program's reminder letters for follow-up screening.

The Program's next challenge is to raise recruitment levels. Currently, about 23% of eligible women in Ontario are screened through the OBSP. The program would like to see that percentage rise to 70% in order to save more lives through early detection. Low screening rates, says Dr. Mai, can be attributed to a number of causes:

A dual screening system – OHIP and OBSP – in Ontario means that women are not automatically screened at the OBSP. Family physicians may routinely refer women to non-OBSP sites for screening. Many radiology facilities in Ontario are not OBSP affiliates. While the OBSP's target age group is 50–69, family physicians recommend screening for some women in their forties. Once at a screening facility, women may be reluctant to switch. Some populations of women are difficult to reach or have never been screened. The OBSP's target population (the Baby Boomer generation) has increased significantly. Although the program screens an increasing number of women each year, the percentage of women screened remains stable.

The OBSP hopes to recruit more women by continuing to work with community partners, public health units, and breast health coalitions to educate women, family physicians, and radiology facilities about the benefits of organized screening and OBSP affiliation, says Dr. Mai. A recent study by Dr. Lawrence Paszat, (Director, Preventive Oncology Program TSRCC) for example, showed that women who attended OBSP screening were more likely to be screened within recommended time intervals than women screened outside of the OBSP.

The OBSP's medical coordinators educate family doctors about the benefits of organized screening and encourage physicians to refer their patients to the OBSP. The Program's health promotion coordinators conduct a variety of community and recruitment initiatives that address barriers to and to help raise awareness of the benefits of organized screening.

The OBSP also ensures quality control – all affiliated sites, for example, are accredited through the Canadian Association of Radiologists – and can monitor interim indicators to determine success in reducing breast cancer mortality.

“Ideally, all eligible women would be part of an organized screening program,” says Dr. Mai, “and we continue to work with the Ministry of Health and Long-Term Care to explore policy strategies to facilitate that goal.

Our Goal

To achieve a 70% participation rate in Ontario women aged 50-69 by the year 2010.

Strong Links in a Chain of Excellence

OBSP Professionals Team up to Deliver Top Quality Mammography

Each time a woman is screened at the OBSP, a dedicated team of professionals works together to ensure she receives top quality care. At every stage in the screening process – from the technologists who perform mammograms, to the radiologists who read films, to the physicists who inspect screening facilities and equipment – the OBSP implements rigorous quality control measures with one goal in mind: to reduce breast cancer deaths through early detection.

Dr. Rene Shumak is radiologist-in-chief at the OBSP and radiology coordinator for the Program's Central East Region. In addition to reading upwards of 2,000 mammo-grams each year, she helps develop and implement quality standards for OBSP mammography.

One key to quality, says Dr. Shumak, is the Canadian Association of Radiologists Mammography Accreditation Program (CAR-MAP). Although CAR accreditation is not mandatory in Ontario, it is for all OBSP screening and assessment facilities, which means that they meet the radiology association's minimum quality standards for mammography equipment, staff training and skill level, and image quality.

But the OBSP exceeds CAR-MAP's minimum standards, says Dr. Martin Yaffe, who leads the team of physicists responsible for inspecting and evaluating screening equipment. For example, while the CAR requires a physicist to inspect facilities annually, OBSP physicists conduct exhaustive inspections twice a year. Physicists test new equipment, evaluate potential OBSP affiliates, troubleshoot problems with facilities, and follow up to ensure that problems are resolved. When they are not inspecting screening facilities, physicists are in the lab, conducting research into best practices for breast screening and helping develop the gold standard of excellence for screening facilities.

The medical radiation technologists (MRTs) who perform mammograms also play a key role in quality control. Daily, weekly, monthly, and biannually, MRTs conduct a battery of quality control tests on their imaging and processing equipment to ensure the best possible films for both radiologists and clients.

With all these quality control measures in place, says provincial mammography technologist coordinator Erin Jones, “we know that the films we are going to be producing will be technically correct, that we will provide the highest quality films for the radiologist to read, and that we can ensure an OBSP client an excellent mammogram the first time it is performed.”

Annual film reviews are performed on each OBSP technologist. A sampling of each technologist's films is reviewed and feedback is provided. If the review identifies areas requiring improvement, the MRT will receive assistance in order to ensure her films meet CAR accreditation standards.

OBSP radiologists have their own set of quality control measures in place, says Dr. Winston Ramsewak, regional radiology coordinator, South Region. Because the program tracks statistics from screening to diagnosis, it can let radiologists know their recall rate, positive predictive value, cancer detection rate, and interval cancer rate. At the local level there are monthly film reviews. These also allow radiologists to revisit the cases they have assessed and learn from them. At the provincial level there are independent panel reviews.

All these reviews, says Dr. Ramsewak, are “another layer of security” that make his work easier and more enjoyable, and ensure a high standard of care.

“It is nice to get feedback, to know how you are doing and how you compare to your colleagues. Outside the OBSP, it is possible to see a patient, make a diagnosis, and never see her again. In the OBSP, we have the systems in place and the support to follow up patients.”

“We are trying to move from a minimum standard to a standard of excellence,” says Dr. Yaffe. “Outside the OBSP, a facility must be evaluated every three years. Our goal is to ensure that every day, every facility in the OBSP will meet or exceed the standards.”

In Good Hands

Ongoing Training and Evaluation Ensure Quality for Clinical Breast Exams

When OBSP certified nurse examiners perform clinical breast exams (CBE), they can make a difference in women's lives, says Patty Halligan, a nurse examiner (NE) and preceptor at the Ontario Breast Screening Program's Kingston hub site.

CBE can detect a small proportion of breast cancers not picked up by a mammogram. As part of an organized screening program, it's also a chance for women to receive hands on health care, learn about good breast health practices and self-examination, all of which add to the overall quality of breast cancer screening, and help ensure that women return to the program.

While not a mandatory component of screening, most OBSP screening sites offer CBE, performed by an NE who has completed a rigorous training process.

Before she can work independently, an NE must complete an intensive orientation and certification program that includes performing a minimum of 40 CBEs under direct

supervision and 40 more with an OBSP preceptor as an on-site resource. During their training, new NEs are observed and evaluated daily on their clinical examinations, documentation skills, and ability to teach clients breast self-exams, and must achieve at least 80% on a written exam at the end of their training. Once an NE begins working, the goal is that she perform 1000 breast exams per year, with a minimum of 500.

"Because we're consistently screening at that level or above," says Patty, "we stay current, and we become very skilled. We're that much better able to distinguish between normal and abnormal variations in breast tissue, and know when to refer to clients to their physician who then may request further testing."

Practice reviews provide ongoing written and verbal evaluation of examiners' clinical practice, referral and accuracy rates, and documentation.

"Many family physicians have a tremendous amount of faith in us, and say that they like women to come to us because we are so skilled," says Patty. "I think that says a lot about the quality of our program."



The OBSP's Integrated Client Management System (ICMS) Harnesses Individual Strengths to Ensure High Quality



There's no doubt that people are the heart of the OBSP. However, a computer application called Integrated Client Management System (ICMS) is the program's central nervous system.

From a server at the OBSP provincial office, the ICMS harnesses the strengths of the individuals who make up the OBSP, linking all hub and affiliated screening and assessment sites through a secure Internet connection. It provides an information infrastructure that governs and enables "virtually every aspect of the OBSP program, from day-to-day screening to research initiatives to quality control," says Laurie Gordon, a systems analyst with OBSP information services who developed and maintains the program.

For example, the ICMS registers and recalls clients and books screening and assessment appointments. It tracks, records, and reports results to clients and their physicians – generating upwards of half a million letters a year in the process. It helps eliminate duplication, monitors OBSP guidelines, and ensures that clients don't fall through the cracks by warning users about missing or incomplete data or any failures to follow up. It's also a rich source of standardized data for OBSP researchers.

The ICMS also plays a key role in ensuring quality, says Laurie. It routinely generates quality assurance monitoring reports, for example, providing data to help nurse examiners, technicians, and radiologists know how well they're doing their jobs and where they need to improve. It also tracks screening and assessment processes for gaps in service or lag times, or to see whether too many invasive procedures are being conducted.

"Many facilities don't have the time or infrastructure to develop these applications for themselves," says Laurie, "so we can give them a big picture view of the quality of their work."

The ICMS is also flexible enough to adapt to the needs of individual regions, as Carolyn Jackson, regional administrator for the OBSP's Northeast region, discovered when she embarked on a pilot project to increase recruitment using the ICMS database. The Algoma District has increased recruitment by 50% over three years through the use of the ICMS scheduling module to provide the clients and health care providers in this District with a centralized booking model and single access point for the OBSP and Non-OBSP client. This pilot project has now expanded to other OBSP sites.

"The ICMS," says Carolyn, is invaluable to the operation and support of the OBSP. I believe that an organized screening program's strength lies in great part in its database. ICMS is one of OBSP's great strengths and could possibly be a platform for future screening initiatives."

Measures of Success

Evaluation Indicators Measure Screening Performance at Every Step

The Ontario Breast Screening Program – like all organized Canadian breast screening programs – has a straightforward goal: to reduce mortality from breast cancer through early detection.

Evaluating the OBSP's progress in achieving that goal, however, is more complicated. Studies suggest that organized screening can prevent approximately a third of breast cancer deaths in women aged 50 to 69, 7 to 12 years after sufficient participation – 70% of women in that age group – has been achieved. In Canada, however, organized screening programs are still working toward reaching that participation rate. Until they do, they need to find interim ways to measure quality and success.

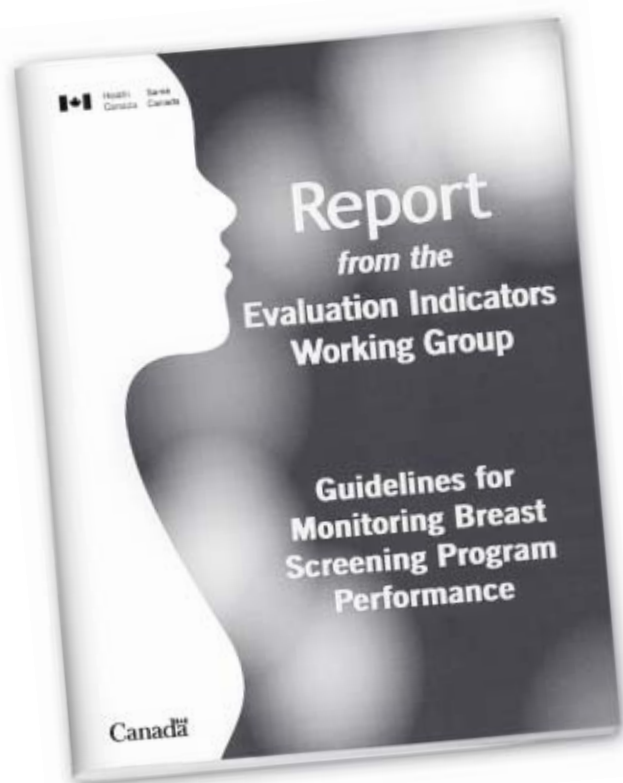
That was the goal of Health Canada's Canadian Breast Cancer Screening Initiative Evaluation Indicators Working Group, which published Canadian Guidelines for Monitoring Breast Screening Program Performance in 2002.

Dr. Anna Chiarelli, a scientist in Cancer Care Ontario's Screening Unit, chaired the working group, which included representatives from Health Canada and Canadian screening programs.

"We need valid, reliable, indicators to see how our screening programs measure up, and where we can improve," she says. "And we specifically need Canadian indicators that reflect our unique geography, healthcare system and population health context. We want to ensure standardization, so that we can compare ourselves nationally and internationally."

The working group identified 11 performance measures (see Table 5 on page 27) to monitor and ensure quality throughout breast screening. The invasive cancer tumor size, for example, measures the percentage of cancers 10 mm or less: the earlier a tumour is detected – and, therefore, the smaller it is – the better a woman's prognosis, explains Dr. Chiarelli.

Together, the evaluation indicators provide screening programs with a consistent means of measuring performance and quality. They're one more tool that ensures the OBSP delivers high quality screening services, and a crucial step in monitoring its goal of reducing deaths from breast cancer.



Access to the Bigger Picture

New Assessment Indicators Mandate Timely, Quality Care

In any breast cancer screening and assessment program, patients are seen – and diagnosed – one at a time. As facilities focus on individuals, however, they can lose sight of the bigger picture: the overall quality of the care they deliver.

“Affiliating with the OBSP,” says Dr. Verna Mai, “gives screening and assessment programs access to the bigger picture.” With set standards for facilities and equipment, performance goals for screening, and regular reporting of results, OBSP affiliates gain access to “a whole culture of continuous quality improvement and feedback.”

Now, the OBSP has broadened that picture by taking yet another step to ensure high quality care. Over the past year, it has developed a set of performance goals for breast assessment. Mandating standards for timeliness, appropriateness of follow-up procedures, and standards for biopsy, the 10 indicators complement and continue on from the OBSP’s performance goals for screening. The OBSP aims to finalize and implement the guidelines this year, and will report results to its assessment affiliates.

“In many instances,” says Dr. Mai, director of screening programs at Cancer Care Ontario, “it’s not easy for stand alone facilities to generate this kind of data. That’s a real advantage to joining us. Once they have the information, they can sit down and say, ‘Where are we doing well? And how could we improve?’”

The Ottawa Regional Women’s Breast Health Centre affiliated with the OBSP in 1998. Since then, says Cathy DeGrasse, program coordinator, clinical services, “we can offer women more timely service and a smoother transition from screening to assessment. We can better meet women’s and health care providers’ needs in assessing abnormalities picked up through OBSP.”

Women in breast screening and assessment programs want comprehensive care, delivered compassionately, with dignity, and in a manner that addresses all their needs, says Cathy.

OBSP breast assessment affiliation helps integrate supportive and educational components to ensure comprehensive care for women and ongoing professional development for staff. The program’s medical coordinators

review all abnormal screens, make recommendations based on the assessment information and diagnostic work-up, and ensure that no woman falls through the cracks.

The new assessment guidelines will help cement the Ottawa centre’s commitment to timeliness and quality, says Cathy. “Affiliation with the OBSP gives us access to their database and indicators – and from that we can further improve the quality of care.”

“You can absolutely move from screening to diagnosis faster when there’s commitment,” says Dr. Doug Mirsky, program coordinator of medical services at the Ottawa centre. “And the OBSP is a committed community partner. We’re diagnosing breast cancers earlier for OBSP clients.”

Developing and mandating performance goals allows the OBSP to offer women high quality care in both rural and urban centres.

“In a rural community, we want to offer service of at least equal quality to that available in urban centres,” says Nancy Kelly, vice president of patient care services at Renfrew Victoria Hospital. Nancy coordinates and oversees the Renfrew Breast Assessment Centre and a screening outreach program at St. Francis Memorial hospital in Barry’s Bay, a rural, isolated hospital on the border of Algonquin Park.

The two sites, says Nancy, have been able to deliver high quality service in large part because they must live up to the same standards for accreditation – and the same performance goals for screening and assessment – as any other OBSP site.

“When we decided to become a screening and assessment affiliate with the OBSP, we did a lot of internal research to examine factors like the quality of our equipment, staff training, time to diagnosis, and appropriateness of diagnostic procedures – all quality indicators the OBSP mandates.”

Regular feedback, says Nancy, “gives us a good, objective overview of the people, processes, and equipment it takes to operate the program. We can see how we’re doing and our opportunities for improvement. And we’ve been able to reduce time to diagnosis. That’s the bottom line.”

Program Results 1990-2001

Recruitment and Compliance

Program results are presented by calendar years. Outcome statistics have not been included for 2002 as not all women referred for assessment in 2002 have completed follow up.

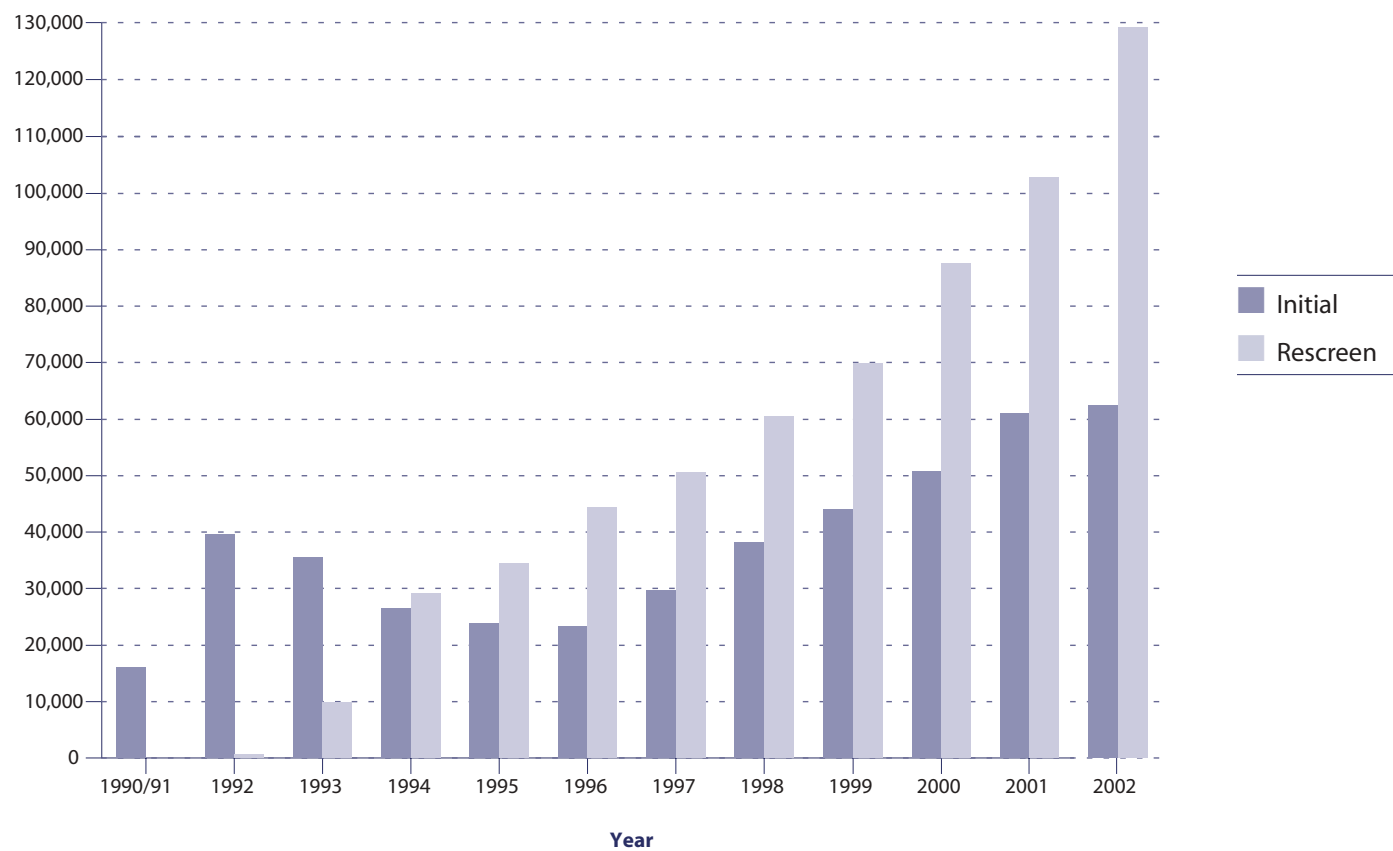
Number of Screens

From the time of its first screen in July 1990 until December 31, 2002, the Ontario Breast Screening Program has provided 1,070,640 screens to 451,501 Ontario women. Less than half (42.2%) of all client visits were initial screens (that is, women having their first screen at OBSP) and the remainder (57.8%) were women returning for a subsequent program screen. Since its first complete year in 1990/91, the annual number of screens has increased substantially from 15,970 in 1990 to 192,267 in 2002 (Figure 1).

During the early years of the Program, as each of the regional hubs and the mobile van began operation across the Province, the number of initial screens increased from 15,970 in 1990/91 to 39,733 in 1992. Starting in 1993, the initial screens declined continuously to 23,269 in 1996 and then began to increase again to 62,998 in 2002 with the opening of affiliate sites. In contrast, the number of rescreens has increased consistently from 561 in 1992 to 129,269 in 2002.

Figure 1 Number of Screens in OBSP, by Year, 1990 – 2002

Number of Screens



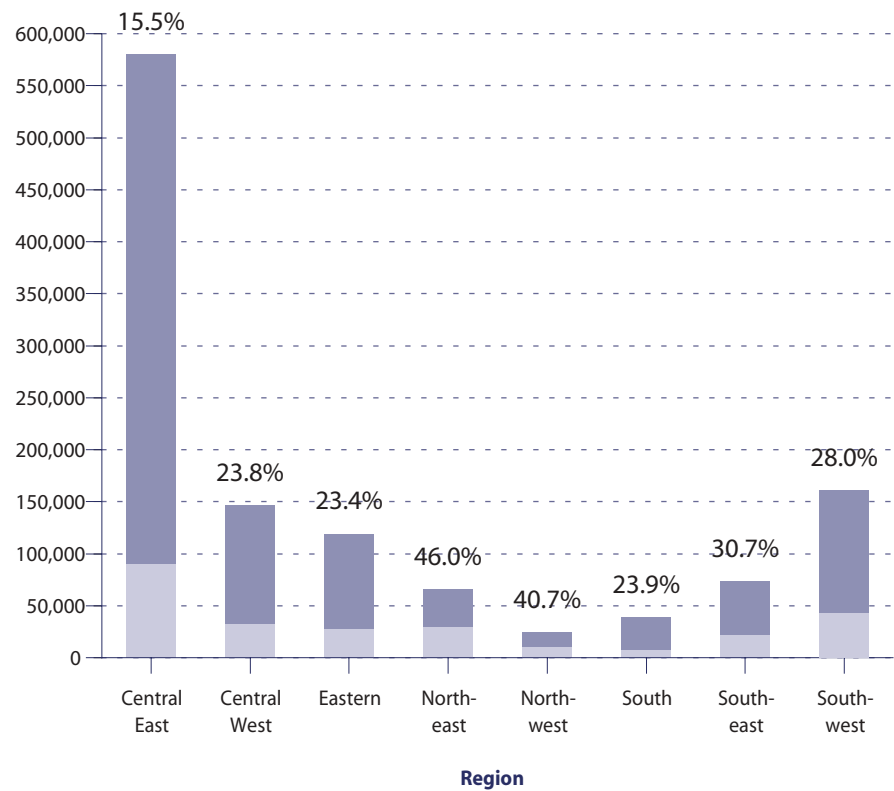
OBSP Participation Rate in Ontario Women Aged 50-69

The goal of the Ontario Breast Screening Program is to screen 70% of women aged 50 to 69. Figure 2 shows the participation rates for women 50 to 69 years of age by Cancer Care Ontario Region. In 2001 and 2002, 267,782 women aged 50 to 69 were screened by the OBSP, yielding a participation rate of 22.3% of all women 50 to 69 years of age in Ontario.

Participation rates range from a high of 46.0% in the Northeast region to a low of 15.5% in the Central East region. It is anticipated that continued program expansion will improve overall recruitment as well as increased coverage across the Province.

Figure 2 OBSP Participation Rate[†] in Ontario Women Aged 50-69 by Cancer Care Ontario Region, 2001 and 2002

Number of Women



■ Ontario Women
■ Women Screened in OBSP

[†] Participation rate is the number of women aged 50-69 at screening who participated in OBSP as a proportion of the target population. Population figures are based on 1996 census data projections for years 2001 and 2002.

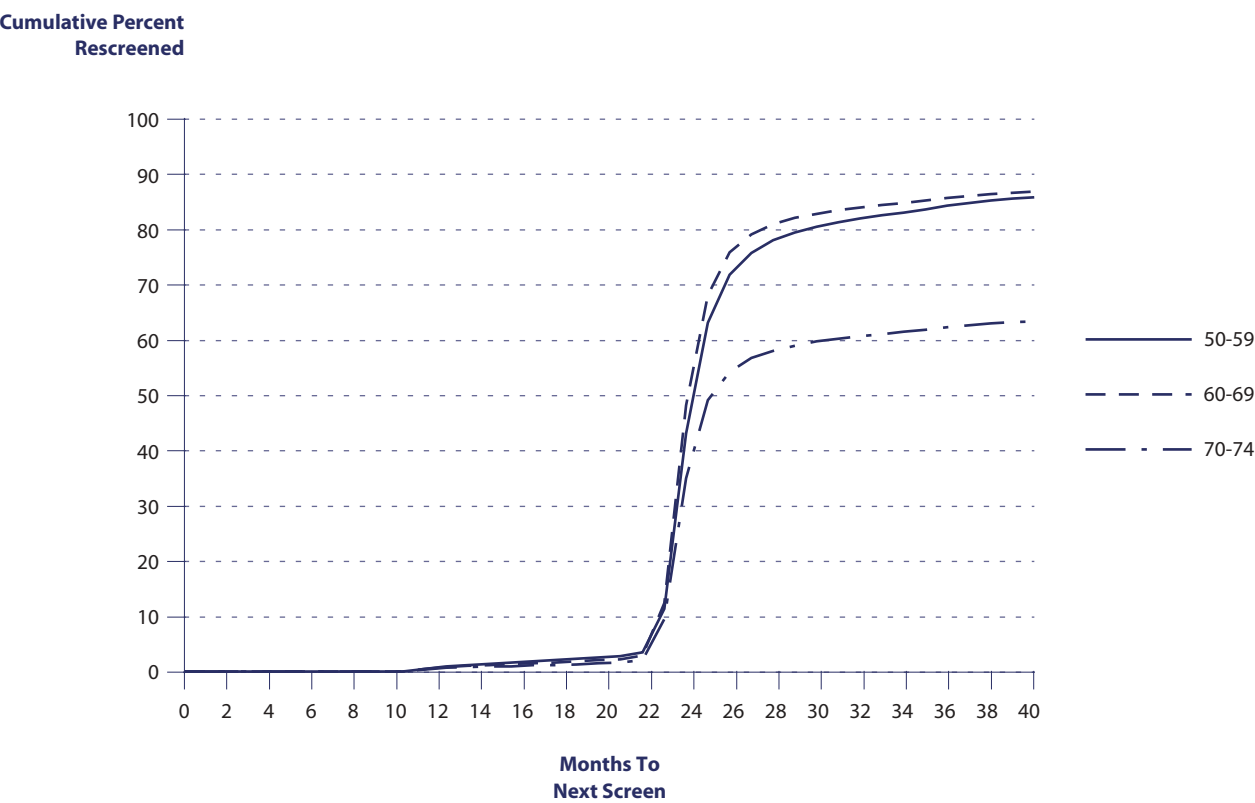
Recruitment and Compliance

Compliance to Rescreening

Figure 3 shows the percentage of women who returned for rescreening by age group for women aged 50-74 who last attended the OBSP in 1998 and 1999 and who had a rescreening recommendation of 2 years. Recall letters were sent to targeted women two months before their next screening visit to remind them to return for screening.

Overall, 83.5% of women returned for at least one rescreen at OBSP and 78.5% returned within 6 months of their recommended screening date. These percentages were highest for women 50 to 69 years of age (86.7% for ever returned; 81.5% return within 6 months) and lowest for women 70-74 years of age (63.6% for ever returned; 59.7% return within 6 months).

Figure 3 Compliance to Rescreening by Age Group at OBSP, 1998 – 1999



OBSP Participant Profile

During the screening visit, some risk factor and clinical information is obtained during a personal interview with the nurse examiner or technologist. Mammographic breast density is indicated by the radiologist when recording their findings from the mammogram. Some of the results of the information collected for women aged 50-74 are shown in Table 1.

Having a first degree relative with breast cancer and having high mammographic breast density are important risk factors for developing breast cancer. Being 30 years

of age or older at first full-term pregnancy and never having had children (nulliparity) are associated with modest elevations in risk. Estrogen replacement therapy slightly increases the risk.

Of the OBSP women screened in 2001, 16.0% had a family history of breast cancer, 9.0% had high mammographic breast density, 9.8% had their first birth at 30 years of age or older, 11.2% have never given birth to a child, and 40.1% were currently on estrogen replacement therapy.

Table 1 OBSP Participation Profile by Age Group, 2001

	Age at Exam (%)			Total(%)
	50-59	60-69	70-74	50-74
Number of women	80,583	58,405	19,171	158,159
Family history of breast cancer [†]				
Yes	14.3	17.3	19.2	16.0
No	85.7	82.7	80.8	84.0
Mammographic breast density [‡]				
≥ 75%	11.5	6.6	5.5	9.0
< 75%	88.5	93.4	94.5	91.0
# unknown	1	5	0	6
Age at first birth (including still-born)				
≥ 30	11.1	7.8	10.5	9.8
< 30	88.9	92.2	89.5	90.2
# unknown	199	136	50	385
Number of children (including still-born)				
None	12.7	9.4	10.2	11.2
≥ 1	87.3	90.6	89.8	88.8
# unknown	94	67	23	184
Current estrogen use				
Yes	43.6	39.7	26.5	40.1
No	56.4	60.3	73.5	59.9
# unknown	887	560	148	1,595

Notes:

[†] Family history of breast cancer includes breast cancer in first-degree relatives (mother, sister, daughter, father, brother, son).

[‡] The proportion of connective tissue and epithelial tissue as opposed to fat.



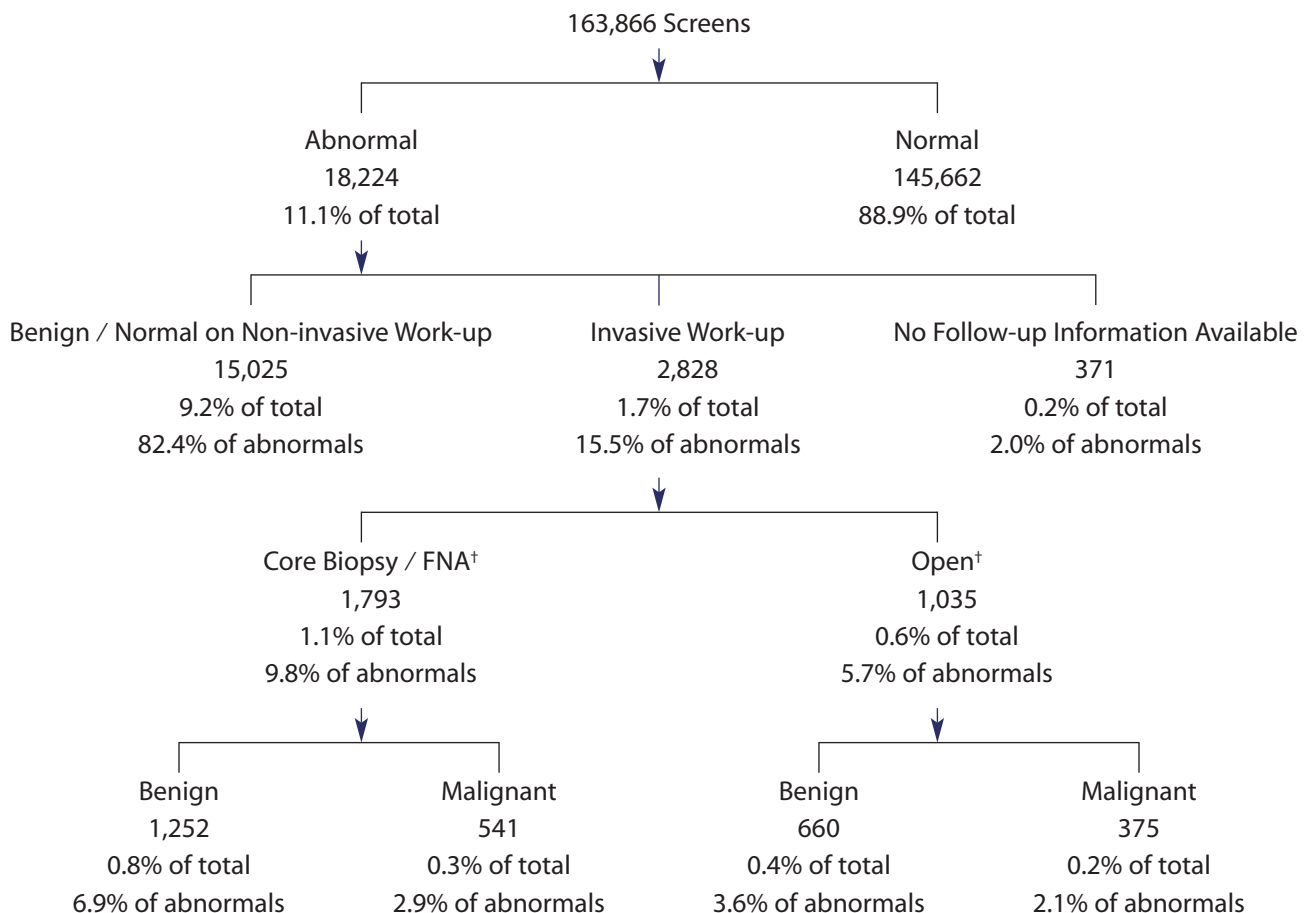
Screening Results

Screening Outcome Summary

Figure 4 depicts a summary of the outcomes during 2001 for initial screens and rescreens combined. Overall, about 11.1% were referred for assessment and 916 cancers were detected (cancer detection rate of 5.6 per 1,000 screens and positive predictive value of 5 cancers per 100 referrals). The majority of the women referred (82.4%) had non-invasive work-up, 15.5% had invasive work-up and 2.0%

had no follow-up information. The majority of women with a benign final result (88.7%) were diagnosed without a biopsy, 7.3% were diagnosed by a fine needle aspiration and/or core biopsy and 3.9% were diagnosed by an open biopsy. The majority of women with breast cancer (59.1%) were diagnosed by fine needle aspiration and/or core biopsy and 40.9% were diagnosed by an open biopsy.

Figure 4 Screening Outcome Summary of OBSP Screens, 2001



Note:

† Biopsy which resulted in a final diagnosis

Screening Results

Outcome Indicators

Table 2 provides information about outcome indicators by age group for 2001. Of the 158,159 screens performed on women aged 50-74, 17,594 (11.1%) had an abnormal result and 859 breast cancers were diagnosed (5.4 per 1,000 screens). Referral rates decreased slightly with age from 14.6% in women 50-59 to 12.6% in women 70-74 years of age for initial screens and from 9.8% in women 50-59 to 9.0% in women 70-74 years of age for rescreens. The invasive cancer detection rates increased with age from 4.0 to 7.6 per 1,000 for initial screens and from 3.3 to 5.8 per 1,000 for rescreens in women 50-59 and 70-74 years of age,

respectively. The in-situ cancer detection rate (per 1,000 screens) increased slightly with age from 0.9 in women 50-59 to 1.1 in women 70-74 years of age for initial screens and from 0.7 in women 50-59 to 0.8 in women 70-74 years of age for rescreens.

Consistent with higher cancer detection rate, the positive predictive value (the number of women detected with breast cancer per 100 referrals) was highest for women aged 70-74 (7.0 for initial screens and 7.3 for rescreens) and lowest for women aged 50-59 (3.3 for initial screens and 4.1 for rescreens). In contrast, the benign to malignant

Table 2 Outcome Indicator in OBSP by Age Group, 2001

Outcome Indicator	Age at Exam			Total
	50-59	60-69	70-74	50-74
Number of screens n (%)				
Initial	37,927 (64.5)	16,283 (27.7)	4,580 (7.8)	58,790
Rescreen	42,656 (42.9)	42,122 (42.4)	14,591 (14.7)	99,369
Number of cancers n (%)				
Initial	185 (53.0)	124 (35.5)	40 (11.5)	349
Rescreen	172 (33.7)	242 (47.5)	96 (18.8)	510
Referral rate (%)				
Initial	14.6	12.7	12.6	13.9
Rescreen	9.8	9.3	9.0	9.5
Invasive cancer detection rate (per 1000)				
Initial	4.0	6.3	7.6	4.9
Rescreen	3.3	4.9	5.8	4.4
In-situ cancer detection rate (per 1000)				
Initial	0.9	1.3	1.1	1.0
Rescreen	0.7	0.9	0.8	0.8
Positive predictive value (%)				
Initial	3.3	6.0	7.0	4.3
Rescreen	4.1	6.2	7.3	5.4
Benign to malignant open biopsy ratio				
All Screens	0.96:1	0.61:1	0.54:1	0.75:1
Diagnostic Interval [†] (%)				
Within 5 weeks without an open biopsy	72.1	73.0	74.0	72.6
Within 7 weeks with an open biopsy	38.1	43.2	34.5	39.6

Note:

† Diagnostic Interval was stratified according to women with and without an open diagnostic biopsy (i.e. open biopsy which resulted in a final diagnosis).

open biopsy ratio (ratio of women with a benign diagnosis versus a malignant diagnosis following an open biopsy) was highest for women aged 50-59 (0.96:1) and lowest for women aged 70-74 (0.54:1). The percentage of OBSP abnormal screens without an open biopsy diagnosed within the recommended interval increased slightly with age (from 72.1% to 74.0% in women aged 50-59 and 70-74 years, respectively). The percentage of OBSP abnormal screens with an open biopsy diagnosed within the recommended interval increased from 38.1% in women aged 50-59 to 43.2% in women aged 60-69, and then declined to 34.5% in women 70-74 years of age.

Diagnostic Investigation

Table 3 summarises the diagnostic procedures for 17,180 (97.6%) of the women aged 50-74 who had abnormal screening results in 2001. Procedures undertaken after the date of diagnosis were excluded. The most common diagnostic procedures were ultrasound (59.6% of referred women), followed by a diagnostic mammogram (58.8%), a family physician visit (21.6%) and a consultation with a surgeon (15.8%). Furthermore, 3.8% underwent a fine needle aspiration, 8.1% underwent a core biopsy and 5.7% underwent an open biopsy.

Table 3 **Diagnostic Procedures Received by OBSP Participants with Abnormal Screens, by Age Group, 2001**

	Age at Exam			Total
	50-59	60-69	70-74	50-74
Procedure [†] (% assessed)				
Physician visit	20.2	23.0	24.5	21.6
Surgical consultation	15.4	16.9	14.9	15.8
Diagnostic mammogram	59.8	57.4	57.6	58.8
Ultrasound	61.8	57.3	55.1	59.6
Fine needle aspiration	3.8	3.9	3.9	3.8
Core biopsy	7.7	8.3	9.3	8.1
Open biopsy	5.1	6.4	6.3	5.7
Number assessed	9,503	5,833	1,844	17,180

Note:

† Percentages and numbers are based on women with diagnostic assessment information available.
Women receiving more than one procedure are included in more than one grouping.

Screening Results

Histologic Features of Screen Detected Breast Cancers

Table 4 summarises the histologic features of screen detected breast cancers by age group. For 2001, 859 women were diagnosed with breast cancer, 84.1% were invasive and 15.9% were in-situ. Of the invasive tumours the majority (86.7%) were infiltrating ductal carcinoma.

Tumour size, nodal status and stage are important indicators in assessing program success, as they provide an indication of whether a reduction in mortality is possible. Established Canadian standards specify that at least 25% of screen detected breast cancers should be less than or equal to 10 mm in diameter and less than 30% of screen detected cancers should have lymph node metastases.

Of the invasive tumours with known size, 34.6% were less than or equal to 10 mm and of the invasive tumours with known nodal status, 24.7% had lymph node metastases. Staging data also indicate that breast cancers are being detected at an early stage with about 71.0% of the tumours with known stage being stage 0 (in-situ) or stage I (tumour size of 2 cm or less with no regional lymph node involvement) and 26.1% being stage II (larger tumour size and/or regional lymph node involvement). Only 2.9% were stage III or stage IV (presence of distant metastasis).

Table 4 **Histologic Features of Screen Detected Breast Cancers in OBSP, by Age Group, 2001**

Outcome Indicator	Age at Exam No. (%)			Total No. (%)
	50-59	60-69	70-74	
Type of cancer				
In-situ	64 (17.9)	57 (15.6)	16 (11.8)	137 (15.9)
Invasive	293 (82.1)	309 (84.4)	120 (88.2)	722 (84.1)
Tumour size (invasive only), mm				
≤ 5	35 (11.9)	37 (12.0)	6 (5.0)	78 (10.8)
6-10	48 (16.4)	91 (29.4)	33 (27.5)	172 (23.8)
11-15	74 (25.3)	85 (27.5)	43 (35.8)	202 (28.0)
16-20	61 (20.8)	39 (12.6)	17 (14.2)	117 (16.2)
>20	75 (25.6)	57 (18.4)	21 (17.5)	153 (21.2)
Nodal status (invasive only)				
Negative	197 (71.1)	221 (77.8)	80 (80.0)	498 (75.3)
Positive	80 (28.9)	63 (22.2)	20 (20.0)	163 (24.7)
# unknown	16	25	20	61
Histologic grouping (invasive only)				
Infiltrating ductal carcinoma	253 (86.3)	273 (88.3)	100 (83.3)	626 (86.7)
Infiltrating lobular carcinoma	19 (6.5)	10 (3.2)	10 (8.3)	39 (5.4)
Tubular	12 (4.1)	15 (4.9)	1 (0.8)	28 (3.9)
Mucinous	5 (1.7)	8 (2.6)	7 (5.8)	20 (2.8)
Other [†]	4 (1.4)	3 (1.0)	2 (1.7)	9 (1.2)
TNM staging [‡]				
0 (in-situ)	64 (19.1)	57 (16.8)	16 (13.1)	137 (17.2)
I	153 (45.5)	199 (58.7)	77 (63.1)	429 (53.8)
II	109 (32.4)	73 (21.5)	26 (21.3)	208 (26.1)
III-IV	10 (3.0)	10 (3.0)	3 (2.5)	23 (2.9)
# unknown	21	27	14	62

Notes:

[†] Other includes metaplastic.

[‡] TNM staging for invasive tumours less than or equal to 2 cm was determined by assuming nodal status negative (N0) whenever nodes were not examined and there was no distant metastasis (M0).

Screening Results

Comparison of OBSP Outcome Indicators to Canadian Standards

Table 5 depicts the OBSP screening outcomes for women referred by mammography, compared with Canadian standards. Recently, national standards for Canada have been developed which combine elements of Canadian programs and address Canada's population health context. The Canadian standards were established for asymptomatic women screened by mammography between the ages of 50 and 69 years with no prior diagnosis of breast cancer, (Appendix 1).

Overall, OBSP meets Canadian standards for the majority of outcome indicators measured. However, participation rate, diagnostic intervals and invasive cancer detection rate for initial screens are below the Canadian standard, whereas, referral rates are slightly higher than the Canadian standard.

Table 5 Outcome Indicators in OBSP compared to Canadian Standards, Ages 50-69, 2001

Outcome Indicator	Total Mammography	Canadian Standard
Participation Rate [†] (%)		
All screens	22.3	≥ 70
Retention rate [‡] (%)		
All screens	81.5	≥ 75
Referral Rate (%)		
Initial	10.8	< 10
Rescreen	6.6	< 5
Invasive Cancer Detection Rate (per 1000)		
Initial	4.5	> 5
Rescreen	3.9	> 3
Positive Predictive Value (%)		
Initial	5.0	≥ 5
Rescreen	7.0	≥ 6
Benign to Malignant Open Biopsy Ratio		
All screens	0.62:1	≤ 2:1
Tumour Size ≤ 10mm (%)		
All screens	35.1	> 25
Node Positive (%)		
All screens	26.0	< 30
Diagnostic Interval [§] (%)		
Within 5 weeks without a diagnostic open biopsy	77.3	≥ 90
Within 7 weeks with a diagnostic open biopsy	43.0	≥ 90
Post Screen Detected Invasive Cancer Rate (per 10,000 person years)*		
Within 12 months	5.1	< 6
Within 24 months	9.4	< 12

Notes:

† Data for 2001 and 2002 screen years were used.

‡ Percentage of women who last attended the OBSP in 1998 or 1999 with a two year screening recommendation who were rescreened within 30 months (ie, up to 6 months after the recommended interval) of their previous screen.

§ The Canadian standard includes any open biopsy. In contrast, the OBSP diagnostic screening interval indicator includes only open biopsies performed within the date of diagnosis.

* Data for 1996 and 1997 screen years were used. Both modalities of referral were considered.

Appendix 1 – Breast Screening Program Performance Measures

As of February 2002

Indicator	Definition	Target [†] (age 50-69)
1 Participation Rate	Percentage of women who have a screening mammogram (calculated biennially) as a proportion of the eligible population	≥70 %of the eligible population
2 Retention Rate	The estimated percentage of women who are rescreened within 30 months of their previous screen	≥ 75% rescreened within 30 months
3 Abnormal Call Rate (%)	Percentage of women screened who are referred for further testing because of abnormalities found with a program screen	< 10 (initial screen) < 5 (rescreens)
4 Invasive Cancer Detection Rate	Number of women detected with invasive cancer during a screening episode per 1,000 women screened	> 5 per 1,000 on initial screen > 3 per 1,000 on rescreens
5 In Situ Cancer Detection Rate	Number of women detected with ductal carcinoma in situ cancer (rather than invasive cancer) during a screening episode per 1,000 women screened	Surveillance and monitoring purposes only
6 Diagnostic Interval	Total duration from abnormal screen to resolution of abnormal screen	≥ 90% within 5 weeks if no open biopsy ≥ 90% within 7 weeks if open biopsy
7 Positive Predictive Value	Proportion of abnormal cases with completed follow-up found to have breast cancer (invasive or in situ) after diagnostic workup	≥ 5% (initial screen) ≥ 6% (rescreen)
8 Benign to Malignant Open Biopsy Ratio	Among open biopsies, the ratio of number of benign cases to the number of malignant cancer cases	≤ 2:1 open (initial and rescreen combined)
9 Invasive Cancer Tumour Size	Percentage of invasive cancers with tumour size of <10 mm in greatest diameter as determined by the best available evidence: 1) pathological, 2) radiological, 3) clinical	> 25% < 10 mm
10 Positive Lymph Nodes in Cases of Invasive Cancer	Proportion of invasive cancers in which the cancer has invaded the lymph nodes	< 30% node positive
11 Post-screen Detected Invasive Cancer Rate	Number of women with a diagnosis of invasive breast cancer after a negative screening episode per 10,000 person-years at risk, within 12 AND 24 months of the screen date.	< 6 per 10,000 person-years (within 12 months) < 12 per 10,000 person-years (within 24 months)

Note:

† Canadian targets obtained by consensus and based on evidence supported by literature

Reference:

Health Canada. *Quality Determinants of Organized Breast Screening Programs in Canada*. Ottawa: Minister of Public Works and Government Services Canada, 2003. Page 68. www.healthcanada.ca

Appendix 2 – OBSP Staff Directory

As of March 31, 2003

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Sylvia Shedden (Resigned Feb 2003)

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Radiologist-in-Chief

Dr. Rene Shumak

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London Screening Centre for Women
339 Talbot Street, London ON N6A 2R5

Tel 519 432-6016 ext 219 **Fax** 519 432-0271

Consultant Pathologist

Dr. Frances O'Malley
Mount Sinai Hospital
600 University Avenue, 6th Floor
Toronto ON M5G 1X5

Tel 416 586-4548 **Fax** 416 586-8628

Appendix 3 – Regional Centres

As of March 31, 2003

Central East Region

10 Milner Business Court, Suite 204
Scarborough, Ontario M1B 3C6

Tel 416 298-1453 Fax 416 298-7470

Regional Administrator	Susan Fekete
Medical Coordinator	Dr. Bart Harvey
Radiology Coordinators	Dr. Eve Fishell Dr. Rene Shumak

Central West Region

Sir William Osler Health Institute
565 Sanatorium Road, Suite 207
Hamilton, Ontario L9C 7N4

Tel 905 389-0300 Fax 905 389-5278

Regional Administrator	Teresa McPhail
Medical Coordinator	Dr. Gillian Howarth
Radiology Coordinator	Dr. Slobodan Franic

Eastern Region

Hampton Park Plaza
1419 Carling Avenue, Suite 214 (2nd Floor)
Ottawa, Ontario K1Z 7L6

Tel 613 728-6508 Fax 613 728-6333

Regional Administrator	Suzie Joannis
Medical Coordinator	Dr. Vincent Young
Radiology Coordinator	Dr. Gérard Collin

Northeast Region

4 Walford Road
Sudbury, Ontario P3E 2H4

Tel 705 675-2294 Fax 705 675-2637

Regional Administrator	Carolyn Jackson
Medical Coordinator	Dr. Amanda Hey
Radiology Coordinator	Dr. Rick Sloan

Northwest Region

68 North Algoma Street
Thunder Bay, Ontario P7A 4Z3

Tel 807 343-1690 Fax 807 345-6602

Regional Administrator	Heather Woodbeck
Medical Coordinator	vacant
Radiology Coordinator	Dr. Donald Henderson

South Region

1275 Walker Road, Unit 10
Windsor, Ontario N8Y 4X9

Tel 519 253-1179 Fax 519 253-0734

Regional Administrator	Lynn Chappell
Medical Coordinator	Dr. John Shaw
Radiology Coordinator	Dr. Winston Ramsewak

Southwest Region

339 Talbot Street
London, Ontario N6A 2R5

Tel 519 432-6016 Fax 519 432-0271

Regional Administrator	Lynn Chappell
Medical Coordinator	Dr. Paul Ferner
Radiology Coordinators	Dr. Lauren McCurdy Dr. Keith Sparrow

Southeast Region

786 Blackburn Mews
Kingston, Ontario K7P 2N7

Tel 613 384-4284 Fax 613 384-8645

Regional Administrator	Brenda Bass
Medical Coordinator	Dr. Diane Pross
Radiology Coordinator	Dr. Bryan Pearse

Appendix 4 – OBSP Committees

As of March 31, 2003

OBSP Strategic Management Committee

Association of Local Public Health Agencies

Dr. Elizabeth Richardson /Maureen Harmer (alternate)

Breast Cancer Action

Joan Sirrs

Canadian Breast Cancer Foundation, Ontario Chapter

Sharon Wood

Canadian Cancer Society, Ontario Division

Patti Payne

Cancer Care Ontario

Dr. Verna Mai, (Chair)

Director, Screening Programs

Wendy Bell

Preventive Oncology Network, Northwestern CCOR

Raylene Godel

Preventive Oncology Committee of the Board

Ontario Association of Radiologists

Dr. George Lougheed

Dr. Lori Moore

Dr. Giuseppe Tarulli

Ontario Breast Screening Program

Lynn Chappell

Acting, Provincial Administrator

Dr. Diane Pross /Dr. Paul Ferner

Medical Coordinator (alternate)

Dr. Rene Shumak

Radiologist-in-Chief

Ontario College of Family Physicians

Dr. Jamie Meuser

Ontario Medical Association

Dr. Margaret Collins

Patient/Survivor Representatives

Ann Grant

Triena Huneault

Mary Lalonde

Heather Lyons

The purpose of the OBSP Strategic Management Committee is to provide overall guidance to the Director of Screening Programs at Cancer Care Ontario on the strategic management of the OBSP. Specific responsibilities of the Committee include:

- To set the direction of the Program in order to deliver a quality assured breast screening program across the province.
- To develop and direct program policies in accordance with the mandate of Cancer Care Ontario and the delivery of CCO programs at the regional CCOR level.
- To evaluate the monitored outcomes of the Program with a view to continuous improvement in the quality and efficiency of breast cancer screening in the province.

The Committee meets quarterly and is chaired by the Director of Screening Programs at Cancer Care Ontario. Membership includes: One Representative from each of Canadian Breast Cancer Foundation, Canadian Cancer Society (Ontario Division), Ontario Medical Association, Ontario College of Family Physicians, CCO Preventive Oncology Board, Public Health; two representatives of CCOR preventive oncology networks; three representatives from the Ontario Association of Radiologists; four patient/survivor representatives; and one representative of each of OBSP medical staff, radiologists and administration.

Appendix 4 – OBSP Committees

As of March 31, 2003

Research Committee

Cancer Care Ontario

Dr. Anna Chiarelli

Scientist, Screening Unit

Dr. Verna Mai

Director, Screening Programs

Dr. Larry Paszat

Director, Preventive Oncology Program TSRCC

Ontario Breast Screening Program

Brenda Bass

Regional Administrator

Dr. Gérard Collin

Radiology Coordinator

Dr. Bart Harvey

Medical Coordinator

Dr. Frances O'Malley

Consultant Pathologist

Dr. Rene Shumak

Radiologist-in-Chief

Dr. Martin Yaffe

Physics Consultant

Nada Malek

Research Clerk

Ontario Cancer Institute

Dr. Norman Boyd

Head, Division of Epidemiology and Statistics (Chair)

Patient/Survivor Representatives

Heather Resnick

Ginny Weston

The purpose of the OBSP Research Committee is to provide overall guidance and advice to the OBSP on research activities involving Program data or clients. Specifically, the Committee develops and reviews key research policies and protocols, ensures that there is a standardized review of proposals, identifies research and Program evaluation priorities, monitors the progress of research projects and monitors and/or approves all manuscripts or reports prior to submission.

The Committee is chaired by the Head of the Division of Epidemiology and Statistics, Ontario Cancer Institute. Its membership includes the Director, Screening Programs, three regional OBSP representatives, the Radiologist-in-Chief of the OBSP, Scientist(s) for the Screening Unit, faculty members of the University of Toronto and community representatives.

The Committee meets quarterly or as often as necessary to review research proposals and policies, to monitor the progress of research projects and to identify research priority areas for the OBSP. The Committee is also available to provide guidance in the preparation of proposals and/or manuscripts pertaining to OBSP research projects.

Appendix 4 – OBSP Committees

As of March 31, 2003

Ontario Breast Assessment Collaborative Group

Cancer Care Ontario

Dr. Verna Mai (Chair)

Dr. Margaret Fitch

Canadian Association of Pathologists

Dr. Frances O'Malley

Canadian Breast Cancer Foundation, Ontario Chapter

Sharon Wood, Executive Director

Canadian Cancer Society, Ontario Division

Patricia Payne, Manager, Program Development

Canadian Surgical Society of Oncology

Dr. Douglas Mirsky

College of Physicians and Surgeons of Ontario

Dr. Daniel Klass

Institute for Clinical Evaluative Sciences

Dr. Susan Bondy

Ontario Association of General Surgeons

Dr. Robert Mackenzie (Advisory to Group)

Ontario Association of Medical Radiation Technologists

(New Rep. to be appointed)

Ontario Association of Pathologists

Dr. Sandip Sengupta, President

Ontario Association of Radiologists

Dr. Lauren McCurdy

Ontario Breast Screening Program

Lynn Chappell, Acting Provincial Administrator

Dr. Rene Shumak, Radiologist-in-Chief

Ontario College of Family Physicians

Dr. Ruth Heisey

Ontario Hospital Association

Dr. Elizabeth Carlton

Ontario Medical Association

Dr. Margaret Collins

Ontario Medical Association – Section on Rural Practices

Dr. Ian Shiozaki

Ontario Public Health Association

Judith Cousins

Community Breast Assessment Development

Dr. Diane Pross, Kingston

Carole Mayer, Sudbury

Jane Warner, Kingston

Dr. David Williams, Thunder Bay

Patient/Survivor Representative

Heather Campeau

The Ontario Breast Assessment Collaborative Group (OBACG) identifies and brings together providers and consumers involved in breast assessment. This is in order that their roles can be understood as well as their perceptions on the gaps in service provision and opportunities for improvements. Specific goals and objectives of the OBACG include:

- To act as a forum for discussion of models and components of breast assessment needed in Ontario in order to provide equal access, quality of service and minimize duplication.
- To ensure communication and be a source of information about breast assessment to professional groups, consumer groups as well to CCO committees provincially and regionally.
- To set and advocate for the acceptance of breast assessment standards.
- To monitor and evaluate quality indicators of the breast assessment process.

The OBACG meets quarterly and is chaired by the Director of Screening Programs at Cancer Care Ontario.





**The Ontario Breast Screening Program
Provincial Office is located at Cancer Care Ontario
620 University Avenue, 11th Floor, Toronto, Ontario M5G 2L7**

For more information call 416 971 9800 ext 1104

For appointments call 1 800 668 9304

www.cancercare.on.ca



ontario breast
screening program
a cancer care ontario program

programme ontarien de dépistage
du cancer du sein
un programme de action cancer ontario