



wrong. We want to streamline things for everyone involved, provide quality assurance and give the doctor back all the information we get. The doctor absolutely continues with the care of the patient.”

She insisted that doctors need to learn about and understand the benefits of organized screening. “A main benefit is quality control, which is very standardized and closely monitored inside the programs. We are able — through training and testing — to ensure the best possible mammogram and the highest degree of skill in reading it.”

The programs, which cost up to \$6 million a year to run, are also specially organized to track and recall patients, so that recalls are automatic. “Screening once in a while or once in a lifetime is not going to reduce a woman’s mortality risk,” she said. “Screening has to be done every 2 years, as a regular part of health care.”

The centralized programs do provide for more thorough data collection. The Canadian Breast Cancer Screening Database (CBCSD), established in 1993 in response to the growing desire to compare and contrast data from different programs, has already revealed some interesting national trends.



Dr. Heather Bryant: screening programs at different stages of development

For example, in its preliminary report — produced in collaboration with the NCCBCSI, Health Canada, 7 provincial screening programs and the Yukon Mammography Program — CBCSD documents the 1994–95 recruitment success of programs in British Columbia, Alberta, Saskatchewan, Ontario and Nova Scotia. Only Saskatchewan screened more than half its targeted population (53%), while Ontario screened only 10%, or 47 540 women. The goal of most programs is to screen 70% of the target population; goals aren’t set higher because of problems related to geography and resources.

“The breast-screening programs are at very different stages of development,” said Dr. Heather Bryant, chair of NCCBCSI and director of the Division of Epidemiology, Prevention and Screening of the Alberta Cancer Board. “Some of them, like British Columbia’s, are quite well established.

Others have just started up, and programs in Quebec and Prince Edward Island are planned and will start up soon. Some programs have more experience than others in mobile delivery, for example, or in recruiting hard-to-reach

Education, testing crucial for successful mammography screeners

Introducing better ways to test and train radiologists in mammography remains an ongoing challenge, but 2 promising projects were demonstrated during the recent National Workshop on Organized Breast Cancer Screening Programs in Ottawa.

Cupido Daniels, a professor of radiology at Dalhousie University and head of the Diagnostic Medical Physics Division at the Queen Elizabeth II Health Sciences Centre in Halifax, has developed a series of radiology CD-ROMs, including one entitled *Fundamentals of Breast Imaging*. “This is the only one of its kind in Canada,” he said in an interview, “and I have had excellent feedback on it.”

The computer program provides instruction on several related topics, including epidemiology, reading a mammogram, quality assurance, pathology, male breasts and case studies. It allows students to learn at their own pace and does not take limited teaching time away from clinical staff. The CD-ROM is now available commercially.

Dr. Paula Gordon, a radiologist with British Colum-

bia’s Screening Mammography Program, demonstrated that program’s standardized mammography reading test for screeners. “No other province has this test,” she said. “To work in our program, a radiologist must be reading a minimum number of mammograms per week, and pass this test.”

Comprising a mixture of 100 actual breast films, the test requires doctors to distinguish healthy tissue, cancerous tissue and abnormal benign tumours. “The test is designed to measure a radiologist’s sensitivity — the ability to find cancer when it is present — and specificity — the ability to read the film accurately,” explained Gordon. “If you read 100 films and recall all 100 women, your sensitivity is considered very high because you have not missed any cancers. But you have caused enormous anxiety in all the healthy women, so your specificity is zero. You want to keep your call back rate as low as possible.”

To pass the test, radiologists’ sensitivity score must be above 85%, and specificity above 65%.