

Breast and Cervical Cancer Early Detection Program Report

New York State Department of Health Cancer Services Program

Program Year 2012-2013

TABLE OF CONTENTS

| EXECUTIVE SUMMARY | | |
|---------------------|----------------------|----|
| PROGRAM DESCRIPTION | | 2 |
| \Diamond | Overview | 2 |
| \Diamond | Eligibility Criteria | 2 |
| \Diamond | Case Management | 3 |
| \Diamond | Quality Assurance | 3 |
| PROGRAM OUTCOMES | | 4 |
| CONCLUSION | | 10 |

Additional and related information is available from the New York State Department of Health (NYSDOH) at: http://www.health.ny.gov/cancerservicesprogram

Persons interested in obtaining additional information about this report should contact the NYSDOH Cancer Services Program at:

Bureau of Chronic Disease Control New York State Department of Health Riverview Center, Room 350 Albany, NY 12204-0678

Telephone: (518) 474-1222

Fax: (518) 473-0642

Email: canserv@health.ny.gov

Persons interested in locating the Cancer Services Program in their area should call the toll-free Referral Line at 1-866-442-CANCER (2262).

EXECUTIVE SUMMARY

The New York State Department of Health Cancer Services Program (CSP) facilitates access to breast and cervical cancer screening and diagnostic services for uninsured and underinsured women in New York State (NYS) and promotes awareness about and access to cancer screening for all New Yorkers. This work is conducted through a network of contractors that conduct public education and targeted outreach to enroll eligible New Yorkers into the program for receipt of services. The contractors enter into agreements with health care providers and clinical laboratories in their service areas for the provision of breast, cervical and colorectal cancer screening and diagnostic services.

Approximately 15,000 women are newly diagnosed with breast cancer and nearly 2,700 die from the disease annually in NYS.¹ Cervical cancer is diagnosed in about 900 women in NYS each year and nearly 270 women die from the disease annually.¹ An increase in timely, age-appropriate screening could prevent many of these deaths by detecting cancer early when it is most treatable.

From April 1, 2012 through March 31, 2013, nearly 45,000 eligible women were screened for cancer with approximately 43,000 mammograms, 39,000 clinical breast exams and over 15,000 Papanicolaou (Pap) tests. Over the course of this same 12-month period, the CSP identified 429 individuals with breast cancer, 15 with cervical cancer and 261 with precancerous cervical dysplasia. A total of 706 clients were enrolled in the Medicaid Cancer Treatment Program for breast or cervical cancer treatment.

Mammograms and the Pap test are highly effective cancer screening tools, but are underused by some subsets of the population. A disproportionate number of deaths from breast and cervical cancer occur among women who are uninsured and underinsured, geographically and culturally isolated, older, or medically underserved and women of racial, ethnic and cultural minorities.² The goal of the CSP is to improve access to and utilization of screening services for these underserved populations while improving the quality of care received by all women in NYS.

This report provides a summary of the breast and cervical cancer early detection and diagnostic services offered to eligible clients by CSP contractors for the period from April 1, 2012 through March 31, 2013 (program year 2012-2013). At that time, there were 41 CSP contractors with agreements with 5,626 health care providers, facilities and clinical laboratories, providing screening services in every NYS County and New York City borough.

¹ New York State Cancer Registry, 2014. *Cancer Incidence and Mortality for New York State, 2007-2012*. http://www.health.ny.gov/statistics/cancer/registry/vol1/v1rnys.htm

² National Cancer Institute, 2008. *National Cancer Institute Cancer Fact Sheets: Cancer Health Disparities*. http://www.cancer.gov/cancertopics/factsheet/disparities/cancer-health-disparities

PROGRAM DESCRIPTION

OVERVIEW

The New York State Department of Health (NYSDOH) Cancer Services Program (CSP) oversees the delivery of comprehensive breast, cervical and colorectal cancer screening and diagnostic services to eligible uninsured and underinsured individuals in NYS through local screening program contractors. CSP contractors develop relationships with regional providers (e.g., hospitals, clinics, health care providers) and community-based organizations to conduct outreach to priority populations; provide screening, diagnostic and case management services; provide public education; and conduct data management and quality assurance. CSP contractors and their partners also assist individuals diagnosed with breast, cervical, colorectal or prostate cancer to obtain prompt, comprehensive treatment through the NYS Medicaid Cancer Treatment Program (MCTP), if eligible. Eligible individuals may receive full Medicaid coverage for the duration of their cancer treatment. The NYSDOH does not support routine population-based screening for prostate cancer. However, men screened and/or diagnosed with prostate cancer through participating providers are eligible for treatment coverage through the MCTP. Starting in 2013, CSP contractors also educate clients about the New York State of Health and use referral systems to local in-person assistors and navigators to facilitate enrollment in public health insurance programs or qualified health plans.

During program year 2012-2013, the CSP had a combined state and federal budget of approximately \$26.7 million for all facets of the program, which included support for staffing and other infrastructure costs, provision of screening, diagnostic, and case management services, and surveillance and data management. The CSP receives federal funds from the Centers for Disease Control and Prevention (CDC) for breast and cervical cancer screening as part of the National Breast and Cervical Cancer Early Detection Program (NBCCEDP).

ELIGIBILITY CRITERIA

In order to access the screening, diagnostic and case management services available through the CSP, individuals must meet program eligibility criteria. The CSP eligibility criteria include women who are 40 years of age or older, uninsured or underinsured (defined as those financially unable to meet their copayments or deductibles or whose insurance does not provide coverage for breast and/or cervical cancer screenings) and whose household incomes are at or below 250 percent of the federal poverty level (FPL). Women with household incomes above 250 percent of the FPL who meet all other eligibility criteria are also eligible for services if they are unable to afford cancer screenings. Women ages 40 and older are eligible for clinical breast exams, annual mammograms, Pap tests and any associated diagnostic testing. Women ages 18-39 years who are deemed at high-risk for, or who have clinically significant findings for, breast cancer are eligible for appropriate mammography or other diagnostic testing. Multiple factors determine a woman's risk for breast cancer, including, but not limited to, a personal or family history of breast, ovarian and other cancers, the age at which a family member was

diagnosed with a particular cancer, or a personal history of chest irradiation for treatment of lymphoma during adolescence or young adulthood.

While CSP eligibility for breast cancer screening includes women between the ages of 40-49, the CSP priority population is women between the ages of 50-64. A focus on this population is supported by the CDC and recognizes that the risk of breast cancer increases with increasing age.

Women diagnosed with breast or cervical cancer or pre-cancerous conditions through the CSP and who meet Medicaid eligibility criteria are encouraged to apply for full Medicaid coverage for the duration of their cancer treatment through the NYS MCTP.

CASE MANAGEMENT

Case management has been an integral part of the CSP since the federal legislation for the NBCCEDP was reauthorized to include this component in 1998. Clients found to have abnormal screenings are provided with case management services to ensure that they receive timely diagnosis, appropriate follow-up care and access to necessary treatment.

Case management increases client adherence to screening, diagnostic and treatment services, and ensures clients receive support to obtain needed services. The CSP requires that a direct, personal level of support be available to assist clients to address barriers that might delay or prevent their care. Barriers to care include transportation, lack of child or elder care, language and cultural barriers, fear and misunderstanding of clinical recommendations and psychosocial issues related to the emotional burden of cancer.

QUALITY ASSURANCE

In 1998, the CSP began monitoring clinical performance and outcomes among providers offering clinical services through the program to ensure that women receive quality clinical services. These quality assurance (QA) efforts have since become a model recognized by the CDC; many other states have adopted similar QA activities.

In program year 2012-2013, the CSP QA team reviewed data from over 5,000 CSP providers to identify facilities that reported either a very low or a very high number of abnormal mammograms, clinical breast exams (CBEs) and Pap tests. The proportion of breast biopsies that are positive for cancer, the timeliness of follow-up for breast or cervical abnormalities detected upon screening and adherence to established clinical algorithms for abnormal findings were also reviewed. The CSP QA team collaborates with contractors and providers to determine reasons for any unusual data patterns. The findings may require a more extensive review, including review of medical records, and may result in the development of a corrective action plan. The quality improvement activities developed as part of these corrective action plans potentially reach beyond those women enrolled in the CSP; improvements in technique or processes benefit both uninsured and insured women served by these providers. The CSP QA activities not only result in improved quality of clinical care, but also help raise awareness of CSP goals, increase participation by the providers and facilities and improve access for clients.

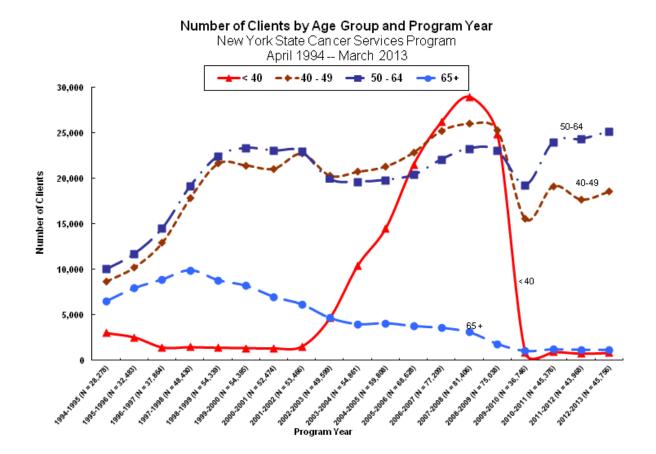
PROGRAM OUTCOMES

This section summarizes the breast and cervical cancer screening and diagnostic services provided through the CSP, screening test results and final diagnoses determined for program year 2012-2013.

WOMEN SCREENED THROUGH THE CANCER SERVICES PROGRAM

The number of women screened for breast and/or cervical cancer through the CSP has increased, overall, since the program's inception in 1994 (Figure 1). The total number of women screened reached a high of over 81,000 in the 2007-2008 program year, but has since declined due to refinement of program eligibility criteria. Since implementation of new program eligibility in 2010, the number of women increased by over 8,000 between the 2009-2010 and the 2010-2011 program years. In the 2011-2012 program year, the total number of women screened declined by 1,400 compared to the 2010-2011 program year, but increased again in the 2012-2013 program year by over 1,700 clients. Among women ages 50 to 64, there has been an increase each year since the change in the program eligibility, reflecting the greater emphasis on the priority population of women 50 to 64 years of age.

Figure 1



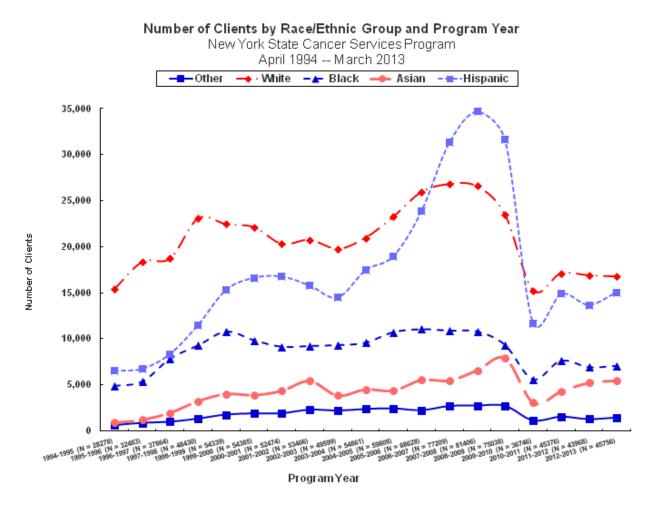
Changes in eligibility criteria for the program can explain most of the variation seen within age-specific groups of women across the 19 program years. The initial increase among younger women was due to the expansion of the number of women 18 to 39 years of age served by the program. A sharp decline in this age group occurred in the 2009-2010 program year when the eligibility criteria for the program changed again to focus recruitment on the priority population of women 50 to 64 years of age. The gradual decrease in women ages 65 and older was due to changes in Medicare Part B coverage in January 1998 to include annual mammograms and the increased focus on the priority population of women 50 to 64 years of age.

Several other factors contributed to the changes in the number of women screened since the 2007-2008 program year. A series of QA activities identified two large CSP contractors that were misinterpreting program eligibility criteria and screening clients who were not eligible for CSP services. Subsequent to this review, there was a notable decrease in the number of clients screened by these contractors. In addition, there was a loss of several higher volume providers in New York City (NYC) and Suffolk County, some of whom screened a primarily younger population of women who were no longer eligible under the new criteria. The increase in the number of women ages 50 to 64 years of age in the past three program years reflects the progress made by CSP contractors to recruit new women into the program for cervical cancer screening and to focus more fully on the priority age group of 50 to 64 year olds.

The number of women ages 40 to 64 screened through the CSP represented 19.5 percent (45,756/235,227) of the estimated eligible population of women ages 40 to 64 who are uninsured and at or below 250 percent of FPL in NYS for the 2012-2013 program year (data source for eligible population: U.S. Census, Small Area Health Insurance Estimates, 2012). The percent of the eligible population screened was 20.7 percent (25,165/121,448) for those ages 50 to 64 for the 2012-2013 program year.

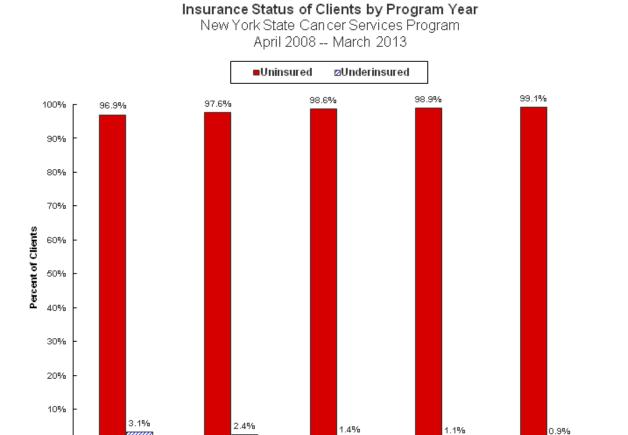
The racial and ethnic distribution of women screened through the CSP is shown in Figure 2. In the 2012-2013 program year, 15.4 percent of women screened identified themselves as Black, 12.0 percent identified as Asian and 36.6 percent identified as white. The percent of Hispanic women screened through the CSP increased dramatically to 42.6 percent in the 2007-2008 program year, but has since declined to 32.9 percent of women screened in the 2012-2013 program year. The initial increase and subsequent decrease in the number of Hispanic women screened through the program follows the trend in the number of women ages 18 to 39 years screened, reflecting the large proportion of younger women represented among the Hispanic clients.

Figure 2



The CSP screens women who are either uninsured or underinsured, however, the vast majority of the women screened through the program are uninsured (Figure 3). In the 2012-2013 program year, 99.1 percent of women screened were uninsured; this percentage increased over the past five program years.

Figure 3



2010-2011

Program Year

2009-2010

2011-2012

2012-2013

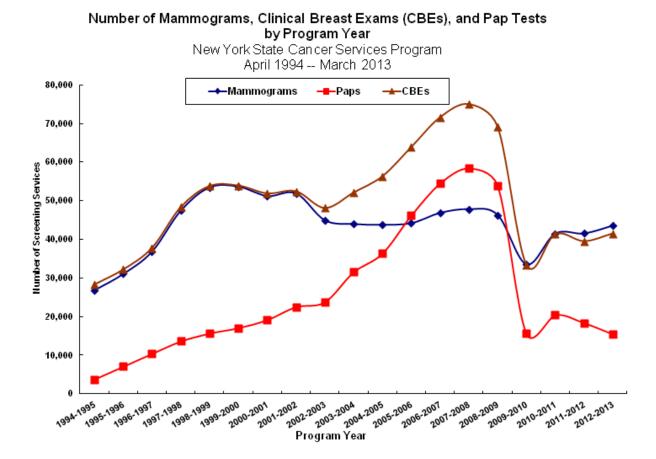
0%

2008-2009

BREAST AND CERVICAL CANCER SCREENING SERVICES

The CSP provided over 830,000 mammograms, over 950,000 clinical breast exams (CBEs) and nearly 484,000 Pap tests to low income, uninsured and underinsured women between the 1994-1995 and 2012-2013 program years (Figure 4). In the 2012-2013 program year, approximately 43,000 mammograms, 41,000 CBEs and 15,000 Pap tests were provided.

Figure 4



The CSP provides screening mammograms to women ages 40 and older, but identifies women ages 50 years and older as a high priority group for mammography screening due to increased breast cancer incidence in this age group. The program goal for this measure is to provide at least 75 percent of screening mammograms to women ages 50 years and older. In the 2012-2013 program year, 58.9 percent of women who received screening mammograms were ages 50 years or older. Another priority for the CSP is to provide Pap tests to women who are rarely (screened more than 5 years ago) or never screened for cervical cancer. The program goal is to provide at least 20 percent of initial Pap tests to women rarely or never screened for cervical cancer. In the 2012-2013 program year, 30.1 percent of initial Pap tests provided through the CSP were for women who were rarely or never screened.

BREAST CANCER SCREENING RESULTS

An abnormal CBE result is defined as having a mass or other finding in the breast. Figure 5 illustrates the age-specific percentages of abnormal CBEs in the 2012-2013 program year. Overall, the percentage of abnormal CBEs among all clients screened in the program was 8.3 percent for the 2012-2013 program year, but was 95% among clients under 40 years of age This is explained, in part, by the fact that, beginning in 2009, clients ages 18 to 39 years old were only eligible to receive breast cancer screening through the CSP if they were at increased risk or symptomatic for breast cancer.

Figure 5

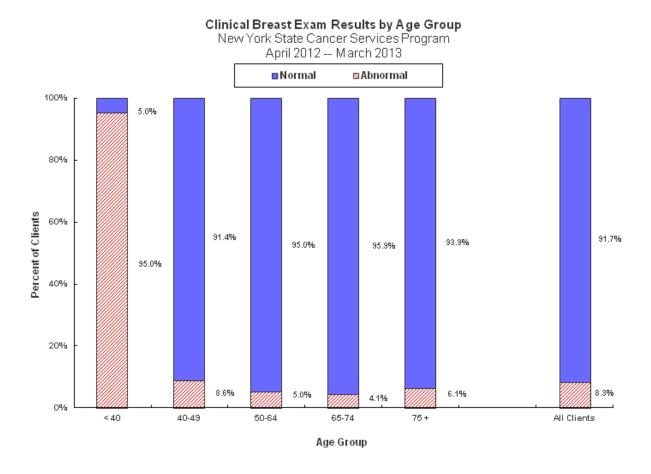
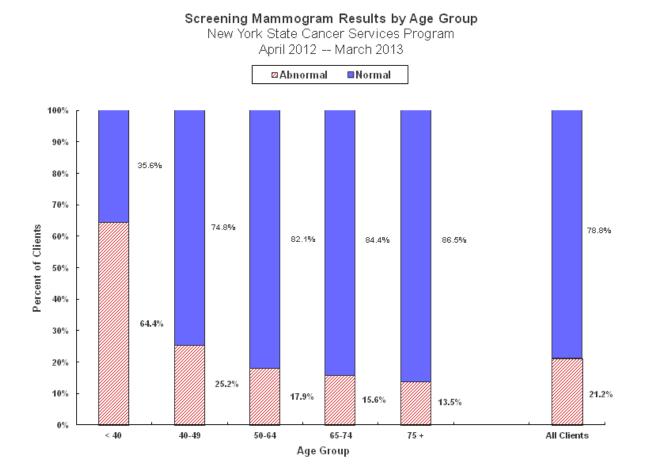


Figure 6 illustrates the age-specific percentages of abnormal screening mammograms in the 2012-2013 program year. Abnormal screening mammograms include those with results of "assessment incomplete", "suspicious abnormality" or "highly suggestive of malignancy." Overall, the percentage of abnormal mammograms among all clients screened in the program was 21.2 percent during the 2012-2013 program year. The percent of abnormal mammograms varies by age, decreasing with increasing age. Younger women had approximately four times as many abnormal findings as women ages 75 years and older. This may be due, in part, to the fact that women less than 40 years of age are eligible to receive a mammogram through the CSP only if they are at increased risk or are symptomatic for breast cancer.

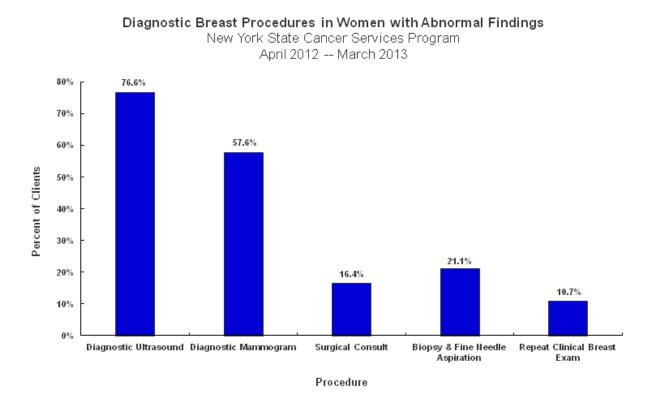
Figure 6



BREAST CANCER SCREENING DIAGNOSTIC FOLLOW-UP

Women with abnormal findings on breast screenings (either CBEs or screening mammograms) are referred for diagnostic services. The program goal for this measure is to provide timely diagnostic follow-up (defined as a final diagnosis determination within 60 days of the date of screening) for at least 75 percent of abnormal breast screenings. During the 2012-2013 program year, 84.2 percent of abnormal breast cancer screenings had timely follow-up. Figure 7 illustrates the most common diagnostic procedures provided through the CSP to women with abnormal breast cancer screenings. During the 2012-2013 program year, 76.6 percent of women with abnormal findings received ultrasounds and 57.6 percent received diagnostic mammograms.

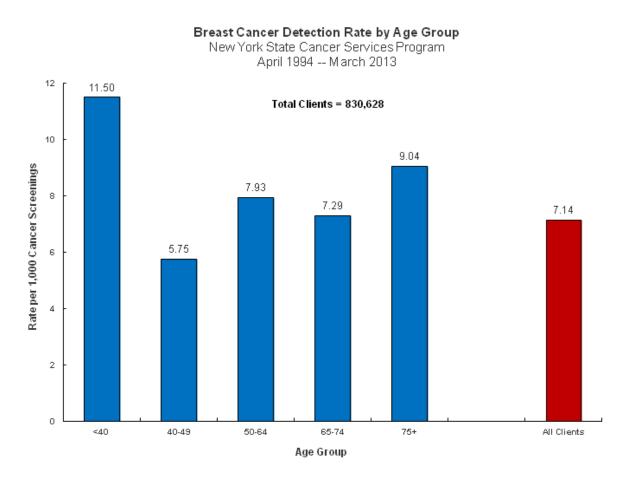
Figure 7



BREAST CANCER DETECTION

During the 2012-2013 program year, a total of 409 cases of breast cancer, including invasive breast cancer, Lobular Carcinoma in Situ (LCIS), Ductal Carcinoma in Situ (DCIS) and all other Carcinoma in Situ, were diagnosed through the CSP, representing an overall breast cancer detection rate of 9.4 cases per 1,000 clients screened through the program. Figure 8 shows how the detection rate for breast cancer varies by age for cases diagnosed between the 1994-1995 and 2012-2013 program years; rates were highest among the youngest and oldest age groups. The relatively high detection rate of breast cancer among women under age 40 can be explained, in part, by the program's eligibility criteria which allow women under age 40 to receive mammograms through the CSP only if they are at increased risk or symptomatic for breast cancer. The higher detection rate for breast cancer among the older age group is consistent with the increasing incidence of breast cancer with age in the general population, with the highest incidence in women 75-79 years of age (New York State Cancer Registry, 2007-2011).

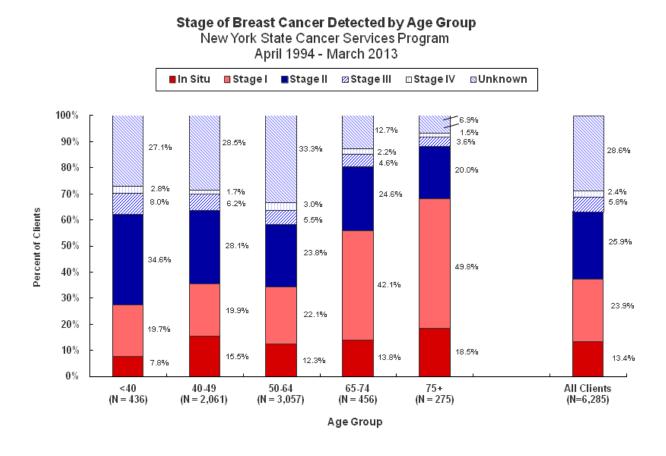
Figure 8



Identification of breast cancer at an early stage when it is most treatable and the survival rate is more favorable is a primary goal of the CSP. Overall, the percent of clients diagnosed with breast cancer at early stages (in situ or Stage I) was 37.3 percent between the 1994-1995 and 2012-2013 program years

(Figure 9). The percentage of early stage diagnosis increases with age. The lower percent of early stage disease in younger women may again be associated with the CSP eligibility criteria, which allow women under age 40 to have screening mammograms only if they are considered to be at increased risk for breast cancer.

Figure 9

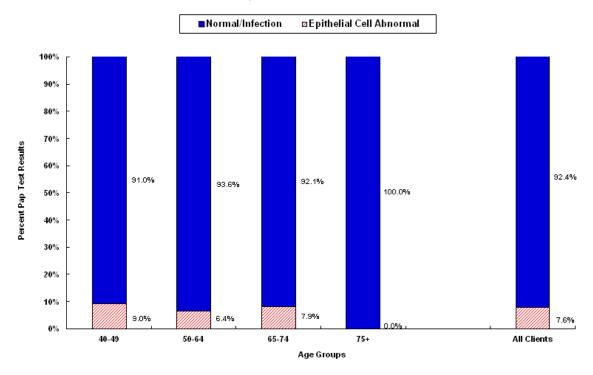


CERVICAL CANCER SCREENING RESULTS

The percentage of abnormal Pap test results among all women screened by the CSP was 7.6 percent for the 2012-2013 program year. Abnormal Pap test results can include any of the following: atypical squamous cells of undetermined significance (ASC-US), low-grade squamous intraepithelial lesions (LSIL) including human papillomavirus (HPV) changes, high-grade squamous intraepithelial lesions (HSIL), atypical squamous cells of undetermined significance - cannot exclude HSIL (ASC-H), atypical glandular cells – all subcategories (AGC), squamous cell cancer or other. Figure 10 illustrates how the percentage of abnormal Pap test results varied with age in the 2012-2013 program year. The youngest women and women ages 65 to 74 years were slightly more likely to have abnormal findings than women ages 50 to 64 years .

Figure 10



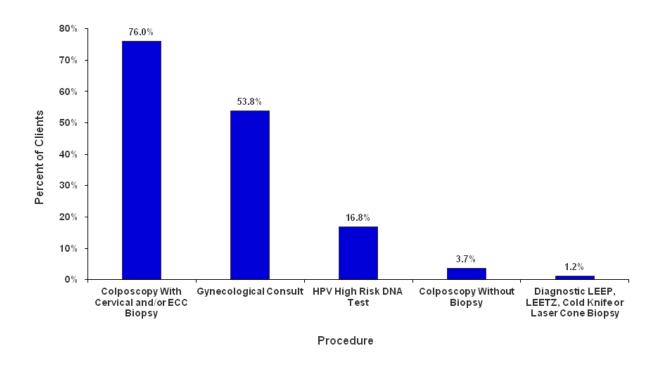


CERVICAL CANCER DIAGNOSTIC FOLLOW-UP

Women with abnormal Pap tests are referred to diagnostic services. The program goal for this measure is to provide timely diagnostic follow-up (defined as a final diagnosis determination within 90 days of the date of screening) for at least 75 percent of the abnormal cervical cancer screenings provided through the CSP. During the 2012-2013 program year, 83.4 percent of abnormal cervical cancer screenings had timely follow-up. Figure 11 illustrates the most common diagnostic procedures provided for women with abnormal cervical cancer screenings. In the 2012-2013 program year, 76.0 percent of women who had abnormal cervical cancer screenings had colposcopies with biopsies, and 53.8 percent had gynecological consults.

Figure 11

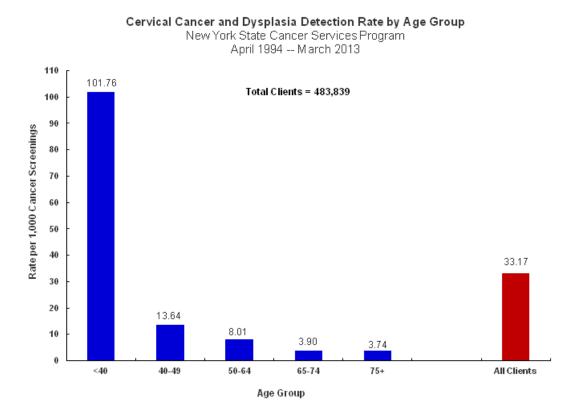
Diagnostic Cervical Procedures in Women with Abnormal Findings New York State Cancer Services Program April 2012 -- March 2013



CERVICAL CANCER AND DYSPLASIA DETECTION

In the 2012-2013 program year, a total of 14 cases of invasive cervical cancer and 259 cases of cervical intraepithelial neoplasia (CIN) were diagnosed through the CSP. The overall rate of invasive cervical cancer and dysplasia (defined as CIN I or worse [including CIN I, CIN II, CIN III - carcinoma in situ]) per 1,000 women screened in the program was 17.6 for the 2012-2013 program year. Figure 12 shows how the detection rates of cervical cancer and dysplasia vary by age for cases diagnosed between the 1994-1995 and 2012-2013 program years. The high detection rate for women under age 40 may be due, in part, to patterns of enrollment prior to the 2009-2010 program year, where younger women with abnormal Pap tests were more likely to be enrolled in the CSP for additional follow-up.

Figure 12

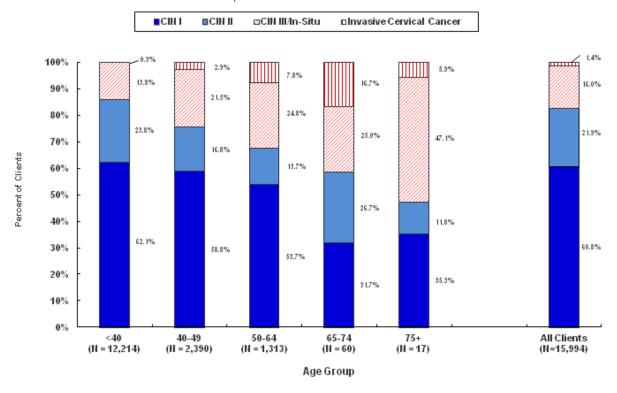


The percent of clients diagnosed with invasive cervical cancer is very small. Less than two percent of abnormal Pap tests were determined to be invasive cervical cancer during the period between the 1994-1995 and 2012-2013 program years (Figure 13). The higher detection rate of invasive cervical cancer in women 65 to 74 years of age is consistent with the incidence of cervical cancer in the general population, where incidence generally increases with age and the highest incidence is in women 65-69 years of age (New York State Cancer Registry, 2007-2011). As noted above, the higher number of precancerous cases in younger women may be due, in part, to patterns of enrollment prior to the 2009-2010 program year, where younger women with abnormal Pap tests were more likely to be enrolled in the CSP for additional follow-up.

Figure 13

Cervical Cancer and Dysplasia by Age Group

New York State Cancer Services Program
April 1994 - March 2013



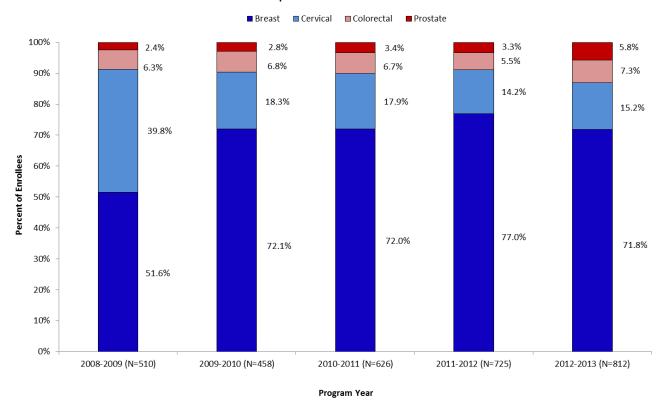
CANCER TREATMENT: MEDICAID CANCER TREATMENT PROGRAM (MCTP)

The CSP actively recruits eligible clients diagnosed with cancer or precancerous conditions for enrollment in the MCTP, with a program goal for this measure of at least 90 percent of eligible clients enrolled. During the 2012-2013 program year, 97.0 percent of MCTP-eligible women diagnosed with breast or cervical cancers or precancerous conditions through the CSP were enrolled in the MCTP. Figure 14 presents the number of enrollees in the MCTP by type of cancer and program year. In the 2012-2013 program year, the overall number of MCTP enrollees (n=812) increased compared to the previous years. The percentage of enrollees with a diagnosis of breast cancer was 71.8 percent (n=583), while the percentage with a diagnosis of cervical cancer or precancerous cervical dysplasia was 15.2 percent (n=123). The number of enrollees with a diagnosis of breast cancer has generally increased over the past 5 years, which is likely explained by the increased focus on the priority population of women ages 50 to 64.

Figure 14

Medicaid Cancer Treatment Program Enrollees By Type of Cancer

New York State Cancer Services Program April 2008- March 2013



In addition to new enrollees in the MCTP, eligible clients are also recertified for additional years of coverage. About half of clients are recertified for a second year of coverage, approximately one-third are enrolled for a third year, 20 percent for a fourth year and less than 10 percent for a fifth year of MCTP coverage. Applications for enrollment are processed quickly; on average, final determinations of eligibility for coverage are provided within four to six days.

CONCLUSION

During the 2012-2013 program year, over 5,000 providers and health care facilities offered breast and cervical cancer screening and diagnostic services through the CSP. Nearly 45,000 women were screened for cancer with nearly 43,000 mammograms, nearly 39,000 CBEs and over 15,000 Pap tests. Over the course of the 2012-2013 program year, the CSP identified 429 breast cancer cases, 15 cervical cancer cases and 261 precancerous cervical dysplasia cases. A total of 706 clients were enrolled in the MCTP for breast or cervical cancer treatment.