WEST VIRGINIA BREAST AND CERVICAL CANCER SCREENING

FISCAL YEAR 2025

Annual Report

West Virginia Department of HEALTH

OFFICE OF MATERNAL, CHILD AND FAMILY HEALTH

DIVISION OF WOMEN'S AND FAMILY HEALTH

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Program Overview

The West Virginia Breast and Cervical Cancer Screening Program (WVBCCSP), within the West Virginia Department of Health (DH), Bureau for Public Health, is a comprehensive public health program that provides breast and cervical cancer screening to low-income, uninsured, and underinsured women who may not otherwise get screened.

WV was one of the first states to begin screening women in April 1991 with funds from a cooperative agreement from the Centers for Disease Control and Prevention (CDC) through the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). The program focuses services on low-income, uninsured, and underinsured women aged 21-64 years. A woman can enroll in the program at age 21 for cervical screening services only and must be age 40 or above to enroll and receive breast screening services. Those under 40 years of age can be screened if they have symptoms such as breast mass, nipple discharge, breast pain, etc., and meet all other screening eligibility criteria. Those older than 64 who do not have Medicare Part B may also be eligible for screening provided they meet the other eligibility criteria.

The WVBCCSP provides clinical breast examinations (CBEs), mammograms, Pap tests, and human papillomavirus (HPV) tests for eligible women, as well as diagnostic testing for women whose screening outcomes are abnormal. The WVBCCSP is implemented through a network of approximately 500 physicians and health care providers throughout WV.

Although screening services are key to early detection, they are insufficient alone to achieve reduction in the illness and death associated with breast and cervical cancer. The WVBCCSP engages in the following additional program activities to execute a comprehensive program:

- Implementation of Evidence-Based Interventions (EBI);
- Use of Surveillance Systems and Population-Based Surveys;
- Program Monitoring and Evaluation; and
- Support Partnerships for Cancer Control and Intervention.

Enrollment and Screening

The WVBCCSP served a total of 1,824 women for breast and cervical cancer services, 1,443 women for breast services and 1,241 women for cervical cancer services during FY 2025.

Breast and Cervical Cancer Detection

From inception in 1991 to FY 2025, the WVBCCSP has assisted in the detection of 1,424 cases of invasive breast cancer and 169 cases of invasive cervical cancer. In FY 2025, 16 cases of invasive breast cancer and no (0) cases of invasive cervical cancer were detected through the program.

Definition of the Problem

Breast Cancer

Incidence and Mortality

Breast cancer is the most diagnosed cancer and the second leading cause of cancer related death in WV women. In 2022, the CDC reported 1,597 cases of female breast cancer in WV and 287 women died from breast cancer. In 2022, the incidence of breast cancer in WV was lower than the US incidence, 128 per 100,000 women compared to 133 per 100,000 women. Over half (56%) of women with breast cancer in WV were diagnosed with localized breast cancer, while 21% and 6% were diagnosed with regional and distant breast cancer, respectively (WVCR, 2023).

Risk Factors

The main factors that influence risk include being a woman and getting older. Most breast cancers are found in women who are 50 years old or older. In certain cases, women may develop breast cancer despite the absence of any identifiable risk factors. It is important to note that possessing a risk factor does not guarantee the onset of the disease, and the impact of various risk factors can differ significantly. Most women have some risk factors, but most women do not get breast cancer. Read more about the risk factors of breast cancer. https://www.cdc.gov/breast-cancer/risk-factors/index.html

Early Detection

The National Breast and Cervical Cancer Early Detection Program, through which the WVBCCSP is funded, recognizes mammography as the standard for breast cancer screening. Mammography remains the best method for early detection of breast cancer. Studies show that early detection of the disease not only increases a woman's chance of survival, but also increases her treatment options. A core competency of the program is to ensure that women go from screening to diagnosis within 60 days and from diagnosis to treatment within 60 days.

According to the 2022 WV Behavioral Risk Factor Surveillance System, 76.1% of WV women aged 50-74 had a mammogram in the past two years and 70.3% of women ages 40 and over had a routine mammogram in the past two years. Those less likely to have had a mammogram in the past two years included women with less than a high school education and women with an income of less than $15,000.

Practice Updates

Breast density refers to the relative amount of fibroglandular (dense) tissue compared with fatty (non-dense) tissue visible on a mammogram. Women with dense breast tissue, which is classified as heterogeneously or extremely dense on mammography, are at a higher risk of developing breast cancer and face challenges in early detection because dense tissue can mask malignancies on mammograms. As women age, breast density often decreases; however, for women with persistently dense breasts, supplemental screening is increasingly recommended.

According to the American College of Radiology (ACR) Appropriateness Criteria for Breast Cancer Screening (2023), women with dense breasts and an elevated lifetime risk (≥20%) should receive

annual MRI screening in addition to mammography, as MRI is the most sensitive modality for detecting early-stage cancers in this group. Evidence-based models, such as the Tyrer-Cuzick or Gail models, should be used to calculate risk. The ACR also supports the use of MRI as a supplemental tool for women with dense breasts even in the absence of other risk factors, depending on individual risk assessment and shared decision-making between provider and patient.

The WVBCCSP has updated program policy to reflect these evidence-based recommendations. Women identified as high risk for breast cancer, including those with extremely dense breasts, should be offered annual mammography with bilateral breast magnetic resonance imaging (MRI) as the supplemental imaging of choice. For those unable or unwilling to undergo MRI, bilateral whole-breast ultrasound may serve as an alternative. Ideally, screenings alternate every six months (with mammogram, then supplemental screening, followed by the next mammogram six months later) to maximize early detection opportunities.

However, despite national recommendations, breast MRI screening for women with dense breasts is not consistently covered by private insurance under preventive breast cancer screening benefits. Many women face significant out-of-pocket costs such as copayments and deductibles, which creates a major deterrent to accessing these supplemental screening services. This financial barrier may disproportionately affect low- and middle-income women, particularly those in rural or underserved areas.

The BCCSP Medical Advisory Committee (MAC) met in January 2025 to review and discuss these updated guidelines. The Committee expressed mixed support for encouraging coverage of screening MRIs as part of routine screening preventive services, citing concerns that such a policy could inadvertently increase out-of-pocket costs for individuals through higher deductibles and copayments. While the BCCSP recognizes and supports the clinical value of MRI screening for women with dense breasts, the program is unable to fully endorse this recommendation at this time due to these financial concerns.

Pending available funding, the BCCSP will provide coverage for screening MRI services for women who meet program eligibility criteria. Importantly, women who are underinsured may also qualify for assistance, meaning that even if they have insurance, those who meet the program's age and income guidelines may be enrolled, and the program will cover the remaining eligible costs. Program reimbursement cannot exceed the NBCCEDP allowable rate, which is based on the WV Medicare fee schedule. This includes all deductibles, copayments, and insurance contributions for covered services. The program will monitor and track the number of screening MRI services reimbursed annually to assess need, utilization, and impact on screening access across the state.

Recommendation

Implementing targeted education and outreach to both healthcare providers and the public on the clinical significance of breast density, current ACR recommendations, and the impact of density on cancer detection is recommended. Providers should be equipped to discuss

supplemental screening options such as MRI or ultrasound and guide shared decision-making with patients. Conducting an assessment to identify gaps and barriers in implementing supplemental imaging for dense breasts, including provider knowledge, imaging capacity, reimbursement challenges, and geographic access will influence programmatic planning and statewide efforts. Expanding patient navigation and case management to assist women in understanding their mammogram results, navigating insurance coverage limitations, scheduling supplemental screenings, and overcoming logistical challenges such as cost, transportation, or appointment availability may help increase screenings. The WVBCCSP does cover Patient Navigation services, a one-time annual reimbursement fee. The WVBCCSP will continue program-level monitoring, by maintaining annual tracking of the number of screening MRIs funded through the WVBCCSP, including demographic and geographic trends, to monitor access, evaluate program reach, and inform future budget and policy discussions.

Breast density represents an evolving area in breast cancer detection and policy. As screening recommendations advance, the WVBCCSP and its partners are proactively adapting to ensure that West Virginia women, particularly those who are low-income or underinsured, can access early detection services.

Cervical Cancer

Incidence and Mortality

In 2022, the U.S. Cancer Statistics report indicated 98 WV women were diagnosed with cervical cancer and 34 died due to cervical cancer. The incidence of cervical cancer in WV is 10.5 per 100,000 women, higher than the U.S. rate 7.4 per 100,000 women. Cervical cancer mortality rate is also higher than the U.S. rate 3.3 per 100,000 women compared to 2.1 per 100,000 women. Almost half (49%) of all cervical cancer diagnoses in West Virginia were found to be Regional or Distant stage (WVCR,2023).

Risk Factors

Risk factors for cervical cancer include obesity, infection with HPV (responsible of more than 95% of cervical cancer), smoking, using birth control for five years or more, giving birth to three or more children, having several sexual partners, or having human immunodeficiency virus (HIV), and exposure to diethylstilbestrol (DES) in the womb. Cervical cancer screening may be more difficult in those with obesity, leading to lower detection of pre-cancers and a higher risk of cancer. For additional information, please review https://www.cdc.gov/cervical-cancer/risk-factors/index.html.

Early Detection

Cervical cancer is a preventable cancer that can be detected early, even as a pre-cancer. If routine cervical screening is followed, most cases of cervical cancer can be prevented. There are two tests that can help prevent cervical cancer or find it early – the Pap test and the HPV test. The Pap test can detect cervical abnormalities in their earliest stage before the disease progresses and allows the woman to seek appropriate treatment. The HPV test looks for the virus that can cause pre-cancerous cell changes and cervical cancer as HPV causes 99% of cervical cancers.

Practice Updates

The WVBCCSP is working on incorporating the HPV self-collection testing, which was approved by the Federal Drug Administration (FDA) if administered in a health care setting in May 2024. These tests are collected by the patient and do not require a pelvic exam or Pap smear. In March 2025, the NBCCEDP approved the inclusion of this test within the program. This screening option is appropriate for women who are eligible for HPV screening only and should not be offered to women who are considered high-risk or symptomatic. This advancement has the potential to enhance access to screening for underserved communities and for women who have previously declined screening due to discomfort with pelvic examinations.

The program convened the HPV Self-Collection Steering Committee in September 2025. Steering committee members included representatives from participating BCCSP Screening Providers in free clinics, Federally Qualified Healthcare Centers, and local health departments as well as partners from West Virginia University BCCSP Evidence-Based Intervention and Community Outreach, Bonnie's Bus Mobile Mammography, Vandalia Mobile Mammography, and West Virginia Program to Increase Colorectal Cancer Screening. The program plans to pilot the HPV Self-Collection testing in select clinics in January 2026.

Anticipated challenges include the reluctance of providers to endorse HPV-only testing. Other challenges include follow-up for abnormal results. Although one benefit of HPV self-collection is the elimination of a pelvic exam for those of average risk due to several factors, including physical disability making pelvic exams challenging, unwillingness due to past trauma, or other reasons, the test does not eliminate follow-up exams should tests come back abnormal. Patients need to be educated about the need for follow-up testing for abnormal results as part of the informed consent process. Ensuring that clinics have good tracking and follow-up mechanisms in place to ensure follow-up is also important.

Recommendation

Provider education should focus on the utility of HPV self-collection versus HPV/Pap testing. Patients need to be educated on the need for follow-up testing for abnormal results as part of the informed consent process. Community Outreach efforts should provide education about the importance of HPV vaccination along with the importance of screening for early detection of cervical cancer and incorporating HPV self-collection as an option for individuals of average risk. The program will also focus on screening for women who have never been screened or have not been screened in the past 10 years.

Another priority area includes improving modifiable risk factors, such as smoking status and engagement in healthy behaviors. The WVBCCSP has incorporated the WISEWOMAN program, which focuses on cardiovascular screening risks for eligible WVBCCSP participants aged 35-64 years old. Within this program, healthy behavior support programs are offered to help with weight management, smoking cessation, and other healthy behaviors associated with decreasing cardiovascular risks among women. Community awareness and provider education should be done to increase enrollment.

Screening and Diagnostic Services

Screening and diagnostic services are the core of the WVBCCSP. These services include screening/rescreening, tracking, follow-up, and case management. The WVBCCSP contracts with a variety of health care practitioners to provide CBEs, mammograms, pelvic exams, HPV tests, Pap tests, and diagnostic procedures.

The WVBCCSP is committed to ensuring that each woman receives timely results for screening and diagnostic procedures and appropriate follow-up. Each contracted health care provider agrees to work in coordination with the WVBCCSP to notify women of their results and arrange for timely follow-up. In addition, the WVBCCSP database is monitored monthly to identify women with incomplete records. If an incomplete record is identified, tracking and follow-up nurses contact the health care provider to identify and resolve any issues underlying the incomplete record.

Health care providers are required to monitor women enrolled in the program and contact them by mail or telephone to schedule their routine screening examinations and follow-up visits. When a woman is unable to keep her appointment for follow-up services or treatment, providers and the WVBCCSP staff work together to help the woman overcome identified barriers and return for medical care.

When a woman is diagnosed with breast cancer, cervical cancer, or certain pre-cancerous cervical conditions, she may be eligible to have her medical costs paid through Medicaid. Once eligibility is assessed and granted, the woman is enrolled in the West Virginia Medicaid Treatment Act (MTA) program. As part of the MTA, enrolled women receive patient navigation/case management services via Nurse Case Managers who are responsible for assessing their needs, developing a care plan, monitoring them throughout their treatment, and assisting them in resolving barriers to treatment. Once a woman has completed active treatment, the Case Manager disenrolls her from the MTA, and depending upon eligibility, may refer her to the WVBCCSP for a continuation of screening services.

Patient Navigation Medicaid Managed Care Organization Project

The WVBCCSP has collaborated with three of West Virginia's Medicaid Managed Care Organizations (MCOs) to improve breast and cervical cancer screening rates among West Virginia's Medicaid population. This was accomplished by offering patient navigation services to help patients overcome barriers to scheduling and attending mammogram and Pap test screening appointments. In addition, patients received a $50 gift card for completing the screening through their MCOs, and all WVBCCSP clinics involved in the project were reimbursed $50 per patient for screening patient navigation service fees.

The project began in March 2024. As of September 2025, 1,098 out of 8,982 eligible participants listed have been successfully contacted. Of those contacted, 39 (3.55%) patients have utilized the patient navigation services to plan their screening appointments, 385 (35.06 %) said they had screening appointments scheduled or planned to schedule a screening appointment, 318 (30%) completed screening mammography and 127 (11.56%) completed cervical screening.

The project's primary goal was to identify the barriers preventing West Virginians from getting mammograms and to find solutions to these issues. Participants expressed several concerns related to mammogram screenings and Pap tests, including:

- Transportation needs
- Anxiety
- Lack of knowledge about the screening process
- Fear of cancer being found
- Fear of pain or discomfort
- Fear of others' experiences with screening
- Time commitment for scheduling and attending screening appointments

These barriers highlight the importance of educating and preparing women for mammogram screening and cervical screening tests. Addressing fears, anxieties, and other challenges will empower women to schedule and attend appointments without hesitation.

Patient navigators faced a significant challenge of contacting patients via phone. About 3,375 (37.57%) of women did not have a phone number listed or the phone number was no longer in service, and 221 (20%) of women contacted declined patient navigation services for various reasons. As a result, it is difficult to determine how many women need an updated mammogram screening and the obstacles they might face in scheduling or attending one. Despite these challenges, the patient navigation project will continue its efforts to reach more of WV's population.

Professional Education

Professional education activities aim to improve the ability of health care providers to screen for and diagnose breast and cervical cancer to ensure women receive appropriate and high-quality screening and diagnostic services. The WVBCCSP provides professional education training through annual training and information updates. The program also provides ongoing technical assistance to WVBCCSP providers and staff.

Increasing Breast and Cervical Cancer Screening Through Evidence-Based Interventions

The WVBCCSP supports evidence-based interventions (EBI) to improve breast and cervical cancer screening rates through intensive work with clinics, which includes identifying baseline screening rates and implementing and maintaining two EBIs over the course of a three-year commitment. These EBIs include:

- Client or Patient Reminders
- Group Education
- One-on-One Education
- Small Media
- Reducing Structural Barriers
- Reducing Out-of-Pocket Costs
- Programs to Reduce Out-of-Pocket Costs
- Provider Assessment and Feedback
- Provider Reminder and Recall Systems
- Patient Navigation

Partnership and Collaboration

Partnerships are critical to the WVBCCSP's cancer control efforts. Success depends on the involvement of a variety of committed partners at the local, state, and national levels. Partners help strengthen the program through their expertise, connections, resources, and enthusiasm. WVBCCSP is proud to have a strong, committed group of partners that provide the following resources:

- **Health Care Professionals**
  Health care professionals are the backbone of the WVBCCSP. Physicians, nurses, nurse practitioners, and physician assistants provide high-quality, life-saving screening and diagnostic services to WV women. The WVBCCSP has a statewide network of screening and referral providers that includes approximately 500 professionals. Since the program's inception, this number has more than quadrupled, resulting in easier access and timely provision of services. These dedicated professionals not only provide compensated care to women, but also volunteer to participate in free screening clinics, serve as preceptors, and train/teach other health care providers.

- **Volunteers**
  Each year, hundreds of volunteers assist in outreach activities for the WVBCCSP, including Breast Cancer Awareness Month activities, Cervical Cancer Awareness Month activities, and cancer walks. Volunteers help distribute WVBCCSP literature and talk with community members, family, and friends about the importance of early detection and the services available through the WVBCCSP. Volunteers have donated thousands of hours of service completing these activities. These and other activities have been diminished greatly by the pandemic.

- **Organizations**
  The WVBCCSP partners with groups and organizations that share the program's goals and vision. Collaboration on this level allows resources to be combined without duplicating efforts. Partnering with groups such as the American Cancer Society, Appalachian Community Cancer Network, Mountains of Hope Cancer Coalition through the West Virginia Cancer Control Program, West Virginia Breast Health Initiative, and numerous community and faith-based groups allows all parties to work together on prevention, early detection, patient navigation, survivorship, and end-of-life care issues affecting WV residents.

Evaluation

Surveillance

Surveillance is the continuous, proactive, timely and systematic collection, analysis, interpretation, and dissemination of health data. The purpose of surveillance is to use relevant data to plan, monitor, and evaluate WVBCCSP activities. Data is used to help make sound program decisions, such as determining where to implement pilot studies to utilize limited resources effectively. Evidence-based practices are utilized when applicable. Data is also used to

determine the types of activities that will increase WVBCCSP enrollment and impact hard-to-reach women, design studies to understand the targeted population, and plan marketing and advertising strategies. Data is monitored and analyzed using several databases that collect a variety of information.

Quality Assurance

Quality assurance is defined as the use of established standards, systems, policies, and procedures to monitor, assess, and identify practical methods for improvement. The purpose of this component is to ensure the quality of services delivered to women through the WVBCCSP and to ensure provider compliance with program guidelines.

Quality assurance monitoring is conducted at contracted WVBCCSP provider sites that screen a minimum of 10 enrolled women each year. Monitoring may include, but is not limited to, review of medical records, review of service policies and procedures, review of staffing ratios and job descriptions, and meetings with any staff directly or indirectly involved in the provision of services.

During an on-site review, the OMCFH Quality Assurance Monitoring Team is given access to all necessary information and is allowed to observe the WVBCCSP examinations to ensure patient care standards are met, and services are provided in accordance with the WVBCCSP policy. All quality assurance monitoring reports are submitted to the WVBCCSP and OMCFH and are carefully reviewed. Areas of provider deficiency are noted, and a corrective course of action is put into place. Staff nurses contact providers to discuss deficiencies and work with them to ensure that these deficiencies are addressed appropriately.

An epidemiologist reviews data on a routine basis to identify and report potential service problems to the Program Director. Problem areas are reviewed and discussed with nursing staff so a resolution can be determined. Any identified problems continue to be monitored by the epidemiologist to ensure the situation is resolved effectively and efficiently.

Technical Assistance

All technical assistance needs are performed by WVBCCSP staff. Technical assistance is commonly requested for proper completion of WVBCCSP forms, billing, and policies. Training on policies and procedures is provided by the WVBCCSP to newly contracted provider staff and to refresh existing staff. In addition, WVBCCSP works with contracted providers to utilize evidence-based interventions to increase breast and cervical cancer screening rates.

Medicaid Treatment Act (MTA)

The Medicaid Treatment Act (MTA), Public Law 106-354, was passed in 2000, and permits states the option to provide medical assistance for breast and cervical cancer diagnosis and treatment through Medicaid. WV was one of the first states to include the costs of breast and cervical cancer treatment for women younger than age 65 through Medicaid. To receive services through MTA, women must be uninsured and enrolled in the WVBCCSP. The program also supports medically indigent patients with certain diagnostic and treatment costs for breast and cervical cancer through the Diagnostic and Treatment Fund (Fund).

During FY 2024, 61 new participants were enrolled in the MTA, an increase of 14 patients from the previous fiscal year. Of these new enrollees, 59 were enrolled for breast cancer treatment and two were enrolled for treatment of cervical cancer. At the end of the program year, June 2025, 216 women were enrolled in the MTA. Cancer treatment services to women were approximately 94% for breast cancer and 6% for cervical cancer throughout the program year. During FY 2025, 78 participants were disenrolled for various reasons such as over the age residency status, insurance status, death, eligibility for straight Medicaid due to decrease in income, and disenrollment due to the end of the COVID-19 public health crisis.

For additional information regarding this program, please visit http://www.wvdhhr.org/WVBCCSP/.

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