

10 • Breast Cancer



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BREAST CANCER

The goal for Maryland is to reduce the incidence, mortality, and morbidity from breast cancer through prevention, early detection, treatment, and effective survivorship care.

BREAST CANCER IS A BROAD TERM for many different types of breast cancer but the most common type is ductal carcinoma which makes up 70% to 80% of the breast cancer that occurs, followed by lobular carcinoma. Breast cancer may present as in situ cancer, meaning that the cells do not invade the local tissue, or invasive forms of breast cancer where the cancer cells have invaded the local breast tissue.

Among women, the average lifetime risk of developing either invasive or in situ breast cancer is about 14.5%; the lifetime risk for developing invasive breast cancer is about 12%.¹ Breast cancer may rarely occur among men who have, on average, a 0.03% lifetime risk of developing breast cancer, although the risk is higher among those men who carry a genetic predisposition to cancer. Due to advances in early detection and treatment, the average risk of dying from breast cancer is only 2.8%.¹

Risk Factors

BREAST CANCER PREVENTION AND SCREENING can be tailored for women based on their specific risk factor profile. Table 10.1 outlines some of the established risk factors for breast cancer. For complete information on breast cancer risk factors, see the National Cancer Institute Breast Cancer Prevention Physician Data Query (PDQ) at www.cancer.gov.² Additional information can also be found at Susan G. Komen for the Cure (www.komen.org) and the American Cancer Society (www.cancer.org).

Research continues to identify factors that may alter an individual's risk of developing breast cancer, such as environmental exposures. Statistical models have been developed that help to determine if women fall into high-risk groups for developing breast cancer. Women should know where they fall on the spectrum of risk for developing breast cancer because screening and prevention recommendations may vary according to risk.

TABLE 10.1

Established Risk Factors for Breast Cancer

RISK FACTOR
• Age.
• Family history of breast cancer, especially in close relatives with an early age at diagnosis.
• Nodular densities on the mammogram involving most of the breast tissue (dense breast tissue often described as “heterogeneously dense”).
• Breast biopsy showing atypical hyperplasia.
• Early age at menarche.
• Late age at menopause.
• Late age at first birth (>30).
• Radiation to chest, especially at early ages.
• Being overweight or obese after menopause.
• High socioeconomic status
• Drinking one to two alcoholic beverages every day.

Some models are appropriate for the general population of women, and others are specifically designed for individuals with a strong family history of cancer. Any model that is used should be validated (tested for accuracy of prediction). Choosing the correct model is very important in order to appropriately estimate a woman’s risk, and women should consult with their healthcare provider to determine which model best applies to their situation.

One of the most widely used models is the Breast Cancer Risk Assessment Tool, also known as the Gail model.³ This model is appropriate for use among women from the general population who are regularly screened. The Gail model has been widely validated and has been used to determine eligibility for two breast cancer prevention trials: the Tamoxifen Prevention Trial and the Study of Tamoxifen and Raloxifene (STAR).^{4,5} The Gail model does not include an extensive family history and thus is not appropriate to use for women with a strong family history who are suspected to be at high genetic risk. Models such as the BRCAPro model have been developed to estimate the likelihood that a major genetic factor,

such as a mutation in BRCA1 or BRCA2 genes, is present in the family.⁶ These models incorporate only age and family history into their risk-prediction models. Because only 20% to 30% of women have a family history of breast cancer and in general only about 10% of women develop breast cancer due to a strong inherited susceptibility factor, the models that use only family history in risk estimation are not appropriate for most women in the general population.

Another model, the Tyrer-Cuzick Model, was developed in the United Kingdom (UK) and combines both genetic and other risk factors to estimate the risk of developing breast cancer.^{7,8} Because it was developed in the UK, the model is based on rates of breast cancer in the UK, which vary from those in the United States. This model differs from the Gail model in that it includes an expanded family history, body mass index, and use of hormone therapy. This model also produces estimates of both the probability of developing breast cancer as well as the likelihood of carrying a mutation in either BRCA1 or BRCA2. It has been validated among a population of women with a family history of breast cancer, and did perform better in that population than the Gail model.⁹ However, the Gail model was developed and validated for the general population of women who are undergoing routine screening. Thus, the most appropriate model to use depends on the population being evaluated.

DECREASING MORBIDITY AND MORTALITY from breast cancer requires interventions across the continuum of care from prevention through end-of-life care (see Figure 10.5). The risk of developing breast cancer can be reduced. Regular exercise is associated with a reduced risk of breast cancer. Exercise is good at any age for multiple health benefits, but exercise during early adolescence and adulthood may be especially beneficial.^{10,11} Maintaining a healthy weight after menopause may also help to lower the risk of breast cancer.¹² Weight can be managed through healthy eating as well as regular exercise. Breast-feeding has been shown in some studies to be associated with a lower risk of breast cancer, but study results are not consistent.¹³ Recommendations to increase rates of breastfeeding are

supported by known benefits to the infant and the potential for long-term benefit to women through reduced risk of breast cancer. For women at high risk, it has been shown in clinical trials that treatment with Tamoxifen or Raloxifene can cut the risk of developing breast cancer in half.^{14,15,16}

The goal of screening is to detect breast cancer early when it is most easily treated. The treatment of breast cancer depends on the stage of the disease at diagnosis as well as other characteristics of the tumor. The stage is determined by the size of the tumor, whether or not the local lymph nodes are involved, and whether there is evidence that the cancer has spread beyond the breast or the lymph nodes to other parts of the body (metastasis). Treatment also depends on characteristics of the tumor such as whether or not estrogen receptors or other markers such as HER2neu receptors are present. More detailed information about breast cancer and its treatment can be found at <http://www.cancer.gov/cancer-topics/pdq>.¹⁷

Survivorship care with the goal of minimizing morbidity from cancer and its treatment should begin at the time of diagnosis. Prevention and prompt treatment of short- and long-term side effects of the cancer as well as its treatment are needed to optimize quality of life. Dr. Fitzhugh Mullan, a cancer survivor, said: “The challenge in overcoming cancer is not only to find therapies that will prevent or arrest the disease quickly, but also to map the middle ground of survivorship and minimize its medical and social hazards.”¹⁸ The Institute of Medicine’s 2006 report “From Cancer Patient to Cancer Survivor: Lost in Transition” emphasizes the need to improve the long-term care of cancer survivors. Survivorship care, like other healthcare, should embrace the holistic concept of treating mind, body, and spirit.

Through application of effective measures across the continuum of breast cancer control—prevention, early detection, effective treatment, survivorship care, palliative care, and hospice care—the goal of reducing the burden of and from breast cancer in the state of Maryland can be achieved. The report’s recommendations for interventions across the continuum of care have been shown to be effective and have pointed out

those areas where more research may be needed before action can be taken.

Current Burden of Breast Cancer and Progress Made

BREAST CANCER IS THE MOST COMMON CANCER diagnosed in women, excluding cancers of the skin, and is the second leading cause of cancer death after lung cancer.¹⁹ Breast cancer accounts for about 30% of all cancer diagnosed among women in Maryland.²⁰ Although men are at risk to develop breast cancer, this is a rare cancer among men, except for those who carry a genetic mutation in BRCA1 or BRCA2 who have up to a 6% lifetime risk of breast cancer. Because male breast cancer is rare, the data cited below focus on women in Maryland.

The number of women who are long-term survivors of breast cancer continues to grow nationally and in Maryland due to advances in both early detection and screening. The National Cancer Institute estimates that approximately 2.9 million US women and approximately 58,600 Maryland women with a history of breast cancer are alive in 2010.²¹

Approximately 3,500 women in Maryland are diagnosed with breast cancer each year (Table 10.2). Maryland’s overall age-adjusted breast cancer incidence rate, as well as the specific rates for white and black or African American women, are similar to the SEER rates for the nation (Figure 10.1). The overall age-adjusted breast cancer incidence rate for Maryland in 2006 was 112.8 per 100,000 women compared to 120.8 per 100,000 women nationally. As seen in Figure 10.2, since 1999, breast cancer incidence rates have declined in Maryland as well as nationally among all races. The decline in incidence observed since 2002 is primarily attributed to change in patterns of use of postmenopausal combined hormone therapy, but declines in screening mammography rates may also contribute to the observed decrease in incidence.^{22,23}

THE RISK OF BREAST CANCER increases with age for all women (Figure 10.3) up to age 75. White women age 45 and over have consistently higher age-specific incidence rates than black or African American women (Figure 10.3).

TABLE 10.2

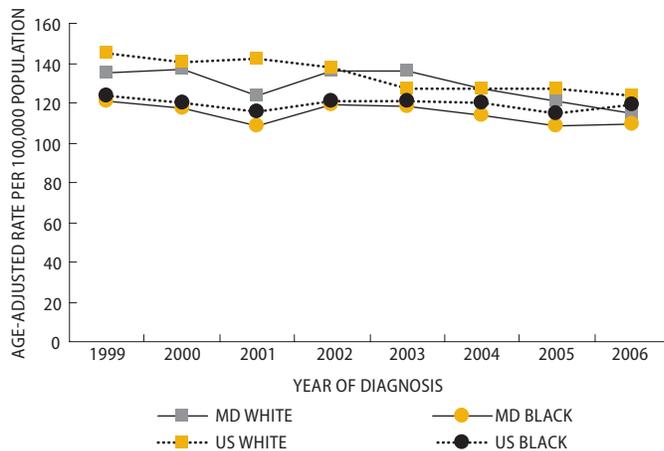
Female Breast Cancer Incidence Data by Race, MD and the US, 2004-2006

2004	TOTAL	WHITES	BLACKS	OTHER
MD New Cases (count)	3,850	2,767	915	129
MD Incidence Rate	124.2	127.4	114.0	90.2
US SEER Rate	123.0	126.7	118.3	88.8
2005	TOTAL	WHITES	BLACKS	OTHER
MD New Cases (count)	3,712	2,637	896	153
MD Incidence Rate	118.6	121.1	108.7	101.2
US SEER Rate	122.1	126.2	114.8	88.1
2006	TOTAL	WHITES	BLACKS	OTHER
MD New Cases (count)	3,580	2,509	921	124
MD Incidence Rate	112.8	115.0	109.7	76.9
US SEER Rate	120.8	124.3	116.8	86.9

*Rates are per 100,000 and are age-adjusted to 2000 U.S. standard population.
 Total includes cases reported as unknown race.
 Sources: Maryland Cancer Registry, 2004-2006.
 NCI SEER*Stat (US SEER 17 rates).

FIGURE 10.1

Female Breast Cancer Incidence Rates by Race, Maryland and US, 1999-2006



Source: Maryland Cancer Registry, 1999-2006.

However, between the ages of 20 and 44, black or African American women have higher age-specific incidence rates than white women. This trend is similar to the national age-specific incidence rate.

For Maryland women of all races, stage of breast cancer at diagnosis is similar to national SEER data; however, Maryland has a higher proportion of cases that are not staged compared

FAST FACT Mortality rates from breast cancer have been decreasing nationally as well as in Maryland.

to SEER data (Figure 10.4). Staging is an important factor in determining the most appropriate treatment for women with breast cancer. In addition, early stage disease is associated with better outcomes than more advanced stage disease. The stage of disease depends on the size of the tumor at diagnosis and whether or not it has spread to local lymph nodes or to other parts of the body (metastasis). The proportion reported unstaged could be due to either lack of staging or lack of reporting of staging data.

Mortality rates from breast cancer have been decreasing nationally as well in Maryland (Figure 10.2) due to screening as well as improved treatment.²⁴ Although breast cancer mortality is declining in Maryland among all race groups, black or African American women continue to have significantly higher breast cancer mortality rates compared to white women, both nationally and in Maryland.^{19,20} Because Maryland has a larger proportion of blacks or African Americans compared to the nation, the breast cancer mortality rate will likely remain high in Maryland until the gap between white and black or African American breast cancer mortality rates narrows.

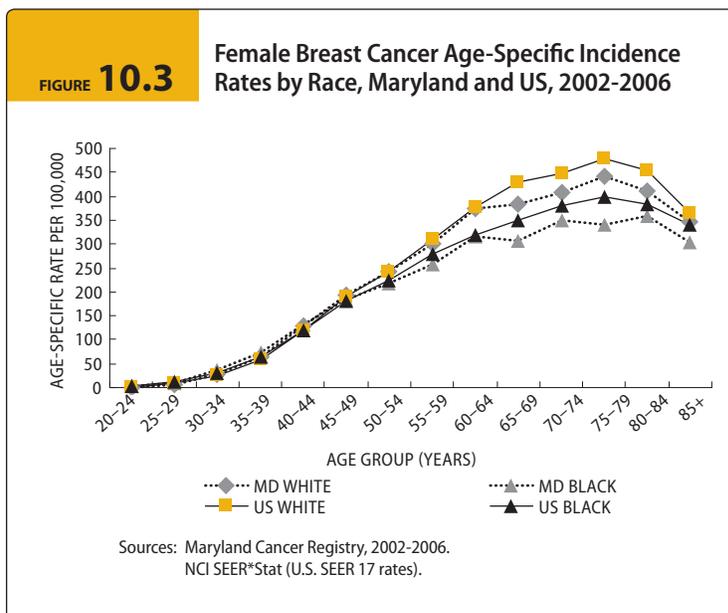
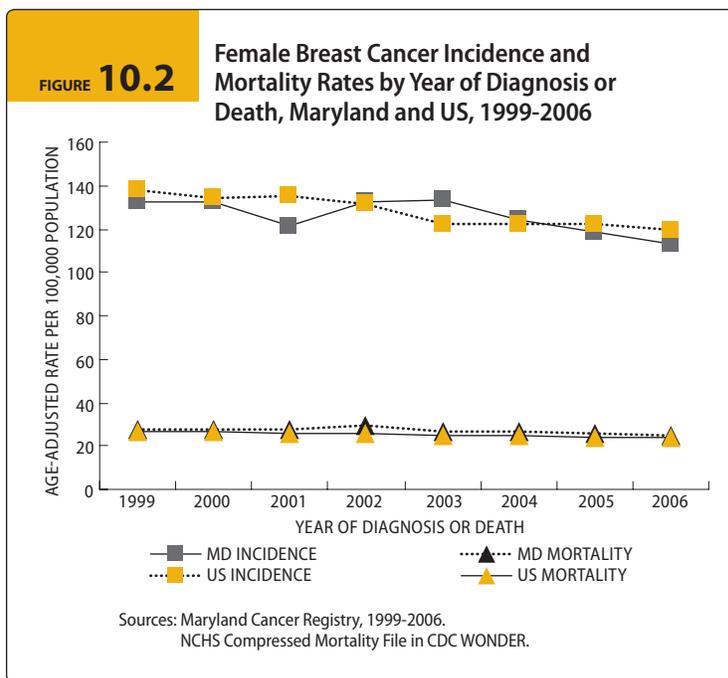
The National Cancer Institute estimates that approximately 2.9 million US women and approximately 58,600 Maryland women with a history of breast cancer are alive in 2010.²¹ With advances in detection and treatment, the numbers of breast cancer survivors will continue to increase and their long-term medical needs will continue to be addressed.

Current/Ongoing Breast Cancer Control Efforts in Maryland

PROGRESS IN BREAST CANCER CONTROL has been accomplished with the assistance of many individuals and organizations throughout Maryland. Some of these efforts are highlighted below.

The Maryland Department of Health and Mental Hygiene (DMHH) Breast and Cervical Cancer Program (BCCP) is a statewide program that provides breast and cervical cancer screening

services to uninsured or underinsured, low-income (less than 250% of the federal poverty level) women 40 to 64 years of age. Across the state, the DHMH awards funds to each jurisdiction to coordinate the provision of breast and cervical cancer outreach, patient and public education, and screening, referral, follow-up, and case management services for its residents. Annually, the BCCP provides about 13,000 mammograms to Maryland women. The proportion of black or African American and Hispanic or Latina clients who have received services under the BCCP is greater than the proportion of these groups in the Maryland population.

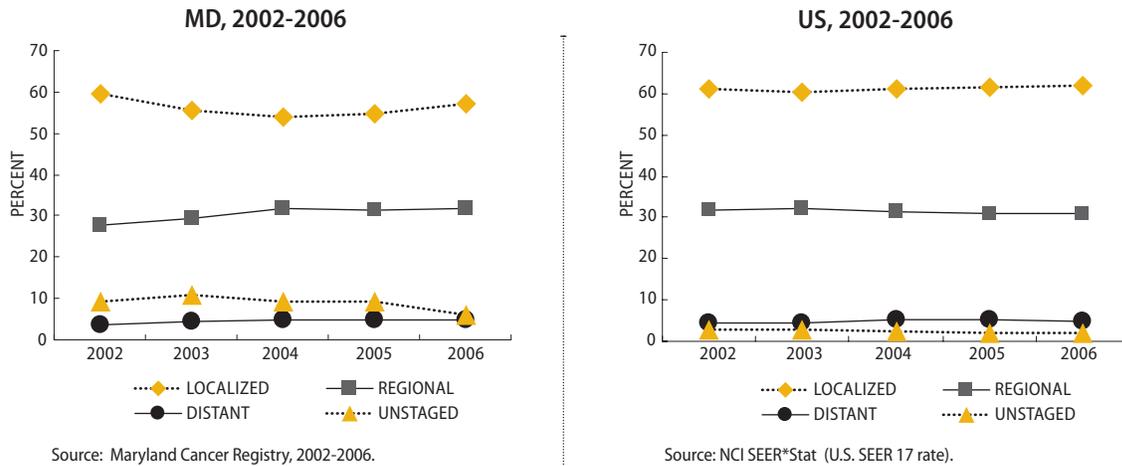


The DHMH formed a Breast Cancer Medical Advisory Committee, which developed guidelines titled Minimal Clinical Elements for Breast Cancer Screening. The Minimal Clinical elements provide guidance for public health programs that screen for breast cancer.

In addition, funding from the Cigarette Restitution Fund Program has been awarded to the University of Maryland Medical System/University Care to provide breast and cervical cancer screening for low-income, uninsured, or underinsured women who live in Baltimore City.

Several hospitals offer free breast cancer screening to high-risk or symptomatic women who do not qualify for state programs. Funding for these programs, usually from donations and private foundations, tends to vary from one year to the next. Patients needing a work-up or treatment are referred to the Maryland Breast and Cervical Cancer Diagnosis and Treatment Program.

FAST FACT The Maryland Breast and Cervical Cancer Diagnosis and Treatment Program covers diagnostic and treatment services for eligible Maryland residents diagnosed with either breast or cervical cancer.

FIGURE 10.4 Female Breast Cancer by Stage at Diagnosis


The Maryland Breast and Cervical Cancer Diagnosis and Treatment Program is a state-funded program that covers diagnostic and treatment services for Maryland residents who are diagnosed with either breast or cervical cancer, meet income guidelines (250% of the poverty level), and are either uninsured or underinsured for these services. The Women's Breast and Cervical Cancer Health Program provides Medicaid coverage to women who were screened under the BCCP and who have been diagnosed with either breast or cervical cancer. Women in this program are eligible for full Medical Assistance while they are undergoing treatment for breast or cervical cancer.

In addition to the state programs, nonprofit foundations provide a wide variety of programs for breast cancer patients, providers, and caregivers. These organizations provide support for clinical services, educational programs for patients and providers, counseling and support programs, community grants and research grants, and help to meet basic needs such as transportation, housing, and other basic services. Information about services and links to many of these organizations is available at www.marylandcancerplan.org.

Numerous laws related to breast cancer have been passed in Maryland. These laws address issues related to provision of screening services and treatment, including access to clinical trials. Additional information on laws relevant to breast

cancer control can be found in the text box, Maryland Law Related to Breast Cancer on page 11.

Disparities

Factors That Contribute to Disparities Across the Continuum of Breast Cancer Control

CANCER IS AN EQUAL OPPORTUNITY DISEASE: It affects men and women of all socioeconomic levels, races, and ethnicity, across age groups and regions of the state and country. Unfortunately, access to prevention, screening, diagnosis, treatment, and after-cancer care for breast cancer is not uniformly accessible or provided. Disparities across the continuum of cancer control persist by factors such as urban/rural location, age, race, ethnicity, insurance, and socioeconomic status.²⁵ Programs in Maryland have helped to address barriers to breast cancer care, but there is much more to do to address these disparities.

Even if universal healthcare is achieved, there will be individuals with gaps in health insurance coverage and therefore populations who lack access to consistent healthcare. Even if insured, not all would have adequate coverage from prevention through survivorship care. Although Maryland helps to fill some of these gaps through the Breast and Cervical Cancer Screening Program, the Cigarette Restitution Fund Program, and the Breast and Cervical Cancer Diagnosis and Treatment Program, funds are not sufficient to cover all in need.

Those in rural communities may have limited access to primary care providers and state-of-the-art diagnosis and treatment facilities. Lack of employment opportunities, lack of health insurance, and lack of public transportation compounds the access issues. Women in rural settings have lower screening rates compared to women in urban settings.²⁶ These differences result in differential effects for care across age, race, and socioeconomic groups.

Ethnic and racial differences in breast cancer outcomes are due to a combination of factors, such as screening rates, access to treatment, and prompt treatment. However, there may be underlying biological factors that also contribute to disparities in outcomes. In general racial and ethnic minority groups tend to be diagnosed with more advanced stage disease compared to white women, and some differences persist even within healthcare settings that provide similar access to care among the groups.

Age also influences screening and treatment. Older women are less likely than younger women to be offered the opportunity to take part in clinical trials and to receive optimum treatment as defined by accepted standard-of-care treatment guidelines.^{27,28} Often multiple factors—such as older age, race, and language barriers—are present that contribute to disparities in prevention, screening, diagnosis, and treatment.

Efforts to overcome disparities need to be aimed at multiple levels: patient, provider, and the health system. Breaking down cultural and language barriers is critical for both the health-care consumer and the provider. Providers should be equipped to provide culturally sensitive resources and services that have been proven effective at all stages of the cancer control continuum from prevention to survivorship care.

Participation in clinical trials should be encouraged. Healthcare systems should facilitate care by making system changes that ensure preventive and screening services are offered when appropriate and that diagnosis and treatment are done promptly and efficiently, offering the optimum standard of care per accepted treatment guidelines established by organizations such as the National Comprehensive Cancer Network.

Continuum of Cancer Control

INTERVENTIONS ACROSS THE CONTINUUM of breast cancer control, as outlined in Figure 10.5, are needed to achieve the goals of reduced incidence, morbidity, and mortality from breast cancer. Cancer control encompasses prevention, screening and early detection, effective treatment, survivorship care, and end-of-life care.

1. Prevention

CLINICAL TRIALS HAVE PROVEN that among women at increased risk to develop breast cancer (defined as a five-year risk of breast cancer greater than 1.67%), taking Tamoxifen or Raloxifene for five years reduces the risk of breast cancer by about 50%.²⁹ Evidence also supports that regular moderate exercise at any age, but especially during adolescence, is associated with a lower risk of developing breast cancer. After menopause, being overweight is associated with an increased risk of breast cancer, so maintaining a healthy weight through diet and exercise is an important lifestyle factor that may help to reduce the risk of developing breast cancer. In addition, breast-feeding has been shown in some studies to be associated with a reduced risk of developing breast cancer.

Avoiding factors such as radiation exposure, especially during adolescence when breasts are developing, can help to minimize risk. In addition to maintaining a healthy weight, data suggest that minimizing alcohol intake to fewer than three to four drinks a week may help lower the risk of breast cancer.

Following the report of results from the Women's Health Initiative (WHI) that confirmed results from cohort studies showing an increased risk of breast cancer with use of combined estrogen and progestin hormone therapy after menopause, use of combination hormone therapy plummeted.^{30,31} Subsequent to the publication of these results, breast cancer incidence rates were noted to be decreasing in the United States and elsewhere with the decline largely attributed to changes in use of postmenopausal hormone therapy.^{32,33} Avoiding long-term use of combined hormone therapy after menopause would be a prudent action to minimize breast cancer risk. It is important to note, however, that a companion arm

of the Women’s Health Initiative trial that tested the use of estrogen-only hormone therapy among women who had a hysterectomy observed a nonstatistically significant decreased risk of breast cancer associated with estrogen use compared to a placebo.³⁴ Estrogen-only hormone therapy is only indicated for women who have had a hysterectomy due to the increased risk of endometrial cancer when using estrogen unopposed by progestin.

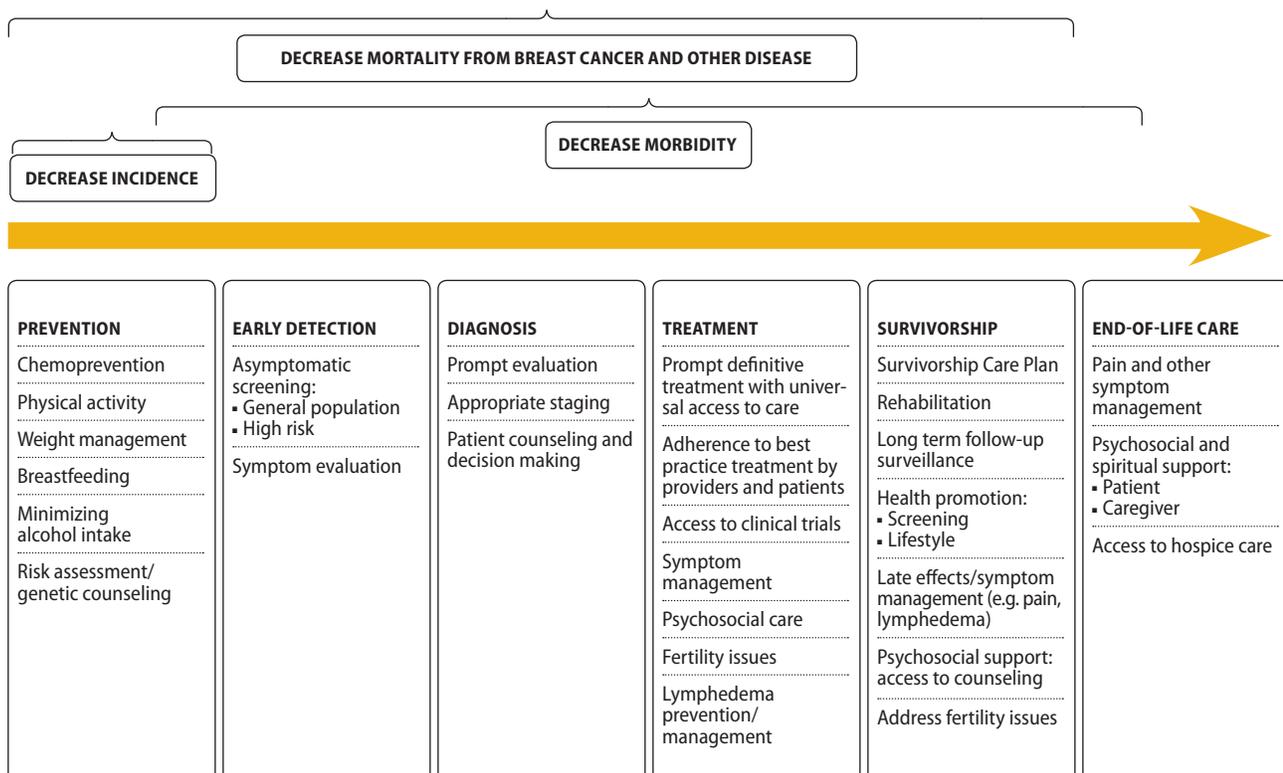
Evaluating a woman’s risk factor profile and estimated risk to develop breast cancer should be a part of routine primary care. Individuals at very high risk of developing breast cancer—such as women who carry mutations in the BRCA1 or BRCA2 genes or other genes known to be associated with an increased risk of breast cancer (e.g., PTEN and p53), women with a strong family history of breast cancer unexplained by known genetic changes, and women with prior high-dose radiation exposure—should receive counseling regarding prevention and screening management options.

2. Early Detection

MAMMOGRAPHY AND CLINICAL BREAST EXAMINATION are the primary methods of screening for breast cancer for the general population of women 40 years and older.^{35,36} A mammogram is a dedicated x-ray of the breast that can often find tumors that are too small to be felt. The ability of mammography to detect cancer depends on factors such as the size of the tumor, the age of the woman, breast density, and the skill of the radiologist. Presently, it is the only screening exam that has been shown to reduce mortality from breast cancer. The degree of benefit with regularly mammography varies by age with more benefit observed at higher ages. One reason is that the breast tissue is easier to examine as a woman ages. Based on evidence from clinical trials clinical breast examination is recommended along with routine mammography in the United States.^{37,38,39} Studies have been conducted to examine whether or not instructing women in breast self-examination is beneficial in reducing mortality from breast cancer.⁴⁰

FIGURE 10.5

Interventions Across the Continuum of Breast Cancer Control



Adapted from: Institute of Medicine "From Cancer Patient to Cancer Survivor: Lost in Translation" (2005) and National Cancer Institute.

The studies showed that more breast biopsies were done, but there was no benefit in reducing mortality from breast cancer.

Since 1987, the United States has seen a rapid increase in reported use of mammography. The percentage of women ages 40 and older reporting a mammogram in the past two years jumped from 39.1% in 1987 to 70% in 2000.⁴¹ Maryland followed the same trend; the percentage of Maryland women ages 40 and older reporting a mammogram within the previous two years increased from 75% in 1990 to about 82% in 2000. However, since 2000, mammography rates have stabilized and in some cases declined.^{42,43} In 2008, the percentage of Maryland women ages 40 and older who reported having a mammogram in the past two years dropped to 77%, but this change in screening rates is not statistically significant. Maryland's rates are similar to the national rates for women ages 40 and older reporting a mammogram within the previous two years; the Healthy People 2010 goal was 70% and was met by the state of Maryland.

Among women at high risk of developing breast cancer (>20% lifetime risk), additional tests such as ultrasound and magnetic resonance imaging (MRI) of the breasts may be indicated. Personalizing screening plans for women is dependent on assessing their risk profile.

3. Diagnosis

ONCE AN ABNORMALITY IS DETECTED either by physical examination or screening mammography, additional testing is needed to make the appropriate diagnosis.⁴⁴ A first step in evaluating an abnormality noted on a screening mammography is to conduct a more detailed mammographic examination (diagnostic mammogram) with additional views such as magnification and compression views of the specific area in question. This may clearly show that the finding on the initial mammogram was benign and no additional testing may be needed. Sometimes additional testing with breast ultrasound or MRI is required and ultimately a breast biopsy may be indicated.

Ultrasound is useful for evaluating breast masses identified on mammogram and physical exam. Ultrasound can differentiate between cysts versus benign/suspicious masses that may require

further tissue sampling. Ultrasound is also useful in evaluating axillary lymph nodes for possible metastasis in known breast cancer patients. Advancements in ultrasound technology now offer three-dimensional capability, which may improve its sensitivity for detecting cancer.

Magnetic resonance imaging (MRI) may be indicated but its role in screening and diagnosis is still being evaluated. MRI has a high sensitivity (ability to detect) an invasive breast cancer but it also has more false positives than mammography, which may cause unnecessary anxiety or biopsies. However, sensitivity of MRI to detect the in situ breast disease is less than with mammography.

Abnormalities that are suspicious from either the tests described above or physical examination should be biopsied to determine if these abnormalities are cancer. The majority of breast cancer abnormalities can be evaluated with a needle core biopsy. To make sure there is adequate sampling, a core biopsy should be performed with imaging guidance even if the lesion can be felt. Based on the results of the needle biopsy, surgical excision may be needed.

4. Treatment Options

DETECTING BREAST CANCER AT AN EARLY STAGE OF DISEASE and completing treatment are essential to maintaining the best outcomes. Treatment options for breast cancer are continually evolving and are tailored to the individual patient and breast cancer biology. Choosing the optimum treatment is best achieved by a multidisciplinary approach including surgery, medical oncology, radiation oncology, genetics, nursing, with consideration for the individual patient. The multi-modality approaches should be in line with recommended treatment guidelines. Participation in clinical trials is very important to make further advances in prevention, treatment, and survivorship. Up-to-date treatment algorithms are detailed by the National Comprehensive Cancer Network (NCCN) (www.nccn.org) and other organizations such as the American Cancer Society (www.cancer.org), American Society of Clinical Oncology (ASCO) (www.asco.org), and American College of Surgeons (www.facs.org). Advances in treatment include surgical advances such as the use of sentinel lymph node biopsies (which is a major advance in helping to reduce the incidence of

lymphedema); new methods to deliver radiation safely, effectively, and efficiently; and new types of chemotherapy and hormonal therapy.

Patients benefit from culturally sensitive information, which can be obtained from the Cancer Information Service, National Cancer Institute, American Cancer Society, and Susan G. Komen for the Cure. Patients should be aware of their treatment options and understand potential side effects. A follow-up plan should be reviewed with each patient to ensure monitoring for recurrences and long-term complications. These guidelines are available through the NCCN and ASCO. Diagnostic work-up and treatment services are available through the Maryland Breast and Cervical Cancer Diagnosis and Treatment Program; however, funds are currently insufficient to serve all uninsured and underinsured women diagnosed with breast cancer in Maryland.

5. Survivorship

A GOAL FOR ALL PATIENTS WITH CANCER is to successfully complete treatment with minimum treatment-associated acute and long-term adverse health consequences. The acute consequences of treatment are well documented but less is known about long-term consequences. More research is needed to determine how best to reduce both short- and long-term adverse effects of breast cancer treatment.

To improve the health-related quality of life of cancer patients, the Institute of Medicine's report "From Cancer Patient to Cancer Survivor: Lost in Transition"⁴⁵ calls for all patients to have a survivorship care plan as part of the standard of care. The essential elements of survivorship care include: prevention of recurrent and new cancers and other late effects, surveillance for cancer and assessment of medical and psychosocial late effects, intervention for effects of cancer and its treatment, and coordination of care between specialists and primary care providers. These elements should be incorporated into the ongoing care of all cancer patients. See Chapter 4 for goals related to survivorship care for cancer patients.

6. Palliative and Hospice Care

WOMEN WITH METASTATIC BREAST CANCER have a wide array of potential chemotherapy options for treatment. While metastatic breast cancer is not curable, long-term survival is still possible with treatment. Treatment is available with the goals of both relief of symptoms and extension of life. At some point in the course of the disease, life extension is no longer possible, and the first and foremost goals are symptom relief and quality of life. Although breast cancer patients may have specific challenges at this point in care compared to other cancer patients, many of the challenges of end-of-life care are shared among cancer patients. End-of-life care is critical for both the patient and their family members. Chapter 15 provides the overall goals for palliative and hospice care for patients in the state of Maryland.

Maryland Laws Related to Breast Cancer

THESE LAWS REQUIRE HEALTH INSURERS AND HEALTH MAINTENANCE ORGANIZATIONS TO:

Provide coverage for routine mammography screening without a deductible charge.

- SB 445 <http://www.michie.com/maryland>
(See Maryland Insurance Code Title 15 Section 814)

Provide coverage for reconstructive breast surgery following a mastectomy and include surgery to the non-diseased breast to establish symmetry with the diseased breast.

- HB 1267 Applies to the Breast Cancer Diagnosis and Treatment Program:
<http://mlis.state.md.us/PDF-Documents/2001rs/bills/hb/hb1267e.PDF>
- HB119/SB181 Applies to health insurers and health maintenance organizations:
<http://mlis.state.md.us/PDF-Documents/1996rs/bills/hb/hb0119t.PDF>

Provide coverage for patient costs incurred as a result of treatment provided in a clinical trial for: (1) a life-threatening condition; or (2) prevention, early detection, and treatment studies on cancer.

A carrier must provide coverage for costs incurred by patients for FDA-approved drugs and devices, whether or not the FDA has approved the drug or device for treating the enrollee's particular condition.

- HB45/SB137 <http://mlis.state.md.us/PDF-Documents/1998rs/bills/hb/hb0045t.PDF>

Pay for a minimum of 48 hours of inpatient care following a mastectomy or cover costs of one home visit within 24 hours following discharge.

- SB173/HB41 <http://mlis.state.md.us/2009rs/bills/sb/sb0173t.pdf>

Provide coverage for a breast prosthesis.

- SB 181 <http://mlis.state.md.us/PDF-Documents/1999rs/bills/sb/sb0181e.PDF>

Reimburse patients (up to \$350) for the cost of a hair prosthesis when the loss of hair is due to chemotherapy or radiation treatments for cancer.

- HB45/SB386 <http://mlis.state.md.us/PDF-Documents/2000rs/bills/sb/sb0386e.PDF>

THESE LAWS ARE FOR PHYSICIANS:

Physicians who treat breast cancer patients are required to provide them with a written summary (to be provided by DHMH) describing various breast cancer treatments.

<http://www.dsd.state.md.us/comar/comarhtml/10/10.14.03.03.htm>

Physicians who perform breast implantations are required to provide patients with a standardized written summary (provided by DHMH) describing the advantages, disadvantages, and risks associated with breast implantation.

<http://www.dsd.state.md.us/comar/comarhtml/10/10.14.03.03.htm>

GOALS - OBJECTIVES - STRATEGIES

GOAL 1

Reduce the incidence of breast cancer in Maryland.

TARGETS (2015)

OVERALL	96.5 per 100,000 (2006 Baseline: 112.8 per 100,000)
BLACK OR AFRICAN AMERICAN	97.7 per 100,000 (2006 Baseline: 109.7 per 100,000)
WHITE	97.7 per 100,000 (2006 Baseline: 115.0 per 100,000) Source: Maryland Cancer Registry.

OBJECTIVE 1

By 2015, improve healthy behaviors of Marylanders including decreasing the number of women who are overweight or obese and increasing physical activity.

See the Nutrition, Physical Activity, and Healthy Weight chapter for specific objectives and strategies.

OBJECTIVE 2

By 2015, increase the proportion of Maryland women breastfeeding to reach the following targets:

- Increase the percentage ever breastfed to 85% (2006 Baseline: 75%).
 - Increase the percentage breastfeeding at six months to 67% (2006 Baseline: 46%).
 - Increase the percentage breastfeeding at 12 months to 42% (2006 Baseline: 26%).
- Source: CDC National Immunization Survey.

STRATEGIES

- 1 **SUPPORT WORKPLACE INITIATIVES** to encourage continued breastfeeding after return to work.
- 2 **INCREASE AWARENESS AND SUPPORT** the implementation of legislation requiring employers with more than 50 employees to provide break time and facilities (other than the bathroom) for breast pumping at work.
- 3 **ENCOURAGE THE ADOPTION** of the Ten Steps to Successful Breastfeeding (outlined by UNICEF/WHO) by Maryland hospitals.

OBJECTIVE 3

By 2015, incorporate breast cancer risk assessment as a part of routine healthcare for all women and conduct appropriate risk-based counseling for breast cancer prevention and screening.

STRATEGIES

- 1 **ASSESS THE NUMBER OF WOMEN COUNSELED** regarding their risk of breast cancer through surveys such as the Behavioral Risk Factor Survey or Maryland Cancer Survey to establish a baseline and appropriate target goals.
- 2 **DISSEMINATE AVAILABLE TOOLS** for cancer risk assessment to primary healthcare providers to assist in determining who is at risk.
- 3 **PROMOTE COVERAGE** for and increase awareness of individual counseling for risk reduction strategies (lifestyle factors such as weight management and exercise, genetic counseling and testing when appropriate, chemoprevention, avoiding or reducing combination hormone therapy after menopause, risk-reducing surgery, minimizing radiation exposure, and other strategies as they develop).

GOAL 2

Reduce the morbidity and mortality from breast cancer in Maryland.

MORTALITY TARGETS (2015)

OVERALL	22.0 per 100,000 (2006 Baseline: 25.0 per 100,000)
BLACK OR AFRICAN AMERICAN	25.1 per 100,000 (2006 Baseline: 30.3 per 100,000)
WHITE	20.7 per 100,000 (2006 Baseline: 23.7 per 100,000) Source: CDC WONDER.

OBJECTIVE 1

By 2015, increase the percentage of females in Maryland ages 40 and above who have received a mammogram in the past two years to greater than 77% (2008 baseline: 77%).

Source: MD BRFSS.

STRATEGIES

- 1 **PROMOTE ADEQUATE FUNDING** for screening mammography:
 - Support universal healthcare that includes breast cancer screening services.

GOALS - OBJECTIVES - STRATEGIES

- Maintain the Breast and Cervical Cancer Program for uninsured and underinsured women.
- Maintain mandatory insurance coverage and no co-pays for screening mammography.

2 INCORPORATE SYSTEM CHANGES in healthcare provider settings that automatically order annual mammography for women 40 and older.

3 SUPPORT POLICIES that allow work-time release to obtain cancer-screening services (as was done for Baltimore City employees).

4 REMOVE BARRIERS TO SELF-REFERRAL for women 40 and older to obtain annual mammography and employ strategies such as direct-to-consumer advertising, mobile mammography services, and others to reach underserved individuals and ensure adequate follow-up.

OBJECTIVE 2

By 2015, ensure that all individuals are promptly diagnosed within 60 days of abnormal screening and receive appropriate surgical (including breast reconstruction) options and adjuvant therapy treatment according to national guidelines (e.g., CDC, NCCN guidelines).

STRATEGIES

- 1 ESTABLISH THE BASELINE RATES** of individuals receiving diagnosis within 60 days and adherence to guidelines for prescribed treatment, and monitor/report primary treatment patterns using Maryland Cancer Registry and/or hospital tumor registries.
- 2 REDUCE THE NUMBER OF BREAST CANCERS** that are reported as unstaged in the Maryland Cancer Registry:
 - Decrease the number of death-certificate-only and/or lab-only reports.
 - Determine and support the use of sentinel node biopsy as part of the staging procedure.
 - Ensure that all women undergo appropriate staging procedures per national guidelines (e.g., American College of Surgeons guidelines).
- 3 INCLUDE "AMOUNT OF TIME TO DIAGNOSIS"** and "breast cancer treatment" as part of quality indicators that are publicly reported.

4 ENCOURAGE THE DEVELOPMENT of patient navigator/case manager programs to serve all patients, especially low-income populations, in order to ensure that patients have access to necessary services.

5 IMPROVE THE NUMBER OF PATIENTS participating in clinical trials by improving access throughout the state and increasing the provider network offering clinical trials.

OBJECTIVE 3

By 2015, ensure that all patients have a survivorship care plan as part of routine care and have adequate access to supportive care for pain and other symptom management for those living with, through, and beyond cancer.

STRATEGIES

- 1 ASSESS THE NUMBER OF PATIENTS** who receive survivorship care plans and supportive care for pain/symptom management through patient and provider survivors in order to establish a baseline and measure progress.
- 2 ESTABLISH MINIMAL CLINICAL ELEMENTS** for survivorship, pain management, and palliative and hospice care.
- 3 IMPROVE THE ASSESSMENT AND TREATMENT** of pain and other symptom management by including assessments at each follow-up visit and incorporating systemic methods to trigger appropriate follow-up and treatment (including access to psychological services and palliative and hospice care if needed).

See the Patient Issues and Cancer Survivorship, Pain Management, and Palliative and Hospice Care chapters for additional specific objectives and strategies.

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