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# COMMUNITY

PROFILE REPORT 2015



SUSAN G. KOMEN®  
MEMPHIS-MIDSOUTH

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# Executive Summary

## **Introduction to the Community Profile Report**

Susan G. Komen® Memphis-MidSouth was founded in 1992. Through 2012, the Affiliate served five counties in two states: Fayette, Shelby, and Tipton in Tennessee and DeSoto and Tunica counties in Mississippi. In 2012, the Affiliate expanded to serve 14 counties in Tennessee and seven in Mississippi: Shelby, Fayette, Tipton, Lauderdale, Dyer, Haywood, Lake, Madison, Crockett, Hardeman, Henderson, Chester, McNairy and Hardin in Tennessee and DeSoto, Tunica, Tate, Marshall, Benton, Coahoma and Quitman in Mississippi. From 1992 to 2014, Komen Memphis-MidSouth granted over \$9.4million locally in its mission to eradicate breast cancer through education, screening and treatment and contributed over \$2.4 million to breast cancer research.

The Affiliate is known as the premier resource in the MidSouth for breast health information and presentations. It is projected that over 17,000 women will receive educational materials from Komen Memphis-MidSouth in 2015-2016. The Affiliate maintains memberships in the Memphis Breast Cancer Consortium, the Tennessee Cancer Coalition, and the Mississippi Partnership for Comprehensive Cancer Control. Representatives from the Affiliate participate in events such as the 2014 community meeting “The Racial Gap in Breast Cancer Outcomes in Memphis” and the Memphis Community Health Forum held in December 2014.

The purpose of the Community Profile Report is primarily to establish focused granting priorities and focused educational needs. It will assist to identify the areas of greatest need in the Affiliate area and where grants can most effectively advance its mission, leading to the most efficient use of funds. The Community Profile will also serve to help align the Affiliate’s strategic and operational plans, drive inclusion efforts in the community, establish directions for marketing and outreach, and strengthen sponsorship efforts. These initiatives will be particularly important in the 16 counties that were added in 2012.

## **Quantitative Data: Measuring Breast Cancer Impact in Local Communities**

The Quantitative Data Report (QDR) that was prepared for Susan G. Komen Memphis-MidSouth combines evidence from many credible sources and uses that data to identify the highest priority areas for evidence based breast cancer programs. The QDR provides demographic information and data about how the 21 counties in the Affiliate area are progressing toward the health objectives of Healthy People 2020 (HP2020). HP2020 is a major federal government objective that provides specific health objectives, or targets, for communities to reach by 2020. Each county is assigned a priority category based on how well it is progressing toward the targets. The report uses the following information to determine priority categories:

- County breast cancer death rate and late-stage diagnosis data for years 2006 to 2010
- Estimates for the trend (annual percent change) in county breast cancer death rates and late-stage diagnoses for years 2006 to 2010
- Both the data and the HP2020 target are age-adjusted.

The QDR reveals that two counties in the Affiliate area, Lauderdale County and Crockett County, are considered highest priority counties. Madison County is one of two high priority counties. Shelby County and Marshall County are among the medium priority counties. As a result of their HP2020 priority categories and other key demographic data, the following communities were selected for further study:

- Shelby County, TN
- Madison County, TN
- Crockett County, TN and Lauderdale County, TN (contiguous counties)
- Marshall County, MS

Shelby County was selected due to several factors. Shelby County is considered a medium priority county for Healthy People 2020. The county's breast cancer incidence rate is significantly higher than the Affiliate service area as a whole and trending upward. Death rates and late-stage rates are also higher than in the US and the Affiliate area, but are trending downward.

Shelby is the most populous county in the Affiliate area and home to 57.5 percent of the women in the area. Over ten percent of the population of the state of Tennessee lives in the city of Memphis. Shelby County has a substantially larger African-American female population than the Affiliate area as a whole. African-American women are more likely to die of breast cancer than Caucasian women and have the highest breast cancer death rate of all racial and ethnic groups (Susan G. Komen, 2014).

Additional data were collected which revealed that the city of Memphis, in Shelby County, has the worst racial disparity in breast cancer death rates of the 25 largest cities in the United States (Whitman, Orsi and Hurlburt, 2011). Memphis has also been identified as the poorest city in the country among metro areas of at least one million (Charlier, 2013).

The numbers and the need in Shelby County justify selecting it as a target community. Demographic and economic indicators, along with Healthy People 2020 data, point to Shelby County as an obvious area for further study.

Crockett and Lauderdale Counties, both in Tennessee, are contiguous and have been selected as one target area. Crockett and Lauderdale Counties are the only two counties in the Affiliate area that have been classified as highest priority based on their predicted failure to meet Healthy People 2020 target goals. Crockett County is not expected to meet the late-stage incidence target by 2020, and Lauderdale County is not expected to reach either the death rate target or the late-stage incidence target. In Lauderdale County, both breast cancer incidence trends and late-stage incidence trends are significantly less favorable than the Affiliate area as a whole. Data indicate that both counties are predominately Caucasian, rural, and in 100 percent medically underserved areas. Both also have substantially lower education levels than that of the Affiliate area as a whole, and Lauderdale has substantially lower income levels. Based on the HP2020 categorization of both counties as highest priority and the area's demographic characteristics, this area was selected as a target community for further study.

Madison County is the second most populous county of the Affiliate's Tennessee counties with 51,087 women. Madison County is designated as a high priority county for Health People 2020 due to its predicted failure to meet the late-stage incidence target. It is predicted to take 13

years or longer to meet the target, and it is predicted to take seven years to meet the death rate target. The data also indicate that late-stage incidence trends may be increasing. Late-stage diagnosis is associated with a poorer prognosis for survival.

In Madison County, 38.6 percent of women live below 250 percent of the federal poverty level and 17.5 percent of them live without health insurance. Although not designated as medically underserved, there may be barriers to care as the county is failing to meet a Healthy People 2020 target and so this county was chosen as a target community.

Marshall County, in north Mississippi, is the fourth target area. This county is not expected to reach the Healthy People 2020 target for breast cancer death rates and is classified as medium priority. According to the QDR, it is 83 percent rural and 100 percent medically underserved. The data reveals substantially lower education levels than the Affiliate area as a whole. It has a substantially larger African-American female population than the Affiliate as a whole, which is significant as African-American women have the highest death rates from breast cancer of any racial or ethnic group. Marshall County was chosen as a target community based on this data and because an analysis of the health system may reveal needs and gaps in services and help set priorities for programs in north Mississippi.

### **Health System and Public Policy Analysis**

In Shelby County, a major strength of the health care delivery system and the Breast Cancer Continuum of Care (CoC) is the large number and diversity of services available. There are multiple providers for each step of the CoC: education, screening, diagnostics, treatment, support/survivorship and end-of-life care. Free breast health information and education is available from many sources, including the Affiliate. There are several hospital systems and community clinics. The Baptist Mobile Mammography Unit makes visits to numerous sites, including clinics, businesses, and community events. There are sources for survivor support in the many local breast cancer support groups.

Despite the large number of providers, there are weaknesses in the Shelby County CoC. It is documented that many women do not get screened, do not have mammograms and do not move along the continuum in a timely manner. There are notable racial disparities in outcomes. Poverty is correlated with accessing and remaining in the CoC and Memphis has high rates of poverty. Many Shelby County women rely on clinics for the uninsured and underserved. Free screening mammogram slots provided through the State of Tennessee are exhausted months before the end of the fiscal year, as are many of the slots provided by Komen grantee programs. Few financial assistance programs assist for breast cancer patients.

Lauderdale and Crockett Counties, in a rural area north of Shelby, have few breast health services available. The Tennessee Breast and Cervical Program (BCCP) is of value to the area as a safety net program, providing an entry point to the CoC for underserved women. The county health departments provide screening clinical breast exams and then refer women out of county to neighboring Dyer and Madison Counties for mammograms. Women must travel there for those services. Women must also travel out-of-county for diagnostics and treatment. There is a local support group for those affected by cancer.

Madison County has several service providers, with mammography centers located in the City of Jackson. Two hospitals are located in Jackson, offering services along the full CoC. Survivor services and support groups are available. The BCCP provides mammograms through the East Jackson Family Health Clinic, but there are few other options for free mammograms, which could limit access for uninsured and low income women.

Marshall County, MS, is a rural county with few breast health services available. Through the Mississippi Breast and Cervical Screening Program, screening clinical breast exams are available at a local clinic and women are referred for mammograms to either Alliance Health System in Marshall County or to Baptist DeSoto Hospital in neighboring DeSoto County. Women must travel out-of-county for treatment and no survivor support groups are known to exist.

Public policy heavily impacts the Breast Cancer CoC. Women who are uninsured and low-income in all three of the Tennessee target communities and in Marshall County, MS, benefit from the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). In Tennessee, it is known as the Breast and Cervical Screening Program (BCCP) and is operated by the Tennessee Department of Health through the county health departments. Funding comes from the CDC with additional funds from the state legislature and additional support from Susan G. Komen Tennessee Affiliates. To be eligible for the program, women must be uninsured or underinsured, aged 40 to 64 and have income at or below 250 percent of the Federal Poverty Level (FPL). Mammograms are only available for women aged 50-64. With a family history of breast cancer, a woman can receive screening services starting at age 40. Women who are younger than 40 can be enrolled for diagnostic and treatment services if they have suspicious results from screening services (TDOH, 2012).

In Mississippi, the program is also known as the Breast and Cervical Program and operates through the Mississippi Department of Health. It is supported with federal funds from the CDC and a matching funds program. To be eligible for the program in Mississippi, a woman must be between 40 and 64, uninsured or underinsured, and have income at or below 250 percent of the FPL. Mammography screening is available through contracted providers to women between 50 and 64 years of age. Women 40 to 49 are eligible for screening mammograms when special funding is available from the National Breast Cancer Foundation.

National Comprehensive Cancer Control programs, funded by the CDC, exist to lessen the burden of cancer in all states and are active in both Tennessee and Mississippi. In Tennessee, Komen Memphis-MidSouth is a member of the Tennessee Cancer Coalition West Region and an Affiliate representative serves on the Women's Cancer Committee. An Affiliate representative also attends meetings of the Tennessee Cancer Coalition Jackson Region. Komen Memphis-MidSouth maintains a membership with the Mississippi Partnership for Comprehensive Cancer Control.

The public policy initiative with the single largest impact on breast health care for in the next few years is the Affordable Care Act (ACA) which was designed to provide almost universal health insurance coverage through a combination of expanded Medicaid eligibility for the poor and income tax credits to assist with the cost of insurance for those with slightly higher incomes. Free screening mammograms are a mandated benefit of the ACA. Following a Supreme Court decision that the States were not required to expand their Medicaid programs under the ACA,

both Tennessee and Mississippi decided not to expand Medicaid eligibility. Many women will find themselves in a coverage “gap” and will be both ineligible for Medicaid and unable to afford private insurance, thus remaining uninsured with no access to screening and other services. Komen Memphis-MidSouth promotes the advocacy priorities of Susan G. Komen Headquarters Public Policy model guidelines. The Executive Director and Board President keep board members and staff informed of policy issues and opportunities to reach out to state and national legislators on breast health related issues.

The Health Systems and Public Policy Analysis findings indicate that accessibility is a concern in each area and that there is a need for education about breast health and local resources that will increase accessibility and encourage women to enter and remain in the CoC. The Affiliate is actively working to provide additional sites for regular, ongoing education in all four areas. Additionally, findings reveal that in urban Shelby County, extensive services along the CoC are available, but poverty creates barriers to accessing them and large racial disparities exist. Poverty and the associated lack of insurance can also lead to delays in diagnosis and treatment. In the two most rural target areas, Lauderdale/Crockett and Marshall, large gaps in accessibility exist, as there are no local providers of some services and women must travel to other counties for care, including diagnosis, treatment and some support services. This could lead to delays in diagnosis and treatment. Madison County also has issues with accessibility, as there is a large rural population, but services and hospitals are located in the City of Jackson.

Findings further indicate that the ACA implementation will have the largest public policy implications for all four target communities. There will be some women who are now utilizing BCCP programs and Komen grantee programs that will be eligible for private health insurance, utilizing the tax credits to help offset the costs. These newly insured women will have access to free screening mammograms and will no longer utilize BCCP or grantee programs. However, as neither Tennessee nor Mississippi has expanded Medicaid eligibility, many low-income women will find themselves in a “gap” and will be ineligible for Medicaid and ineligible for the tax credits. Unable to afford the high cost of insurance without tax credits and also unable to qualify for Medicaid, these low-income women will likely remain uninsured with no access to screening mammograms. They will continue to need to access free screening and other services through BCCP or Komen grantees. High deductibles will be a continuing problem, as insured women will find that they cannot afford the personal expense of diagnostics.

### **Qualitative Data: Ensuring Community Input**

In each of the four target communities, focus groups and key informant interviews (KI interviews) were the methods used to collect Qualitative Data. The focus groups and KI interviews were conducted by the Affiliate Mission Manager (a Licensed Master Social Worker) or the Community Profile Intern, a Middle Tennessee State University Senior majoring and graduating in Public Health. The Mission Manager and the Intern traveled to the target communities for the focus groups and most of the KI Interviews.

Several of the KI interview informants were known to Komen as providers of breast health services and community leaders. The Community Profile Team also spent extensive time making phone calls and traveling to facilities and events in order to develop new sources of information in the four target communities. Contacts in each area provided assistance in

recruiting group participants and referring the Community Profile Team to other potential sources of breast health information

Key assessment questions were selected to further explore the issues highlighted by the quantitative data and health systems analysis. Access to screening and education was viewed as the entry point to the CoC in each community. Respondents in each community were asked about barriers to access and utilization of breast cancer screening and diagnostic services, and the most effective methods of breast health education for the local community. A question regarding disparities among different populations was included.

The Qualitative Data findings yielded striking consistencies about the most common barriers to accessing screening and the CoC across all four communities. The lack of health insurance as a barrier to screening and a lack of knowledge about both the importance of screening and local resources for the underserved were cited in each community.

In Shelby County, the data reveals that two of the major barriers to screening and the CoC are a lack of health insurance, fueled by poverty, and a woman's fear of what screening may reveal, related to the lack of adequate breast health education. The data from both focus groups and KI interviews further reveals that more culturally competent education may be a way to address both the fear of screening and the lack of knowledge of free screening resources. It can also be concluded from the data that respondents are aware of the racial disparity in breast cancer deaths and want to see it addressed with more education, more free and low-cost resources and better coordination of existing resources and services.

In Crockett and Lauderdale Counties, the Qualitative Data reveal findings that are supported by the QDR and the Health Systems Analysis. Respondents indicate that the "lack of insurance" and "lack of transportation" are among the top barriers to accessing the CoC. The Quantitative Data reveal that Lauderdale County incomes are substantially lower than the Affiliate area as a whole, which is likely to be contributing to the lack of insurance and lack of transportation to services (no money for gas or to pay for transportation). These barriers can reasonably be assumed to be affecting the high rates of late-stage incidence in both counties and the high breast cancer death rate in Lauderdale County. The respondents voiced that there is a need for more free local screening since there are currently few options locally for free or low-cost screening. Participants in focus groups also voiced that culturally competent education should be brought to places where women meet already – to church, to women's clubs, to clinics.

In Madison County, the qualitative findings indicate that the lack of health insurance and difficulty with transportation are major barriers to breast cancer screening which is consistent with the health system analysis and quantitative data. The health system analysis reveals a county where there are very few sources of free or low cost breast cancer screening other than the BCCP. The findings also show that key informants and focus group members believe that there is a need for more education about the benefits of early detection, and that the education should be culturally competent and at sites easily accessible to women.

In Marshall County, the findings reveal that the lack of health insurance is perceived as the biggest barrier to screening services and accessing the CoC. A majority of qualitative data respondents in focus groups and KI interviews feel that more free and low cost services are

needed in the county and would lead to higher screening rates. Key informants and focus group members also voiced that more culturally competent education about both breast health and local resources in the county would increase screening rates. This is supported by the Quantitative Data which show that Marshall has a larger African-American/Black population and substantially lower education levels than the Affiliate area as a whole.

### **Mission Action Plan**

In order to create the Mission Action Plan (MAP) for the Affiliate, the Community Profile Team reviewed the breast health and breast cancer findings for each target community, identified the most pressing concerns, and developed a statement of need for each area. A collaborative process was used to develop priorities for each area. The Team deliberately selected priorities that were broad, but measurable and attainable, and it was recognized by the committee that it may be several years before a notable change is observed. A maximum of five realistic and achievable objectives related to each priority were then developed for each target area. The Mission Action Plan for each target community is summarized below:

### **Shelby County, TN**

Women in Shelby County have breast cancer incidence rates, death rates, and late-stage rates that are higher than Affiliate service area rates and US rates. Memphis, in Shelby County, has the worst racial disparity in breast cancer deaths among the 25 largest metropolitan areas in the US. The lack of health insurance and a lack of knowledge about free and low cost breast health resources are major barriers to increased screening and utilization of the CoC. There is not enough funding for breast health services to meet the needs of underserved women. A lack of culturally competent breast health education contributes to underutilization of services by African-American/Black women.

**Priority 1:** Increase access to the breast health CoC for poor and uninsured women.

### **Objectives for Priority 1:**

1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Shelby County who are uninsured, underinsured, and poor as priorities for funding.
2. From FY2016 through FY2019, meet at least twice annually with at least one local coalition of health care providers or community based organizations in Shelby County to communicate grantmaking priorities, encourage applications, foster discussion about increased access, and promote collaboration among breast health providers serving poor and uninsured women.
3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Shelby County women.
4. From FY2016 through FY2019, publicize free and low cost breast health resources at least twice annually, in spring and fall, through press releases to known media outlets, the Affiliate website, Facebook, and other social media outlets that specifically reach Shelby County.

5. From FY2016 through 2019, provide 15,000 educational materials with local resource information to organizations, businesses, educational institutions, places of worship, and others in Shelby County.

**Priority 2:** Increase culturally competent education that may assist in reducing the racial disparities in breast cancer deaths.

**Objectives for Priority 2:**

1. From FY2016 through FY2019, coordinate an annual Pink Sunday event which focuses on African-American/Black churches and will reach at least 75 churches each year with culturally competent education.
2. In FY2016, hold quarterly educational sessions for African-American/Black women that provide culturally competent education about breast health and local breast health resources.
3. From FY2016 through FY2019, Community Grant RFA funding priorities will include education and support with a special emphasis on culturally competent education and survivor support for African-American/Black women.

**Crockett County and Lauderdale Counties, TN**

Women in the adjoining counties of Crockett and Lauderdale have high rates of late-stage incidence and high death rates. These two counties are designated as highest priority for expected failure to meet HP 2020 target rates based on current trends. Lauderdale County will fail to meet both the late-stage incidence rate target (with late-stage incidence increasing annually), and the death rate target. Crockett County is not expected to meet the late-stage incidence rate target. There are very few services in the breast cancer CoC provided in the two counties. A lack of health insurance, high poverty percentages, few free and low cost services, and the distance to service providers are also barriers to accessing the CoC. Lack of knowledge and the “fear of what screening may lead to” contribute to decreased access and lead to less utilization of the CoC.

**Priority 1:** Increase access to the breast health CoC for poor and uninsured women.

**Objectives for Priority 1:**

1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Crockett and Lauderdale Counties who are uninsured, underinsured, and poor as priorities for funding.
2. In FY2016, participate in at least one meeting of local health care providers or community based organizations in Crockett and Lauderdale Counties to communicate grantmaking priorities, encourage applications from local providers, and foster discussion about improved access to the CoC.

3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Crockett County and Lauderdale County women.
4. From FY2016 through FY2019, publicize free and low cost breast health resources and Komen grant opportunities at least twice annually, in spring and fall, through press releases to known media outlets in these counties, the Affiliate website, Facebook, and other social media outlets that specifically reach Crockett and Lauderdale Counties.
5. In FY2016, hold quarterly culturally competent educational sessions about breast health and local breast health resources in Crockett and Lauderdale Counties and follow up with participants after the sessions to provide information that can link them to services.

### **Madison County, TN**

The late-stage incidence rate in Madison County is trending upward annually, which makes this area a high priority county for HP 2020. There are few free or low cost breast health services available from local providers, although 38.6 percent of women in this area live below 250 percent of the poverty level and 17.5 percent have no health insurance. The lack of health insurance, the lack of transportation to services, and the lack of knowledge of the value of early detection and of local resources are all barriers to accessing the breast cancer CoC.

**Priority 1:** Increase access to the breast health CoC for poor and uninsured women.

#### **Objectives for Priority 1:**

1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Madison County who are uninsured, underinsured, and poor as priorities for funding.
2. In FY2016, participate in at least one meeting of local health care providers or community based organizations in Madison County to communicate grantmaking priorities, encourage applications from local providers, and foster discussion about improved access to the CoC.
3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Madison County women.
4. From FY2016 through FY2019, publicize free and low cost breast health resources and Komen grant opportunities at least twice annually, in spring and fall, through press releases to known media outlets in Madison County, the Affiliate website, Facebook, and other social media outlets that specifically reach Madison County.
5. In FY2016, hold quarterly educational sessions in Madison County that provide culturally competent education about breast health and local breast health resources and follow up with participants after the sessions to provide information that can link them to services.

## **Marshall County, MS**

Marshall County breast cancer death rates are trending upward and the county is not expected to reach the Healthy People 2020 death rate target. There are few providers of breast health services in the county and very few free or low cost services. Poverty, lack of insurance, and lack of knowledge create barriers to accessing the breast health CoC.

**Priority 1:** Increase access to the breast health CoC for poor and uninsured women.

### **Objectives for Priority 1:**

1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Marshall County who are uninsured, underinsured, and poor as priorities for funding.
2. From FY2016 through 2019, participate annually in the Women's Health Day in Marshall County to communicate grantmaking priorities, encourage applications from local providers, and foster discussion about improved access to the CoC.
3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Marshall County women.
4. From FY2016 through FY2019, publicize free and low cost breast health resources and Komen grant opportunities at least twice annually, in spring and fall, through press releases to known media outlets in Marshall County, the Affiliate website, Facebook, and other social media outlets that specifically reach Marshall County
5. In FY2016, hold quarterly educational sessions in Marshall County that provide culturally competent education about breast health and local resources and follow up with participants after the sessions to provide information that can link them to services.

**Disclaimer:** Comprehensive data for the Executive Summary can be found in the 2015 Susan G. Komen Memphis-MidSouth Community Profile Report.

# Introduction

## **Affiliate History**

Susan G. Komen® Memphis-MidSouth was founded in 1992. Through July 2012, the Affiliate served five counties in two states: Fayette, Shelby and Tipton Counties in Tennessee and DeSoto and Tunica Counties in Mississippi. In August 2012, the Affiliate expanded to serve 14 counties in Tennessee and seven counties in Mississippi: Shelby, Fayette, Tipton, Lauderdale, Dyer, Haywood, Lake, Madison, Crockett, Hardeman, Henderson, Chester, McNairy and Hardin in Tennessee and DeSoto, Tunica, Tate, Marshall, Benton, Coahoma and Quitman in Mississippi.

In 2012, the Affiliate celebrated its twentieth Race for the Cure by naming Twenty Faces for Twenty Races amidst extensive media coverage. In 2013, the Volunteer Center of Memphis selected a Race for the Cure committee member, Loretta Hooker, as Spirit of Giving- Volunteer of the Year Award honoree.

Since its inception in 1992, Komen Memphis-MidSouth has granted over \$9.4 million locally in its mission to eradicate breast cancer through education, screening and treatment and has contributed over \$2.4 million to breast cancer research. The Affiliate has partnered with major hospitals in the area including Baptist, Methodist, Regional One and St. Francis and with community providers including Christ Community Health Center, Church Health Center, and the Julie B. Baier Foundation. Grants have been made to 36 organizations since 1992. In fiscal year 2015-2016, grants totaling \$551,499 were provided for dedicated use in 21 counties. As a result of the Komen grant program, thousands of women each year are able to access education, screening, diagnostic, treatment, and support services.

Komen Memphis-MidSouth is known as the premier local resource for breast health educational materials and presentations. Educational sessions are regularly provided for local health care providers, places of worship, colleges, women's groups, and other entities. Affiliate employees and volunteers staff dozens of health fairs annually. In 2015-2016, the Affiliate is projected to provide educational materials to over 17,000 women.

Komen Memphis-MidSouth is recognized for breast health and breast cancer expertise in the community. The Affiliate is a member of the Memphis Breast Cancer Consortium, the Tennessee Cancer Coalition, and the Mississippi Partnership for Comprehensive Cancer Control. Representatives from the Affiliate are regularly invited to participate in initiatives such as the 2014 event "The Racial Gap in Breast Cancer Outcomes in Memphis" and the Memphis Community Health Forum held in December 2014.

## **Affiliate Organizational Structure**

A governing Board of Directors composed of 11 community leaders and the Executive Director lead the Komen Memphis-MidSouth. In addition to the Executive Director, the staff includes an Operations Manager, a Communications and a Mission Manager. There are four volunteer committees: the Race for the Cure Committee, Grants Committee, Survivor Luncheon Committee, and Rock the Ribbon Committee. Additionally, nearly 400 volunteers support the work of the Affiliate in various capacities.

## **Affiliate Service Area**

As seen in Figure 1.1, the Affiliate's service area is composed of fourteen counties in West Tennessee and seven counties in North Mississippi. The area has a diverse socioeconomic and demographic make-up. It encompasses both rural and urban counties, as seen in Figure 1.2 and Figure 1.3. The area varies from counties like Benton in Mississippi and Lake in Tennessee, which are both 100 percent rural, to urban Shelby County in Tennessee, home to the City of Memphis, the largest city in the state with a population of 653,450 (US Census Bureau, 2010).

# KOMEN MEMPHIS-MIDSOUTH SERVICE AREA

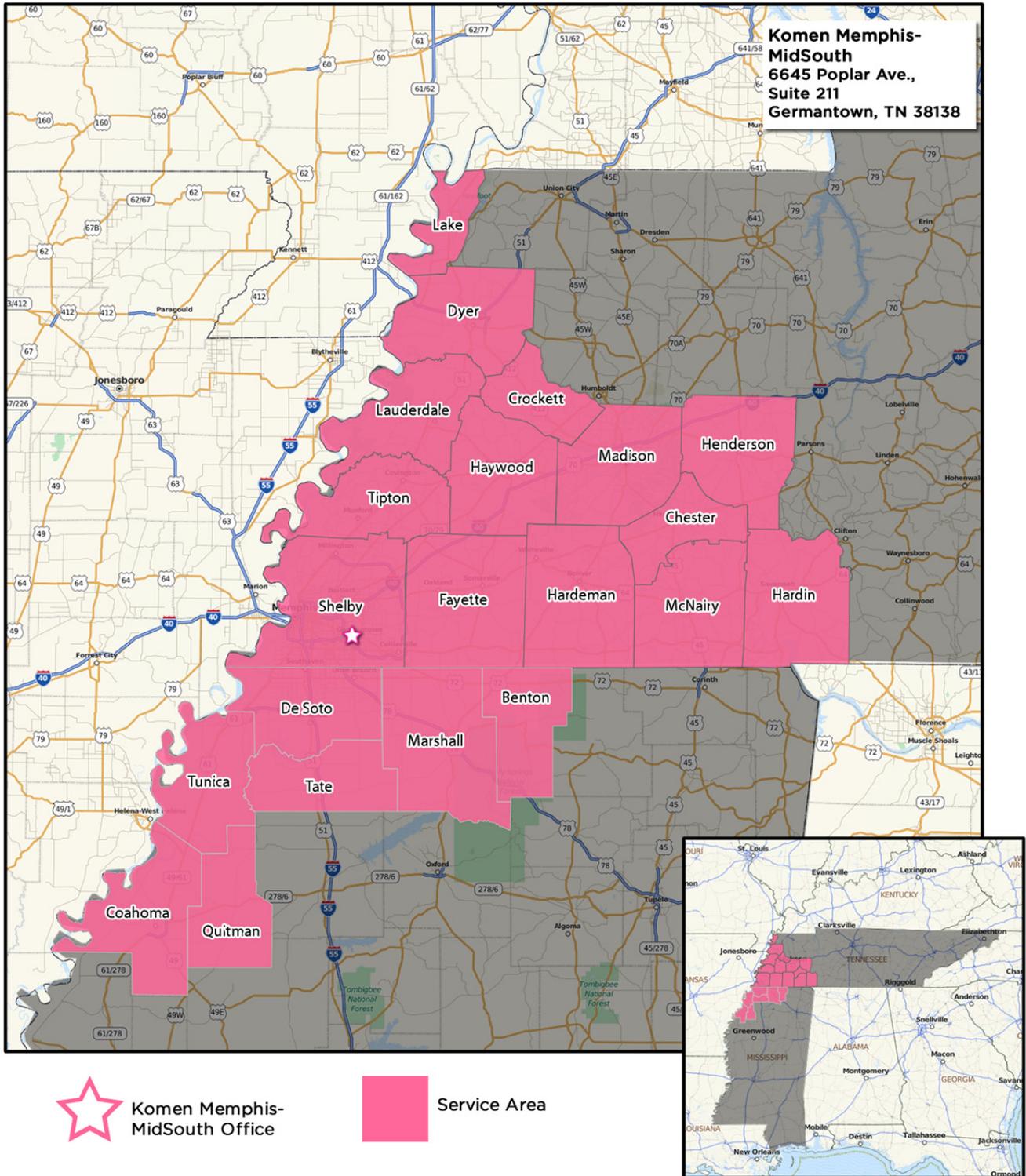
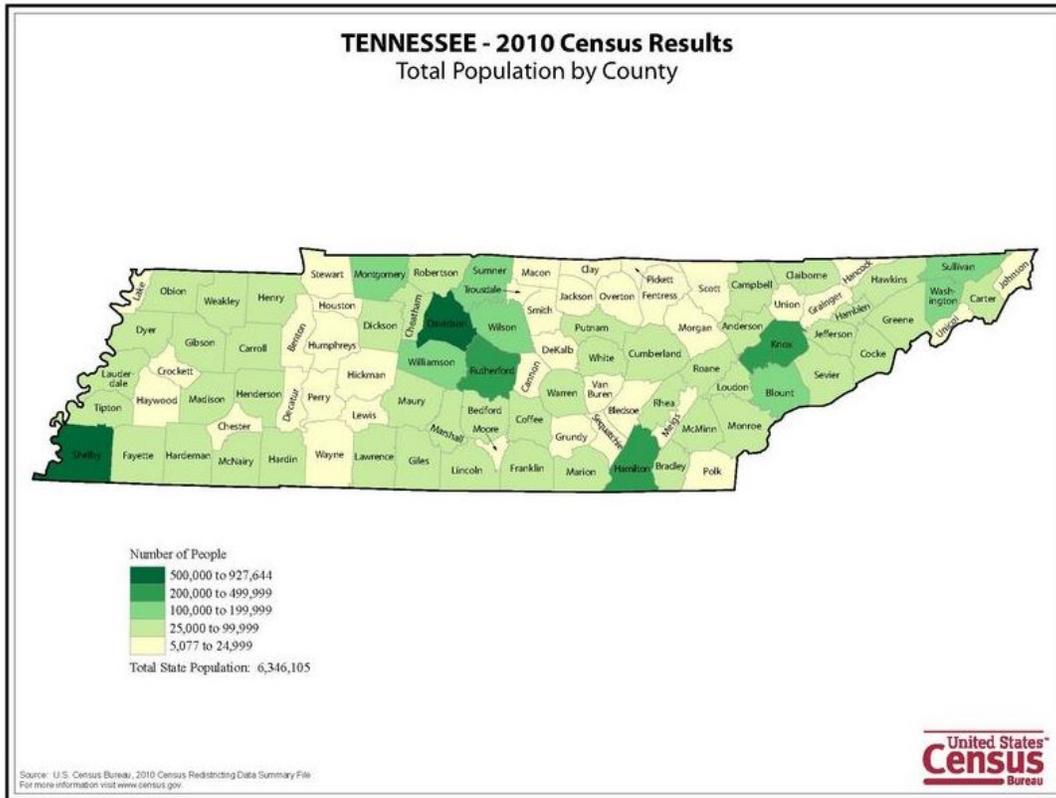
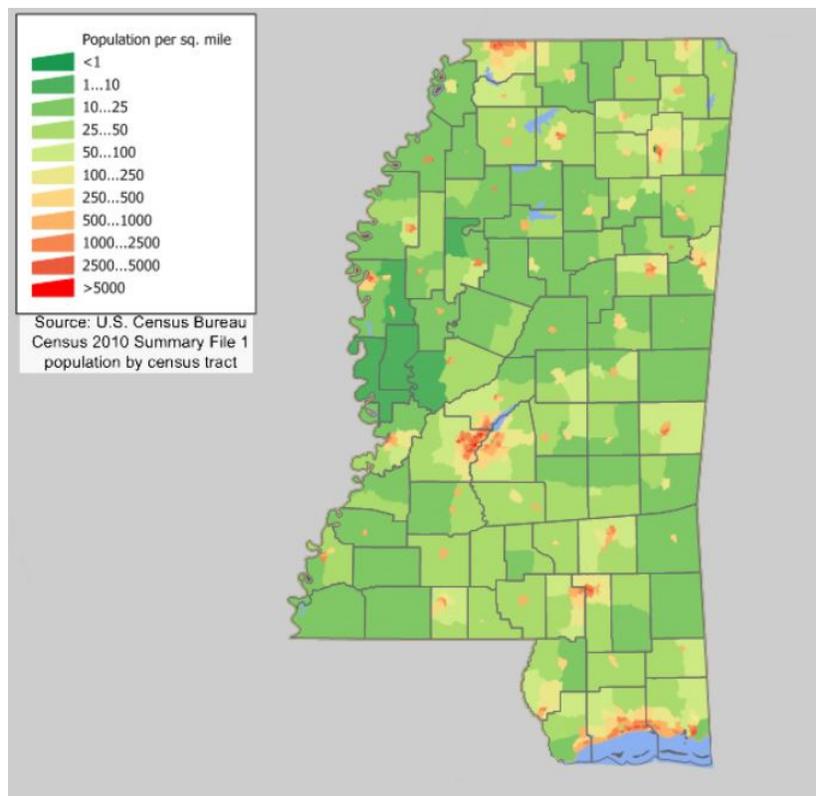


Figure 1.1. Susan G. Komen Memphis-MidSouth service area



Source: US Census Bureau: 2010 Redistricting Summary File

**Figure 1.2.** State of Tennessee population map



Source: US Census Bureau: Census 2010 Summary File

**Figure 1.3.** State of Mississippi population map

The Affiliate service area's economy has historically relied predominately on agriculture, with Memphis serving as the nearest urban site and the distribution center for agricultural and other products. Memphis, strategically located on the Mississippi River and near the population center of the United States, is also known today as America's Distribution Center (Greater Memphis Chamber, 2014). The area also includes smaller cities like Jackson, Tennessee, with a population of 67,685 and Southaven, Mississippi, with a population of 50,997 (US Census Bureau, 2010). The Affiliate's counties also vary widely in racial make-up. Shelby County is 53.1 percent African-American/Black alone, 42.6 percent Caucasian/White alone (not Hispanic/Latino), and 5.9 percent Hispanic/Latino (US Census Bureau, 2014). Other counties have a much less diverse population.

The two states where the Affiliate's counties are located have some of the highest rates of poverty in the United States. Tennessee has the twelfth highest poverty percentage in the country and Mississippi has the highest poverty percentage in the country (Tennessee's, 2012). The City of Memphis has been ranked as the poorest city in the US among metro areas of at least one million (Charlier, 2013). Tennessee and Mississippi are also noted for poor health rankings. Of the 21 counties in the Affiliate area, only three are not considered medically underserved (HRSA, 2013). Given these defining characteristics, the work of Komen Memphis-MidSouth can be literally lifesaving.

### **Purpose of the Community Profile Report**

The purpose of the Community Profile Report is primarily to establish focused granting priorities and focused educational needs. It will assist to identify the areas of greatest need in the community and where grants can most effectively advance the mission of the Affiliate, leading to the most effective and efficient use of funds. The Community Profile will also serve to help align the Affiliate's strategic and operational plans, drive inclusion efforts in the community, establish directions for marketing and outreach, and strengthen sponsorship efforts. These initiatives will be particularly important in the 16 counties that were added to the Affiliate area in 2012.

The Community Profile will be used to establish priorities in the annual Request for Applications, to reach out to women with educational opportunities, and to establish partnerships with other entities that will benefit the women of the Affiliate service area.

The report will be posted on the Affiliate website and will be made readily available to community partners, potential grantees, and any other interested parties in the fields of breast health, breast cancer, and community health. The Community Profile should prove to be an enlightening and valuable tool for those who are interested in the health of the women of West Tennessee and North Mississippi.

# Quantitative Data: Measuring Breast Cancer Impact in Local Communities

## Quantitative Data Report

### Introduction

The purpose of the quantitative data report for Susan G. Komen® Memphis-MidSouth is to combine evidence from many credible sources and use the data to identify the highest priority areas for evidence-based breast cancer programs.

The data provided in the report are used to identify priorities within the Affiliate's service area based on estimates of how long it would take an area to achieve Healthy People 2020 objectives for breast cancer late-stage diagnosis and death rates (<http://www.healthypeople.gov/2020/default.aspx>).

The following is a summary of Komen® Memphis-MidSouth's Quantitative Data Report. For a full report please contact the Affiliate.

## Breast Cancer Statistics

### Incidence rates

The breast cancer incidence rate shows the frequency of new cases of breast cancer among women living in an area during a certain time period (Table 2.1). Incidence rates may be calculated for all women or for specific groups of women (e.g. for Asian/Pacific Islander women living in the area).

The female breast cancer incidence rate is calculated as the number of females in an area who were diagnosed with breast cancer divided by the total number of females living in that area. Incidence rates are usually expressed in terms of 100,000 people. For example, suppose there are 50,000 females living in an area and 60 of them are diagnosed with breast cancer during a certain time period. Sixty out of 50,000 is the same as 120 out of 100,000. So the female breast cancer incidence rate would be reported as 120 per 100,000 for that time period.

When comparing breast cancer rates for an area where many older people live to rates for an area where younger people live, it's hard to know whether the differences are due to age or whether other factors might also be involved. To account for age, breast cancer rates are usually adjusted to a common standard age distribution. Using age-adjusted rates makes it possible to spot differences in breast cancer rates caused by factors other than differences in age between groups of women.

To show trends (changes over time) in cancer incidence, data for the annual percent change in the incidence rate over a five-year period were included in the report. The annual percent change is the average year-to-year change of the incidence rate. It may be either a positive or negative number.

- A negative value means that the rates are getting lower.

- A positive value means that the rates are getting higher.
- A positive value (rates getting higher) may seem undesirable—and it generally is. However, it's important to remember that an increase in breast cancer incidence could also mean that more breast cancers are being found because more women are getting mammograms. So higher rates don't necessarily mean that there has been an increase in the occurrence of breast cancer.

### Death rates

The breast cancer death rate shows the frequency of death from breast cancer among women living in a given area during a certain time period (Table 2.1). Like incidence rates, death rates may be calculated for all women or for specific groups of women (e.g. African-American/Black).

The death rate is calculated as the number of women from a particular geographic area who died from breast cancer divided by the total number of women living in that area. Death rates are shown in terms of 100,000 women and adjusted for age.

Data are included for the annual percent change in the death rate over a five-year period.

The meanings of these data are the same as for incidence rates, with one exception. Changes in screening don't affect death rates in the way that they affect incidence rates. So a negative value, which means that death rates are getting lower, is always desirable. A positive value, which means that death rates are getting higher, is always undesirable.

### Late-stage incidence rates

For this report, late-stage breast cancer is defined as regional or distant stage using the Surveillance, Epidemiology and End Results (SEER) Summary Stage definitions (<http://seer.cancer.gov/tools/ssm/>). State and national reporting usually uses the SEER Summary Stage. It provides a consistent set of definitions of stages for historical comparisons.

The late-stage breast cancer incidence rate is calculated as the number of women with regional or distant breast cancer in a particular geographic area divided by the number of women living in that area (Table 2.1). Late-stage incidence rates are shown in terms of 100,000 women and adjusted for age.

**Table 2.1.** Female breast cancer incidence rates and trends, death rates and trends, and late-stage rates and trends.

Population Group	Incidence Rates and Trends				Death Rates and Trends			Late-stage Rates and Trends		
	Female Population (Annual Average)	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of Deaths (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)
US	154,540,194	182,234	122.1	-0.2%	40,736	22.6	-1.9%	64,590	43.8	-1.2%
HP2020	-	-	-	-	-	20.6*	-	-	41.0*	-
Mississippi	1,514,063	1,894	113.8	1.4%	421	24.7	-0.9%	771	46.8	-0.4%
Tennessee	3,195,539	4,363	118.8	0.0%	880	23.3	-1.6%	1,605	44.1	-3.0%
Komen Memphis-MidSouth Service Area	839,588	1,052	117.6	0.6%	258	28.6	NA	431	48.3	-6.3%

Population Group	Female Population (Annual Average)	Incidence Rates and Trends			Death Rates and Trends			Late-stage Rates and Trends		
		# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of Deaths (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)
Caucasian/White	456,262	646	114.9	0.8%	134	22.8	NA	239	43.1	-6.7%
African-American/Black	365,964	387	118.5	0.7%	123	39.7	NA	184	55.9	-5.4%
American Indian/Alaska Native (AIAN)	2,745	SN	SN	SN	SN	SN	SN	SN	SN	SN
Asian Pacific Islander (API)	14,617	11	86.6	-0.6%	SN	SN	SN	4	33.2	-7.1%
Non-Hispanic/ Latina	810,247	1,045	118.6	0.7%	257	28.8	NA	427	48.7	-6.2%
Hispanic/ Latina	29,341	7	55.7	-16.5%	SN	SN	SN	4	33.8	-27.6%
Benton County - MS	4,397	5	99.6	-14.8%	3	60.1	NA	SN	SN	SN
Coahoma County - MS	14,453	14	91.1	5.3%	7	46.6	4.9%	7	45.0	-6.1%
DeSoto County - MS	79,214	80	101.2	-3.4%	19	25.8	0.3%	33	41.5	-12.8%
Marshall County - MS	18,673	18	83.4	0.9%	6	27.1	2.4%	7	31.7	-18.3%
Quitman County - MS	4,467	SN	SN	SN	SN	SN	SN	SN	SN	SN
Tate County - MS	14,557	17	106.7	-3.4%	SN	SN	SN	8	52.3	-10.2%
Tunica County - MS	5,722	6	124.6	6.9%	SN	SN	SN	SN	SN	SN
Chester County - TN	8,671	13	134.7	-10.9%	SN	SN	SN	5	57.8	-21.3%
Crockett County - TN	7,562	13	144.7	-1.2%	SN	SN	SN	4	39.8	19.2%
Dyer County - TN	19,761	22	91.8	12.3%	4	15.8	-1.4%	7	30.1	19.2%
Fayette County - TN	18,858	30	130.4	5.8%	7	30.5	-0.1%	12	50.7	-2.4%
Hardeman County - TN	12,620	20	132.0	4.0%	5	32.6	-0.3%	8	55.6	-8.6%
Hardin County - TN	13,327	22	121.8	0.0%	4	22.8	-4.3%	8	49.3	4.6%
Haywood County - TN	10,069	11	92.7	1.0%	4	31.4	-0.5%	6	47.4	-2.5%
Henderson County - TN	14,241	20	112.0	3.6%	6	31.7	NA	9	49.9	-2.0%
Lake County - TN	2,869	4	94.0	-22.7%	SN	SN	SN	SN	SN	SN
Lauderdale County - TN	13,182	16	105.9	15.4%	4	27.3	-0.3%	5	32.4	55.2%
McNairy County - TN	13,111	19	113.2	-8.1%	6	33.9	NA	7	42.6	-13.1%
Madison County - TN	51,087	62	107.6	5.1%	13	22.1	-1.1%	24	41.1	4.1%
Shelby County - TN	482,438	622	126.0	0.4%	148	30.0	-3.7%	262	53.0	-6.9%
Tipton County - TN	30,306	35	110.9	-1.1%	7	22.4	-1.4%	13	38.3	-10.6%

\*Target as of the writing of this report.

NA – data not available.

SN – data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

Data are for years 2006-2010.

Rates are in cases or deaths per 100,000.

Age-adjusted rates are adjusted to the 2000 US standard population.

Source of incidence and late-stage data: North American Association of Central Cancer Registries (NAACCR) – Cancer in North America (CINA) Deluxe Analytic File.

Source of death rate data: Centers for Disease Control and Prevention (CDC) – National Center for Health Statistics (NCHS) mortality data in SEER\*Stat.

Source of death trend data: National Cancer Institute (NCI)/CDC State Cancer Profiles.

### ***Incidence rates and trends summary***

Overall, the breast cancer incidence rate in the Komen Memphis-MidSouth service area was lower than that observed in the US as a whole and the incidence trend was higher than the US as a whole. The incidence rate and trend of the Affiliate service area were not significantly different than that observed for the State of Mississippi. The incidence rate and trend of the Affiliate service area were not significantly different than that observed for the State of Tennessee.

For the United States, breast cancer incidence in African-Americans/Blacks is lower than in Caucasians/Whites overall. The most recent estimated breast cancer incidence rates for Asians and Pacific Islanders (APIs) and American Indians and Alaska Natives (AIANs) were lower than for Non-Hispanic Caucasians/Whites and African-Americans/Blacks. The most recent estimated incidence rates for Hispanics/Latinas were lower than for Non-Hispanic Caucasians/Whites and African-Americans/Blacks. For the Affiliate service area as a whole, the incidence rate was higher among African-Americans/Blacks than Caucasians/Whites and lower among APIs than Caucasians/Whites. There were not enough data available within the Affiliate service area to report on AIANs so comparisons cannot be made for this racial group. The incidence rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

The following county had an incidence rate **significantly higher** than the Affiliate service area as a whole:

- Shelby County, TN

The incidence rate was significantly lower in the following counties:

- DeSoto County, MS
- Marshall County, MS
- Dyer County, TN

**Significantly less favorable trends** in breast cancer incidence rates were observed in the following county:

- Lauderdale County, TN

Significantly more favorable trends in breast cancer incidence rates were observed in the following county:

- Benton County, MS

The rest of the counties had incidence rates and trends that were not significantly different than the Affiliate service area as a whole or did not have enough data available.

It's important to remember that an increase in breast cancer incidence could also mean that more breast cancers are being found because more women are getting mammograms.

### ***Death rates and trends summary***

Overall, the breast cancer death rate in the Komen Memphis-MidSouth service area was higher than that observed in the US as a whole and the death rate trend was not available for comparison with the US as a whole. The death rate of the Affiliate service area was **significantly higher** than that observed for the State of Mississippi. The death rate of the Affiliate service area was **significantly higher** than that observed for the State of Tennessee.

For the United States, breast cancer death rates in African-Americans/Blacks are substantially higher than in Caucasians/Whites overall. The most recent estimated breast cancer death rates for APIs and AIANs were lower than for Non-Hispanic Caucasians/Whites and African-Americans/Blacks. The most recent estimated death rates for Hispanics/Latinas were lower than for Non-Hispanic Caucasians/Whites and African-Americans/Blacks. For the Affiliate service area as a whole, the death rate was substantially higher among African-Americans/Blacks than Caucasians/Whites. There were not enough data available within the Affiliate service area to report on APIs and AIANs so comparisons cannot be made for these racial groups. Also, there were not enough data available within the Affiliate service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

The following counties had a death rate **significantly higher** than the Affiliate service area as a whole:

- Benton County, MS
- Coahoma County, MS

The death rate was significantly lower in the following county:

- Dyer County, TN

**Significantly less favorable trends** in breast cancer death rates were observed in the following county:

- Coahoma County, MS

The rest of the counties had death rates and trends that were not significantly different than the Affiliate service area as a whole or did not have enough data available.

### ***Late-stage incidence rates and trends summary***

Overall, the breast cancer late-stage incidence rate in the Komen Memphis-MidSouth service area was higher than that observed in the US as a whole and the late-stage incidence trend was lower than the US as a whole. The late-stage incidence rate and trend of the Affiliate service area were not significantly different than that observed for the State of Mississippi. The late-stage incidence rate of the Affiliate service area was **significantly higher** than that observed for the State of Tennessee and the late-stage incidence trend was not significantly different than the State of Tennessee.

For the United States, late-stage incidence rates in African-Americans/Blacks are higher than among Caucasians/Whites. Hispanics/Latinas tend to be diagnosed with late-stage breast cancers more often than Caucasians/Whites. For the Affiliate service area as a whole, the late-stage incidence rate was higher among African-Americans/Blacks than Caucasians/Whites and lower among APIs than Caucasians/Whites. There were not enough data available within the Affiliate service area to report on AIANs so comparisons cannot be made for this racial group. The late-stage incidence rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

The late-stage incidence rate was significantly lower in the following counties:

- Marshall County, MS
- Dyer County, TN

**Significantly less favorable trends** in breast cancer late-stage incidence rates were observed in the following county:

- Lauderdale County, TN

The rest of the counties had late-stage incidence rates and trends that were not significantly different than the Affiliate service area as a whole or did not have enough data available.

### Mammography Screening

Getting regular screening mammograms (and treatment if diagnosed) lowers the risk of dying from breast cancer. Screening mammography can find breast cancer early, when the chances of survival are highest. Table 2.2 shows some screening recommendations among major organizations for women at average risk.

**Table 2.2.** Breast cancer screening recommendations for women at average risk.

American Cancer Society	National Cancer Institute	National Comprehensive Cancer Network	US Preventive Services Task Force
Mammography every year starting at age 40	Mammography every 1-2 years starting at age 40	Mammography every year starting at age 40	Informed decision-making with a health care provider ages 40-49  Mammography every 2 years ages 50-74

Because having mammograms lowers the chances of dying from breast cancer, it’s important to know whether women are having mammograms when they should. This information can be used to identify groups of women who should be screened who need help in meeting the current recommendations for screening mammography. The Centers for Disease Control and Prevention’s (CDC) Behavioral Risk Factors Surveillance System (BRFSS) collected the data on mammograms that are used in this report. The data come from interviews with women age 50 to 74 from across the United States. During the interviews, each woman was asked how long it has been since she has had a mammogram. BRFSS is the best and most widely used source available for information on mammography usage among women in the United States, although it does not collect data aligning with Komen breast self-awareness messaging (i.e. from women age 40 and older). The proportions in Table 2.3 are based on the number of women age 50 to 74 who reported in 2012 having had a mammogram in the last two years.

The data have been weighted to account for differences between the women who were interviewed and all the women in the area. For example, if 20.0 percent of the women interviewed are Hispanic/Latina, but only 10.0 percent of the total women in the area are Hispanic/Latina, weighting is used to account for this difference.

The report uses the mammography screening proportion to show whether the women in an area are getting screening mammograms when they should. Mammography screening proportion is calculated from two pieces of information:

- The number of women living in an area whom the BRFSS determines should have mammograms (i.e. women age 50 to 74).
- The number of these women who actually had a mammogram during the past two years.

The number of women who had a mammogram is divided by the number who should have had one. For example, if there are 500 women in an area who should have had mammograms and 250 of those women actually had a mammogram in the past two years, the mammography screening proportion is 50.0 percent.

Because the screening proportions come from samples of women in an area and are not exact, Table 2.3 includes confidence intervals. A confidence interval is a range of values that gives an idea of how uncertain a value may be. It's shown as two numbers—a lower value and a higher one. It is very unlikely that the true rate is less than the lower value or more than the higher value.

For example, if screening proportion was reported as 50.0 percent, with a confidence interval of 35.0 to 65.0 percent, the real rate might not be exactly 50.0 percent, but it's very unlikely that it's less than 35.0 or more than 65.0 percent.

In general, screening proportions at the county level have fairly wide confidence intervals. The confidence interval should always be considered before concluding that the screening proportion in one county is higher or lower than that in another county.

**Table 2.3.** Proportion of women ages 50-74 with screening mammography in the last two years, self-report.

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
US	174,796	133,399	77.5%	77.2%-77.7%
Mississippi	3,417	2,396	71.1%	69.0%-73.2%
Tennessee	2,882	2,209	76.6%	74.5%-78.5%
Komen Memphis-MidSouth Service Area	850	608	73.7%	69.4%-77.6%
Caucasian/White	608	431	72.7%	67.8%-77.2%
African-American/Black	231	168	74.5%	66.2%-81.4%
AIAN	SN	SN	SN	SN
API	SN	SN	SN	SN
Hispanic/ Latina	SN	SN	SN	SN
Non-Hispanic/ Latina	841	602	73.9%	69.6%-77.8%

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Benton County - MS	SN	SN	SN	SN
Coahoma County - MS	31	18	68.5%	40.1%-87.6%
DeSoto County - MS	143	93	69.5%	59.0%-78.4%
Marshall County - MS	41	29	66.9%	45.8%-82.9%
Quitman County - MS	SN	SN	SN	SN
Tate County - MS	36	17	42.8%	23.3%-64.9%
Tunica County - MS	SN	SN	SN	SN
Chester County - TN	14	10	68.3%	27.2%-92.6%
Crockett County - TN	14	10	53.8%	27.9%-77.8%
Dyer County - TN	24	18	80.1%	52.0%-93.8%
Fayette County - TN	27	17	72.1%	49.2%-87.3%
Hardeman County - TN	13	10	87.9%	54.8%-97.8%
Hardin County - TN	18	8	29.2%	11.5%-56.6%
Haywood County - TN	12	7	67.4%	27.9%-91.7%
Henderson County - TN	34	23	71.6%	50.7%-86.0%
Lake County - TN	SN	SN	SN	SN
Lauderdale County - TN	19	12	62.7%	33.5%-84.9%
McNairy County - TN	20	13	68.1%	37.2%-88.5%
Madison County - TN	208	165	79.2%	71.1%-85.4%
Shelby County - TN	164	133	79.8%	71.0%-86.5%
Tipton County - TN	32	25	71.7%	44.9%-88.7%

SN – data suppressed due to small numbers (fewer than 10 samples).

Data are for 2012.

Source: CDC – Behavioral Risk Factor Surveillance System (BRFSS).

### ***Breast cancer screening proportions summary***

The breast cancer screening proportion in the Komen Memphis-MidSouth service area was not significantly different than that observed in the US as a whole. The screening proportion of the Affiliate service area was not significantly different than the State of Mississippi and was not significantly different than the State of Tennessee.

For the United States, breast cancer screening proportions among African-Americans/Blacks are similar to those among Caucasians/Whites overall. APIs have somewhat lower screening proportions than Caucasians/Whites and African-Americans/Blacks. Although data are limited, screening proportions among AIANs are similar to those among Caucasians/Whites. Screening proportions among Hispanics/Latinas are similar to those among Non-Hispanic Caucasians/Whites and African-Americans/Blacks. For the Affiliate service area as a whole, the

screening proportion was not significantly different among African-Americans/Blacks than Caucasians/Whites. There were not enough data available within the Affiliate service area to report on APIs and AIANs so comparisons cannot be made for these racial groups. Also, there were not enough data available within the Affiliate service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

The following counties had a screening proportion **significantly lower** than the Affiliate service area as a whole:

- Tate County, MS
- Hardin County, TN

The remaining counties had screening proportions that were not significantly different than the Affiliate service area as a whole.

### **Population Characteristics**

The report includes basic information about the women in each area (demographic measures) and about factors like education, income, and unemployment (socioeconomic measures) in the areas where they live (Tables 2.4 and 2.5). Demographic and socioeconomic data can be used to identify which groups of women are most in need of help and to figure out the best ways to help them.

It is important to note that the report uses the race and ethnicity categories used by the US Census Bureau, and that race and ethnicity are separate and independent categories. This means that everyone is classified as both a member of one of the four race groups as well as either Hispanic/Latina or Non-Hispanic/Latina.

The demographic and socioeconomic data in this report are the most recent data available for US counties. All the data are shown as percentages. However, the percentages weren't all calculated in the same way.

- The race, ethnicity, and age data are based on the total female population in the area (e.g. the percent of females over the age of 40).
- The socioeconomic data are based on all the people in the area, not just women.
- Income, education and unemployment data don't include children. They're based on people age 15 and older for income and unemployment and age 25 and older for education.
- The data on the use of English, called "linguistic isolation", are based on the total number of households in the area. The Census Bureau defines a linguistically isolated household as one in which all the adults have difficulty with English.

**Table 2.4.** Population characteristics – demographics.

Population Group	Caucasian/ White	African- American/ Black	AIAN	API	Non- Hispanic /Latina	Hispanic /Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
US	78.8 %	14.1 %	1.4 %	5.8 %	83.8 %	16.2 %	48.3 %	34.5 %	14.8 %
Mississippi	59.5 %	38.8 %	0.6 %	1.1 %	97.7 %	2.3 %	47.0 %	34.0 %	14.6 %
Tennessee	79.9 %	17.9 %	0.4 %	1.8 %	95.8 %	4.2 %	49.3 %	35.5 %	15.2 %
Komen Memphis- MidSouth Service Area	53.9 %	43.9 %	0.3 %	1.9 %	95.9 %	4.1 %	46.6 %	32.8 %	13.1 %
Benton County - MS	61.6 %	37.9 %	0.3 %	0.1 %	98.4 %	1.6 %	51.3 %	37.1 %	16.7 %
Coahoma County - MS	23.1 %	76.3 %	0.1 %	0.6 %	98.9 %	1.1 %	44.3 %	32.1 %	13.9 %
DeSoto County - MS	73.7 %	24.3 %	0.4 %	1.7 %	95.6 %	4.4 %	44.3 %	29.2 %	11.6 %
Marshall County - MS	50.2 %	49.1 %	0.3 %	0.4 %	97.2 %	2.8 %	49.9 %	36.7 %	14.8 %
Quitman County - MS	28.4 %	71.1 %	0.3 %	0.2 %	99.1 %	0.9 %	49.5 %	36.0 %	16.9 %
Tate County - MS	67.1 %	32.2 %	0.3 %	0.4 %	98.0 %	2.0 %	47.5 %	34.0 %	14.0 %
Tunica County - MS	24.0 %	75.3 %	0.1 %	0.6 %	98.1 %	1.9 %	41.2 %	28.6 %	10.5 %
Chester County - TN	89.1 %	9.9 %	0.4 %	0.6 %	97.8 %	2.2 %	46.7 %	34.7 %	16.0 %
Crockett County - TN	85.5 %	13.9 %	0.4 %	0.2 %	91.9 %	8.1 %	50.8 %	37.6 %	18.7 %
Dyer County - TN	83.8 %	15.4 %	0.3 %	0.6 %	97.5 %	2.5 %	50.9 %	36.8 %	16.5 %
Fayette County - TN	69.7 %	29.4 %	0.3 %	0.7 %	97.8 %	2.2 %	54.6 %	40.9 %	16.6 %
Hardeman County - TN	58.5 %	40.6 %	0.3 %	0.7 %	98.6 %	1.4 %	53.1 %	39.6 %	17.7 %
Hardin County - TN	95.0 %	4.2 %	0.2 %	0.5 %	98.2 %	1.8 %	56.6 %	43.2 %	20.4 %
Haywood County - TN	47.5 %	52.0 %	0.3 %	0.2 %	96.6 %	3.4 %	51.6 %	37.8 %	15.9 %
Henderson County - TN	90.8 %	8.6 %	0.2 %	0.4 %	98.1 %	1.9 %	51.4 %	37.1 %	16.7 %
Lake County - TN	77.1 %	22.3 %	0.4 %	0.2 %	98.4 %	1.6 %	54.7 %	42.3 %	21.4 %
Lauderdale County - TN	64.7 %	34.4 %	0.6 %	0.4 %	98.2 %	1.8 %	49.1 %	35.4 %	15.3 %
McNairy County - TN	92.9 %	6.5 %	0.2 %	0.3 %	98.5 %	1.5 %	54.5 %	40.9 %	19.4 %
Madison County - TN	60.4 %	38.2 %	0.2 %	1.2 %	97.0 %	3.0 %	48.1 %	34.9 %	14.8 %
Shelby County - TN	42.6 %	54.4 %	0.4 %	2.6 %	95.0 %	5.0 %	45.1 %	31.4 %	12.0 %
Tipton County - TN	78.7 %	19.7 %	0.5 %	1.1 %	98.0 %	2.0 %	47.3 %	31.9 %	12.4 %

Data are for 2011.

Data are in the percentage of women in the population.

Source: US Census Bureau – Population Estimates

**Table 2.5.** Population characteristics – socioeconomics.

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un-employed	Foreign Born	Linguistically Isolated	In Rural Areas	In Medically Underserved Areas	No Health Insurance (Age: 40-64)
US	14.6 %	14.3 %	33.3 %	8.7 %	12.8 %	4.7 %	19.3 %	23.3 %	16.6 %
Mississippi	19.7 %	21.6 %	45.8 %	10.0 %	2.2 %	0.9 %	50.7 %	80.7 %	20.3 %
Tennessee	16.8 %	16.9 %	38.9 %	9.2 %	4.5 %	1.5 %	33.6 %	47.7 %	17.6 %
Komen Memphis-MidSouth Service Area	16.6 %	19.2 %	39.9 %	11.0 %	4.4 %	1.7 %	23.4 %	48.4 %	18.4 %
Benton County - MS	27.3 %	23.8 %	58.6 %	17.5 %	1.2 %	0.0 %	100.0 %	100.0 %	22.0 %
Coahoma County - MS	25.0 %	37.2 %	62.0 %	15.7 %	0.7 %	0.3 %	32.0 %	100.0 %	20.3 %
DeSoto County - MS	11.9 %	9.5 %	30.4 %	7.5 %	3.6 %	1.2 %	20.4 %	100.0 %	17.3 %
Marshall County - MS	30.0 %	24.2 %	50.4 %	12.6 %	1.9 %	1.1 %	83.4 %	100.0 %	22.6 %
Quitman County - MS	34.1 %	36.3 %	67.2 %	16.4 %	0.7 %	0.7 %	57.0 %	100.0 %	22.8 %
Tate County - MS	19.8 %	18.1 %	44.7 %	8.5 %	1.3 %	1.0 %	77.4 %	100.0 %	21.0 %
Tunica County - MS	30.1 %	27.2 %	63.8 %	13.5 %	3.4 %	1.3 %	66.0 %	100.0 %	18.5 %
Chester County - TN	22.0 %	17.9 %	45.3 %	12.6 %	1.2 %	1.2 %	65.2 %	100.0 %	17.7 %
Crockett County - TN	23.4 %	18.9 %	48.0 %	8.6 %	4.4 %	2.2 %	67.4 %	100.0 %	20.8 %
Dyer County - TN	19.4 %	19.2 %	45.0 %	8.4 %	1.3 %	0.7 %	42.9 %	30.0 %	16.0 %
Fayette County - TN	15.9 %	11.7 %	29.7 %	11.1 %	1.9 %	0.2 %	79.0 %	100.0 %	14.1 %
Hardeman County - TN	28.8 %	21.6 %	53.1 %	14.1 %	1.1 %	0.3 %	80.2 %	100.0 %	17.4 %
Hardin County - TN	25.7 %	22.7 %	52.3 %	13.1 %	1.0 %	0.3 %	67.9 %	100.0 %	20.5 %
Haywood County - TN	24.5 %	23.0 %	51.9 %	13.7 %	1.8 %	0.5 %	47.4 %	100.0 %	17.6 %
Henderson County - TN	19.1 %	16.5 %	43.0 %	11.2 %	1.0 %	0.3 %	76.4 %	100.0 %	16.6 %
Lake County - TN	31.4 %	31.4 %	56.8 %	13.7 %	2.8 %	0.0 %	100.0 %	100.0 %	17.0 %
Lauderdale County - TN	25.5 %	25.3 %	51.3 %	12.7 %	1.7 %	0.5 %	58.7 %	100.0 %	18.4 %
McNairy County - TN	23.9 %	22.5 %	52.2 %	14.7 %	1.1 %	0.8 %	85.3 %	100.0 %	17.7 %
Madison County - TN	15.1 %	19.2 %	38.6 %	11.9 %	3.4 %	1.1 %	25.8 %	0.0 %	17.5 %
Shelby County - TN	14.5 %	20.1 %	38.4 %	10.9 %	6.0 %	2.3 %	2.8 %	22.4 %	18.8 %
Tipton County - TN	15.9 %	15.3 %	35.9 %	12.0 %	1.6 %	0.1 %	55.1 %	100.0 %	15.1 %

Data are in the percentage of people (men and women) in the population.

Source of health insurance data: US Census Bureau – Small Area Health Insurance Estimates (SAHIE) for 2011.

Source of rural population data: US Census Bureau – Census 2010.

Source of medically underserved data: Health Resources and Services Administration (HRSA) for 2013.

Source of other data: US Census Bureau – American Community Survey (ACS) for 2007-2011.

### ***Population characteristics summary***

Proportionately, the Komen Memphis-MidSouth service area has a substantially smaller Caucasian/White female population than the US as a whole, a substantially larger African-American/Black female population, a substantially smaller Asian and Pacific Islander (API) female population, a smaller American Indian and Alaska Native (AIAN) female population, and a substantially smaller Hispanic/Latina female population. The Affiliate's female population is slightly younger than that of the US as a whole. The Affiliate's education level is slightly lower than and income level is slightly lower than those of the US as a whole. There are a slightly larger percentage of people who are unemployed in the Affiliate service area. The Affiliate service area has a substantially smaller percentage of people who are foreign born and a substantially smaller percentage of people who are linguistically isolated. There are a slightly larger percentage of people living in rural areas, a slightly larger percentage of people without health insurance, and a substantially larger percentage of people living in medically underserved areas.

The following counties have substantially larger African-American/Black female population percentages than that of the Affiliate service area as a whole:

- Coahoma County, MS
- Marshall County, MS
- Quitman County, MS
- Tunica County, MS
- Haywood County, TN
- Shelby County, TN

The following counties have substantially older female population percentages than that of the Affiliate service area as a whole:

- Hardin County, TN
- Lake County, TN
- McNairy County, TN

The following counties have substantially lower education levels than that of the Affiliate service area as a whole:

- Benton County, MS
- Coahoma County, MS
- Marshall County, MS
- Quitman County, MS
- Tunica County, MS
- Chester County, TN
- Crockett County, TN
- Hardeman County, TN
- Hardin County, TN
- Haywood County, TN
- Lake County, TN
- Lauderdale County, TN
- McNairy County, TN

The following counties have substantially lower income levels than that of the Affiliate service area as a whole:

- Coahoma County, MS
- Quitman County, MS
- Tunica County, MS
- Lake County, TN
- Lauderdale County, TN

The following counties have substantially lower employment levels than that of the Affiliate service area as a whole:

- Benton County, MS
- Coahoma County, MS
- Quitman County, MS
- Hardeman County, TN
- McNairy County, TN

## **Priority Areas**

### ***Healthy People 2020 forecasts***

Healthy People 2020 (HP2020) is a major federal government initiative that provides specific health objectives for communities and for the country as a whole. Many national health organizations use HP2020 targets to monitor progress in reducing the burden of disease and improve the health of the nation. Likewise, Komen believes it is important to refer to HP2020 to see how areas across the country are progressing towards reducing the burden of breast cancer.

HP2020 has several cancer-related objectives, including:

- Reducing women's death rate from breast cancer (Target as of the writing of this report: 41.0 cases per 100,000 women).
- Reducing the number of breast cancers that are found at a late-stage (Target as of the writing of this report: 41.0 cases per 100,000 women).

To see how well counties in the Komen Memphis-MidSouth service area are progressing toward these targets, the report uses the following information:

- County breast cancer death rate and late-stage diagnosis data for years 2006 to 2010.
- Estimates for the trend (annual percent change) in county breast cancer death rates and late-stage diagnoses for years 2006 to 2010.
- Both the data and the HP2020 target are age-adjusted.

These data are used to estimate how many years it will take for each county to meet the HP2020 objectives. Because the target date for meeting the objective is 2020, and 2008 (the middle of the 2006-2010 period) was used as a starting point, a county has 12 years to meet the target.

Death rate and late-stage diagnosis data and trends are used to calculate whether an area will meet the HP2020 target, assuming that the trend seen in years 2006 to 2010 continues for 2011 and beyond.

### **Identification of priority areas**

The purpose of this report is to combine evidence from many credible sources and use the data to identify the highest priority areas for breast cancer programs (i.e. the areas of greatest need). Classification of priority areas are based on the time needed to achieve HP2020 targets in each area. These time projections depend on both the starting point and the trends in death rates and late-stage incidence.

Late-stage incidence reflects both the overall breast cancer incidence rate in the population and the mammography screening coverage. The breast cancer death rate reflects the access to care and the quality of care in the health care delivery area, as well as cancer stage at diagnosis.

There has not been any indication that either one of the two HP2020 targets is more important than the other. Therefore, the report considers them equally important.

Counties are classified as follows (Table 2.6):

- Counties that are not likely to achieve either of the HP2020 targets are considered to have the highest needs.
- Counties that have already achieved both targets are considered to have the lowest needs.
- Other counties are classified based on the number of years needed to achieve the two targets.

**Table 2.6.** Needs/priority classification based on the projected time to achieve HP2020 breast cancer targets.

		Time to Achieve Late-stage Incidence Reduction Target				
		13 years or longer	7-12 yrs.	0 – 6 yrs.	Currently meets target	Unknown
Time to Achieve Death Rate Reduction Target	13 years or longer	Highest	High	Medium High	Medium	Highest
	7-12 yrs.	High	Medium High	Medium	Medium Low	Medium High
	0 – 6 yrs.	Medium High	Medium	Medium Low	Low	Medium Low
	Currently meets target	Medium	Medium Low	Low	Lowest	Lowest
	Unknown	Highest	Medium High	Medium Low	Lowest	Unknown

If the time to achieve a target cannot be calculated for one of the HP2020 indicators, then the county is classified based on the other indicator. If both indicators are missing, then the county is not classified. This doesn't mean that the county may not have high needs; it only means that sufficient data are not available to classify the county.

### **Affiliate Service Area Healthy People 2020 Forecasts and Priority Areas**

The results presented in Table 2.7 help identify which counties have the greatest needs when it comes to meeting the HP2020 breast cancer targets.

- For counties in the “13 years or longer” category, current trends would need to change to achieve the target.

- Some counties may currently meet the target but their rates are increasing and they could fail to meet the target if the trend is not reversed.

Trends can change for a number of reasons, including:

- Improved screening programs could lead to breast cancers being diagnosed earlier, resulting in a decrease in both late-stage incidence rates and death rates.
- Improved socioeconomic conditions, such as reductions in poverty and linguistic isolation could lead to more timely treatment of breast cancer, causing a decrease in death rates.

The data in this table should be considered together with other information on factors that affect breast cancer death rates such as screening percentages and key breast cancer death determinants such as poverty and linguistic isolation.

**Table 2.7.** Intervention priorities for Komen Memphis-MidSouth service area with predicted time to achieve the HP2020 breast cancer targets and key population characteristics.

County	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Crockett County - TN	Highest	SN	13 years or longer	Education, rural, medically underserved
Lauderdale County - TN	Highest	13 years or longer	13 years or longer	Education, poverty, rural, medically underserved
Fayette County - TN	High	13 years or longer	9 years	Rural, medically underserved
Madison County - TN	High	7 years	13 years or longer	
Coahoma County - MS	Medium High	13 years or longer	2 years	%African-American/Black, education, poverty, employment, rural, medically underserved
DeSoto County - MS	Medium High	13 years or longer	1 year	Medically underserved
Hardeman County - TN	Medium High	13 years or longer	4 years	Education, employment, rural, medically underserved
Hardin County - TN	Medium High	3 years	13 years or longer	Older, education, rural, medically underserved
Haywood County - TN	Medium High	13 years or longer	6 years	%African-American/Black, education, rural, medically underserved
Henderson County - TN	Medium High	NA	10 years	Rural, medically underserved
Marshall County - MS	Medium	13 years or longer	Currently meets target	%African-American/Black, education, rural, medically underserved

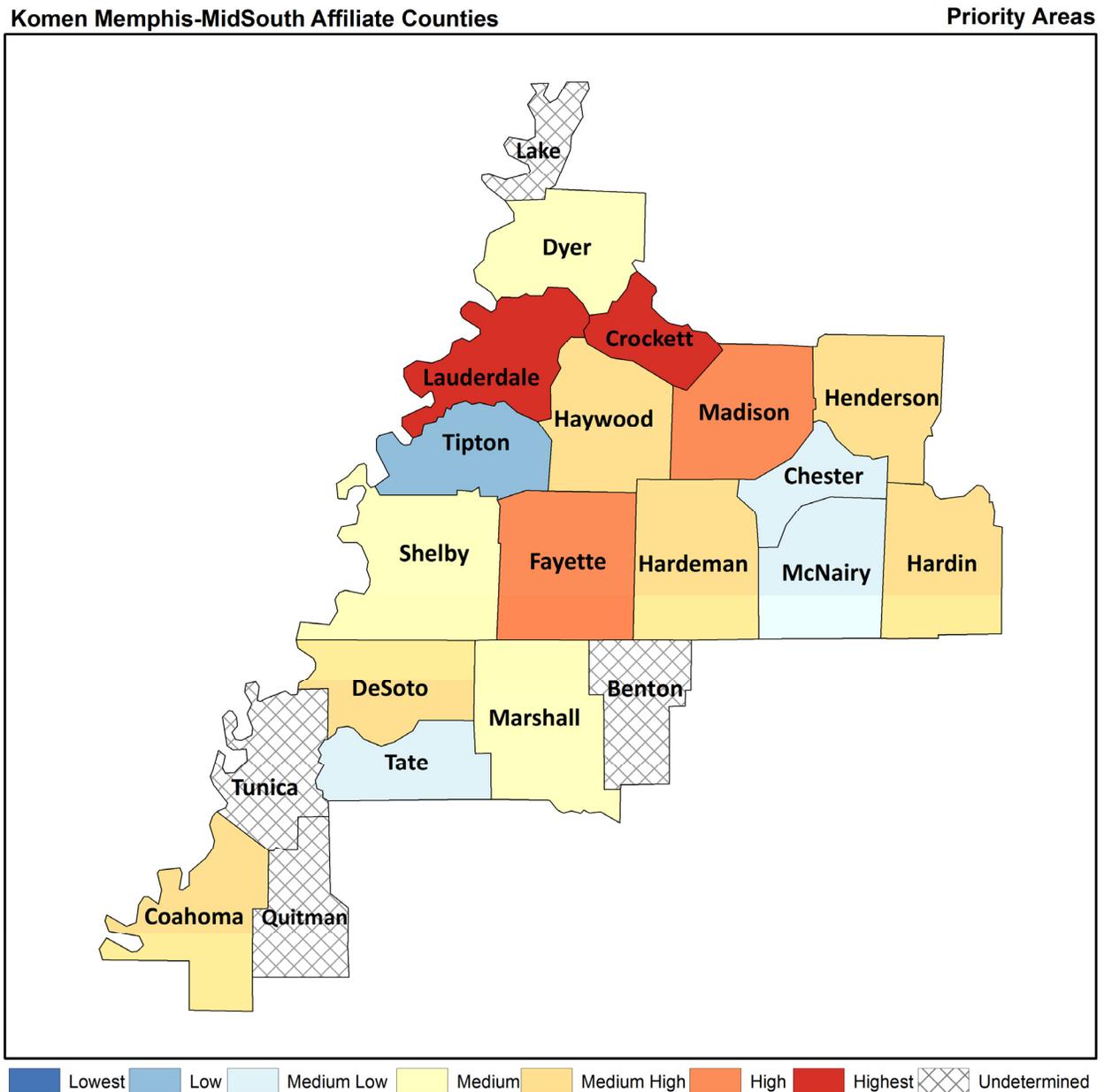
<b>County</b>	<b>Priority</b>	<b>Predicted Time to Achieve Death Rate Target</b>	<b>Predicted Time to Achieve Late-stage Incidence Target</b>	<b>Key Population Characteristics</b>
Dyer County - TN	Medium	Currently meets target	13 years or longer	Rural
Shelby County - TN	Medium	10 years	4 years	%African-American/Black
Tate County - MS	Medium Low	SN	3 years	Rural, medically underserved
Chester County - TN	Medium Low	SN	2 years	Education, rural, medically underserved
McNairy County - TN	Medium Low	NA	1 year	Older, education, employment, rural, medically underserved
Tipton County - TN	Low	6 years	Currently meets target	Rural, medically underserved
Benton County - MS	Undetermined	NA	SN	Education, employment, rural, medically underserved
Quitman County - MS	Undetermined	SN	SN	%African-American/Black, education, poverty, employment, rural, medically underserved
Tunica County - MS	Undetermined	SN	SN	%African-American/Black, education, poverty, rural, medically underserved
Lake County - TN	Undetermined	SN	SN	Older, education, poverty, rural, medically underserved

NA – data not available.

SN – data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

### Map of Intervention Priority Areas

Figure 2.1 shows a map of the intervention priorities for the counties in the Affiliate service area. When both of the indicators used to establish a priority for a county are not available, the priority is shown as “undetermined” on the map.



**Figure 2.1.** Intervention priorities.

### Data Limitations

The following data limitations need to be considered when utilizing the data of the Quantitative Data Report:

- The most recent data available were used but, for cancer incidence and deaths, these data are still several years behind.
- For some areas, data might not be available or might be of varying quality.
- Areas with small populations might not have enough breast cancer cases or breast cancer deaths each year to support the generation of reliable statistics.

- There are often several sources of cancer statistics for a given population and geographic area; therefore, other sources of cancer data may result in minor differences in the values even in the same time period.
- Data on cancer rates for specific racial and ethnic subgroups such as Somali, Hmong, or Ethiopian are not generally available.
- The various types of breast cancer data in this report are inter-dependent.
- There are many factors that impact breast cancer risk and survival for which quantitative data are not available. Some examples include family history, genetic markers like HER2 and BRCA, other medical conditions that can complicate treatment, and the level of family and community support available to the patient.
- The calculation of the years needed to meet the HP2020 objectives assume that the current trends will continue until 2020. However, the trends can change for a number of reasons.
- Not all breast cancer cases have a stage indication.

## **Quantitative Data Report Conclusions**

### ***Highest priority areas***

Two counties in the Komen Memphis-MidSouth service area are in the highest priority category. One of the two, Lauderdale County, TN is not likely to meet either the death rate or late-stage incidence rate HP2020 targets. One of the two, Crockett County, TN is not likely to meet the late-stage incidence rate HP2020 target.

Incidence trends in Lauderdale County, TN (15.4 percent per year) are significantly less favorable than the Affiliate service area as a whole (0.6 percent per year). Late-stage incidence trends in Lauderdale County, TN (55.2 percent per year) are significantly less favorable than the Affiliate service area as a whole (-6.3 percent per year). (This very large positive trend indicates that there are large year-to-year variations in the late-stage incidence rates.) The late-stage incidence trends in Crockett County, TN (19.2 percent per year) indicate that late-stage incidence rates may be increasing.

Crockett County, TN has relatively low education levels. Lauderdale County, TN has relatively low education levels and high poverty percentages.

### ***High priority areas***

Two counties in the Komen Memphis-MidSouth service area are in the high priority category. One of the two, Fayette County, TN is not likely to meet the death rate HP2020 target. The other, Madison County, TN is not likely to meet the late-stage incidence rate HP2020 target.

The incidence rates in Fayette County, TN (130.4 per 100,000) appear to be higher than the Affiliate service area as a whole (117.6 per 100,000) although not significantly. The death rates in Fayette County, TN (30.5 per 100,000) are similar to those of the Affiliate service area but are higher than the State of Tennessee as a whole (23.3 per 100,000). The late-stage incidence trends in Madison County, TN (4.1 percent per year) indicate that late-stage incidence rates may be increasing.

## **Selection of Target Communities**

In order to identify the highest priority areas for evidence-based breast cancer programs, Komen Memphis-MidSouth has elected to choose four target communities for further study, three in Tennessee and one in Mississippi. The target communities are:

1. Shelby County, TN
2. Crockett County and Lauderdale County, TN
3. Madison County, TN
4. Marshall County, MS

### **Shelby County, TN:**

Shelby County is the most populous county in the Affiliate area with a female population of 482,438. Over ten percent of the population of the State of Tennessee lives in the city of Memphis, located within Shelby County. The county is home to 57.5 percent of the women in the Affiliate area.

Shelby County has a substantially larger African-American/Black female population than the Affiliate area as a whole. African-American/Black women are more likely to die of breast cancer than women and have the highest breast cancer death rate of all racial and ethnic groups (Susan G. Komen, 2014).

Memphis is noted for breast cancer death rate disparities. A study of the largest cities in the United States (US) found that Memphis had the worst racial disparity in breast cancer death rates (Whitman, Orsi and Hurlbert, 2011). The ratios for death rates in the cities ranged from .78 to 2.09 (Table 2.8). The Memphis ratio of 2.09 indicates that twice as many non-Hispanic African-American/Black women as non-Hispanic Caucasian/White women die from breast cancer in the city. The authors suggest that when the ratio rate is high, “city wide efforts are surely merited to attempt to reduce the racial disparity in breast cancer mortality (deaths).”

**Table 2.8.** 3-year estimates of breast cancer death rates between non-Hispanic African-American/Black and non-Hispanic Caucasian/White Women for 24 of the 25 largest cities in the US, 2005-2007.

**Table 1**

3-Year estimates of breast cancer mortality disparity between non-Hispanic Black and non-Hispanic White Women for 24 of the 25 largest cities in the United States, 2005–2007.

City, State (largest to smallest)	NHB rate <sup>a</sup>	NHW rate <sup>a</sup>	Rate ratio <sup>c</sup>	95% CI	Annual excess NHB deaths <sup>#</sup>
United States	33.2	23.7	<b>1.40</b>	1.38–1.42	1722
New York City, NY	31.2	25.2	<b>1.24</b>	1.15–1.34	70
Los Angeles, CA	46.5	27.4	<b>1.70</b>	1.48–1.94	43
Chicago, IL	37.8	23.4	<b>1.61</b>	1.42–1.83	76
Houston, TX	47.3	28.7	<b>1.65</b>	1.42–1.92	49
Philadelphia, PA	35.8	25.1	<b>1.43</b>	1.23–1.65	38
Phoenix, AZ	32.9	22.0	1.50	0.96–2.33	
San Antonio, TX	36.8	27.0	1.36	0.98–1.89	
San Diego, CA	36.7	24.7	<b>1.49</b>	1.05–2.11	5
Dallas, TX	37.5	25.3	<b>1.48</b>	1.20–1.84	18
San Jose, CA	27.2	28.9	0.94	0.49–1.82	
Detroit, MI	35.2	37.3	0.94	0.71–1.26	
Indianapolis, IN	–	–	–	–	
Jacksonville, FL	37.1	28.1	<b>1.32</b>	1.06–1.65	10
San Francisco, CA	19.6	25.2	0.78	0.48–1.25	
Columbus, OH	36.6	26.1	<b>1.40</b>	1.08–1.82	9
Austin, TX	33.1	22.2	1.49	0.97–2.31	
Memphis, TN	<b>44.6</b>	<b>21.3</b>	<b>2.09</b>	<b>1.64–2.67</b>	<b>42</b>
Baltimore, MD	31.6	25.7	1.23	0.97–1.56	
Fort Worth, TX	29.8	24.6	1.21	0.86–1.70	
Charlotte, NC	32.3	26.3	1.23	0.93–1.61	
El Paso, TX	24.9	18.4	1.35	0.53–3.43	
Milwaukee, WI	29.6	18.4	<b>1.61</b>	1.19–2.20	12
Seattle, WA	30.0	25.9	1.16	0.73–1.83	
Boston, MA	34.6	21.7	<b>1.59</b>	1.18–2.15	10
Denver, CO	30.8	17.7	<b>1.74</b>	1.13–2.66	4

<sup>c</sup> Bolded rate ratio denotes it is significantly different from 1.00.

<sup>a</sup> Age-adjusted rate is expressed per 100,000 females using the US 2000 Standard Population.

<sup>#</sup> Excess NHB deaths are only calculated for rate ratios that are significantly different from 1.00.

Shelby County has high rates of poverty with 38.4 percent of women living under 250 percent of the poverty level, an unemployment percentage of 10.9 percent, and 14.5 percent who have less than a high school education. The QDR is supported by a 2013 study of the City of Memphis which identifies Memphis as the poorest city in the US among metro areas of at least one million (Charlier, 2013). Living in poverty reduces women’s access to affordable breast health care. Poverty, poor education, and high unemployment are linked with disparities across the continuum of care, from screening to diagnosis to treatment.

As seen in Table 2.9, Shelby County’s breast cancer incidence rate is significantly higher than the Affiliate service area as a whole and trending upward. Death rates and late-stage rates are also higher than in the US and the Affiliate area, but are trending downward. Shelby County is considered a medium priority county in meeting the Healthy People 2020 breast cancer targets. It is predicted to take ten years to meet the death rate target and four years to meet the late-stage incidence rate target.

**Table 2.9.** Shelby County breast cancer statistics

	Shelby County	Affiliate Service Area	US
Incidence Rates	126.0	117.6	122.1
Death Rates	30.0	28.6	22.6
Late Stage Rates	53.0	48.3	43.8

Rates are age adjusted and figured per 100,000 women

Additional quantitative data about Memphis, TN, has been collected to support the selection of Shelby County as a target area. The City of Memphis is the urban core of Shelby County. Over ten percent of the entire population of the State of Tennessee resides in Memphis (US Census Bureau, 2010). In the City of Memphis, African-Americans/Blacks make up 63.3 percent of the population, and 26.2 people live below the poverty level. The percentage of those without a high school education is 17.7 percent (Table 2.10).

**Table 2.10.** Selected population characteristics, Memphis, TN

	<b>Memphis</b>	<b>Tennessee</b>
Population, 2012 estimate	655,155	6,454,914
Population, 2010 (April 1) estimates base	646,889	6,346,113
Population, percent change, April 1, 2010 to July 1, 2012	1.3%	1.7%
Population, 2010	646,889	6,346,105
Female persons, percent, 2010	52.5%	51.3%
<b>Race and Ethnicity</b>		
Caucasian/White alone, percent, 2010 (a)	29.4%	77.6%
African-American/ Black alone, percent, 2010 (a)	63.3%	16.7%
American Indian and Alaska Native alone, percent, 2010 (a)	0.2%	0.3%
Asian alone, percent, 2010 (a)	1.6%	1.4%
Native Hawaiian and Other Pacific Islander alone, percent, 2010 (a)	Z	0.1%
Two or More Races, percent, 2010	1.4%	1.7%
Hispanic or Latino, percent, 2010 (b)	6.5%	4.6%
Caucasian/White alone, not Hispanic or Latino, percent, 2010	27.5%	75.6%
<b>Education and Income</b>		
High school graduate or higher, percent of persons age 25+, 2008-2012	82.3%	83.9%
Bachelor's degree or higher, percent of persons age 25+, 2008-2012	23.4%	23.5%
Per capita money income in past 12 months (2012 dollars), 2008-2012	\$21,368	\$24,294
Median household income, 2008-2012	\$36,817	\$44,140
Persons below poverty level, percent, 2008-2012	26.2%	17.3%

Source: US Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, Community Business Patterns, Economic Census, Survey of Business Owners, building Permits, Census of Governments.

The numbers and the need in Shelby County justify selecting it as a target community. Demographic and economic indicators, along with Healthy People 2020 data, point to Shelby County as an obvious target community and one where further health systems analysis and qualitative data collection may lead to effective breast cancer programs that yield positive results for the largest number of women in the Affiliate area.

### **Crockett County and Lauderdale County, TN:**

Crockett and Lauderdale Counties, both in Tennessee, are contiguous and have been selected as one target area. Both counties are predominately Caucasian/White, rural, and in 100 percent medically underserved areas. The annual average female population is 7,562 in Crockett County and 13,182 in Lauderdale County. Crockett and Lauderdale Counties both have substantially lower education levels than that of the Affiliate area as a whole, and Lauderdale has substantially lower income levels.

Crockett and Lauderdale Counties are the only two counties in the Affiliate area that have been classified as highest priority based on their predicted failure to meet Healthy People 2020 targets. Crockett County is not expected to meet the late-stage incidence target by 2020, and Lauderdale County is not expected to reach either the death rate target or the late-stage incidence target. In Lauderdale County, both breast cancer incidence trends and late-stage incidence trends are significantly less favorable than the Affiliate area as a whole. Lauderdale County has an increasing annual late-stage trend (55.2 percent) indicating that those that are being diagnosed with breast cancer are continuing to be diagnosed at a late-stage rather than an early stage when prognosis is more favorable. This area could benefit from a health systems analysis that may reveal gaps in services and opportunities for evidence-based breast programs that can address these alarming and dangerous trends.

### **Madison County, TN:**

Madison County is the second most populous county of the Affiliate's Tennessee counties with 51,087 women. With 25.1 percent of the population living in rural areas and African-American/Black women making up 38.2 percent of the female population, Madison County provides a contrast to Shelby County, which is predominately urban and African-American/Black. In Madison County, 38.6 percent of women live below 250 percent of the federal poverty level and 18.8 percent of them live without health insurance. Although not designated as medically underserved, there may be barriers to care as the county is failing to meet one of the Healthy People 2020 targets.

Madison County is designated as a high priority county for Health People 2020 due to its predicted failure to meet the late-stage incidence target. It is predicted to take 13 years or longer to meet the target, and it is predicted to take seven years to meet the death rate target. The data also indicate that late-stage incidence trends may be increasing. This is an area for concern as late-stage diagnosis is associated with a poorer prognosis for survival. A health systems review will analyze the availability of breast health services and may reveal gaps and problems with access.

### **Marshall County, MS:**

Marshall County, in north Mississippi, is the fourth target area. The Affiliate added Marshall County to its area in 2012. This county is 83.4 percent rural, 100 percent medically underserved, and has substantially lower education levels than the Affiliate service area as a whole. It has a substantially larger African-American/Black female population than the Affiliate area as a whole, which is significant as African-American/Black women have the highest death rates from breast cancer of any racial or ethnic group. Marshall County is not expected to reach the Healthy People 2020 target for breast cancer death rates and is classified as medium priority. An analysis of the health system may reveal needs and gaps in services and help set priorities for programs in north Mississippi.

# Health Systems and Public Policy Analysis

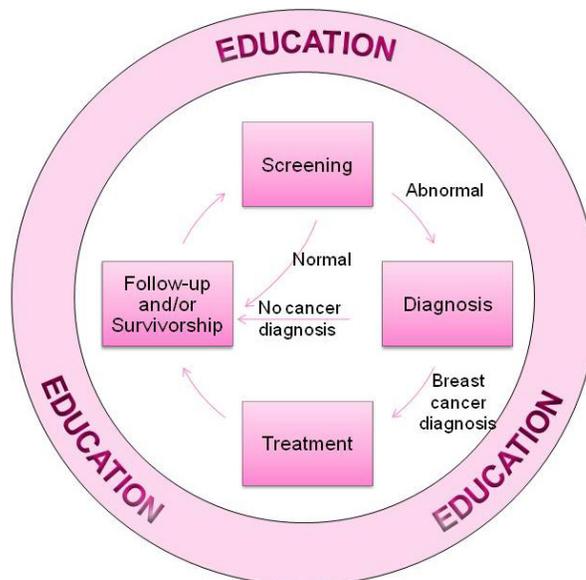
## Health Systems Analysis Data Sources

Komen Memphis-MidSouth used multiple sources to collect information about the breast health programs and services available in the four target areas. The Affiliate sourced data from several websites, including <https://data.medicare.gov/Hospital-General-Information/v287-28n3> for hospitals, <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfMQSA/mqsa.cfm> for mammography facilities, <http://www.naccho.org/about/lhd/> for local health departments, and [http://findahealthcenter.hrsa.gov/Search\\_HCC.aspx](http://findahealthcenter.hrsa.gov/Search_HCC.aspx) for community health centers.

Information was extracted from GeMS, the Komen online grants system, regarding current and historical grantee organizations. The Tennessee and Mississippi state government websites provided information on licensed health care facilities and government programs like NBCCEDP. Internet search engines, example: Google, provided additional data on programs and services in the four target areas. Phone calls were conducted with providers to ascertain which specific services they provide and where they refer patients for services when there are no local service providers.

Data were compiled in an Excel spreadsheet and crosschecked to avoid duplication. The addresses and zip codes of service providers identified problems of accessibility and distance. The data depicts which services are available for the continuum of care in each area. Mapping of the data by Komen Headquarters provides a clear view of the geographical distribution of services in the four target areas.

## Health Systems Overview



**Figure 3.1.** Breast Cancer Continuum of Care (CoC)

The Breast Cancer Continuum of Care (CoC) (Figure 3.1) is a model that demonstrates the typical patient process for breast care through the health care system. The goal is for a patient to proceed through the CoC quickly and seamlessly, receiving timely, quality care in order to have the best outcome. While a woman may enter the continuum at any point, ideally, a woman enters the CoC by having a breast cancer screening – with a clinical breast exam and/or a screening mammogram. Education plays an important role throughout the entire CoC.

When the screening test results are normal she loops back into follow-up care, where she has an additional screening exam at the recommended interval. Education serves to provide encouragement to women to get screened and to reinforce the need for regular scheduled future screening.

When the screening exam has abnormal results, diagnostic tests are needed to determine if the abnormal finding is breast cancer. These tests may include a diagnostic mammogram, breast ultrasound and/or biopsy. If the tests are negative (or benign) and breast cancer is not detected, the patient progresses to the follow-up loop and returns for screening at the recommended interval. The recommended intervals may range from three to six months for some women to 12 months for most women. Education communicates the importance of proactively getting test results and keeping follow-up appointments. Education can empower a woman and help manage anxiety and fear.

When breast cancer is diagnosed, the patient proceeds to treatment. Education includes information about treatment options, how a pathology report determines the best options for treatment, understanding and managing side effects, and helps to formulate questions for health care providers.

Treatment for breast cancer patients can range from a few months to many years. While the CoC model depicts that follow up and survivorship are after treatment concludes, they may be concurrent. Follow up and survivorship may include navigating insurance issues, locating and obtaining financial assistance, managing symptoms and side effects that may include pain, fatigue, sexual issues, and bone health. Education addresses topics that include making healthy lifestyle choices, long term effects of treatment, managing side effects, the importance of follow-up appointments, and communication with health care providers.

There can be delays in the CoC process. Delaying follow-up of abnormal screening results, beginning treatment, and/or completing treatment can all contribute to a poorer outcome. There are multiple and varied reasons why a woman does not enter or continue in the breast cancer CoC. These barriers can include a lack of transportation, systemic issues including long waits for appointments and inconvenient clinic hours, language barriers, fear, and lack of information – or misinformation (myths and misconceptions). Education addresses these barriers and assists a woman's progress through the CoC.

### **Shelby County, TN**

The large number and diversity of services available in Shelby is a major strength of the health care delivery system and CoC (Figure 3.2). There are multiple providers for each step of the CoC: education, screening, diagnostics, treatment, support/survivorship and end-of-life care. There are sources for free breast health education, including the Affiliate, other nonprofits that promote wellness and fight cancer, the local health department, and church outreach programs.

Clinics for the underserved can be found in multiple locations and serve as BCCP (Breast and Cervical Cancer Program) sites. There are several major hospital systems. Many clinics and hospitals are serviced by public transportation and some programs offer transportation. The Baptist Mobile Mammography Unit makes visits multiple times annually to many clinics, including Church Health Center and Christ Community Health Services to provide onsite screening for the underserved. The mobile unit also provides ease of access to mammography by traveling to numerous businesses, health fairs and community events.

There are community-based support groups including STAARS (Surviving, Thriving African-Americans Rallying Support), Carin' and Sharin', Sisters Network, and groups associated with health care systems like WHOW (Women Helping Other Women).

Despite the large number of providers, there are known weaknesses in the local CoC. There is much documentation that a number of women do not get screened, do not have mammograms, and do not move along the continuum in a timely manner. There are notable racial disparities in outcomes. A study published in the Journal of the American Medical Association indicated that African-American/Black women, even with Medicare insurance coverage, are less likely to be screened than Caucasian/White women (Parker-Pope, 2014). An analysis of patient records at a large hospital system in Shelby County revealed that African-American/Black patients “took on average about a month longer to begin treatment after diagnosis compared with Caucasian/White patients” (Parker-Pope, 2014). Non-Hispanic African-American/Black women in Memphis with breast cancer are twice as likely to die of the disease than Caucasian/White women (Whitman, et al, 2011). With numerous providers and service locations in Shelby County, factors and data must be examined to provide clarity and insight into the racial disparities and weaknesses in the continuum of care.

Poverty is correlated with accessing and remaining in the CoC. Memphis is the poorest large metropolitan area in the US (Charlier, 2013). The high numbers of patients who must rely on local clinics that specialize in serving the uninsured and underserved are indicative of this. Free screening mammograms provided through the Tennessee Department of Health's BCCP in Shelby County are exhausted several months before the end of the fiscal year, another indicator that the breast health needs of poor women are not being met (B. Kyles, personal communication, January 23, 2014). In the local continuum, there are few financial assistance programs directed specifically at breast cancer patients. Breast cancer treatment leads to additional personal expenditures, including wages lost, out-of-pocket medical expenses, and travel expenses.

The Tennessee Breast Cancer Coalition has an Emergency Access Fund that provides financial assistance for Tennessee residents undergoing breast cancer treatment. These funds can financially assist personal and household expenses including rent, mortgage, and utility payments. While the Coalition does not have a physical presence in Shelby County or any of the target areas, any Tennessee resident undergoing active breast cancer treatment can contact the office in Nashville and apply for aid. Several Komen Memphis-MidSouth supported programs in Shelby provide free screening mammograms, and others offer diagnostics, treatment, and survivor support services, easing the financial burden for eligible women.

The Affiliate has several valuable mission-related partnerships in Shelby County. A key partner and grantee is Baptist Memorial Hospital for Women. Baptist has the only mobile mammography unit in the 21 county Affiliate area and works with Komen to reach the underserved, especially those for whom transportation is a barrier to services. The Church Health Center (CHC), a clinic and wellness center that serves the working poor is another valued partner and grantee. CHC provides space for the Affiliate for educational and community events and collaborates on health fairs, Pink Sunday, and other educational opportunities. Another grantee, Methodist Healthcare, collaborates with the Affiliate in seeking to reach women through their established congregational network. Regional One Health, the local safety net hospital system, provides health care services as a grantee and also organizes and provides space for Affiliate educational sessions. Other mission related partners include Mroz-Baier Breast Clinic and Baptist Medical Group Memphis Breast Care, medical groups that provide diagnostic, surgical, and treatment services to the underserved. Education and survivor needs are addressed through collaboration with the STAARS and Carin' and Sharin' support groups.

# Shelby County



Hospital



Community Health Center



Other



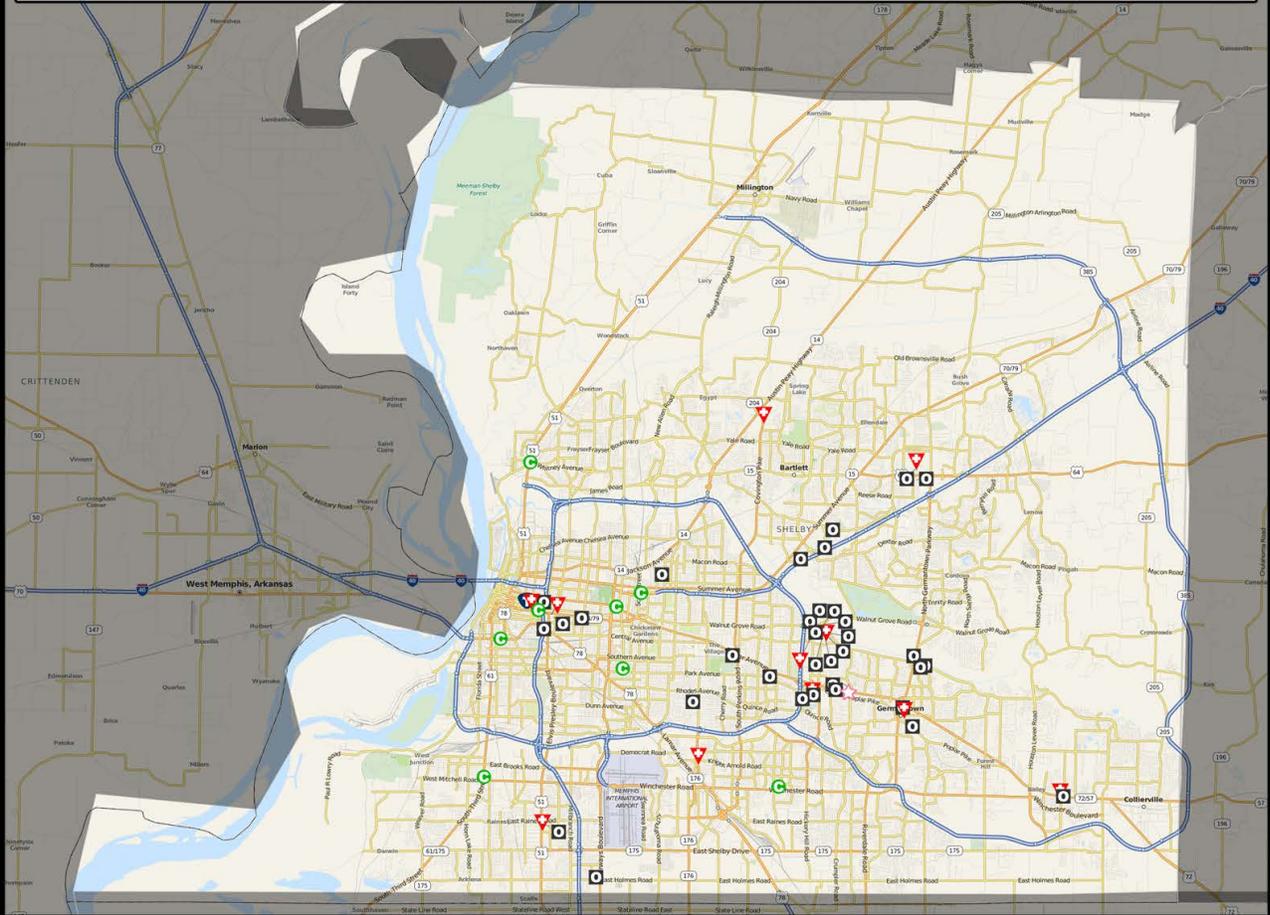
Free Clinic



Department of Health



Affiliate Office



## Statistics

Total Locations in Region: 56

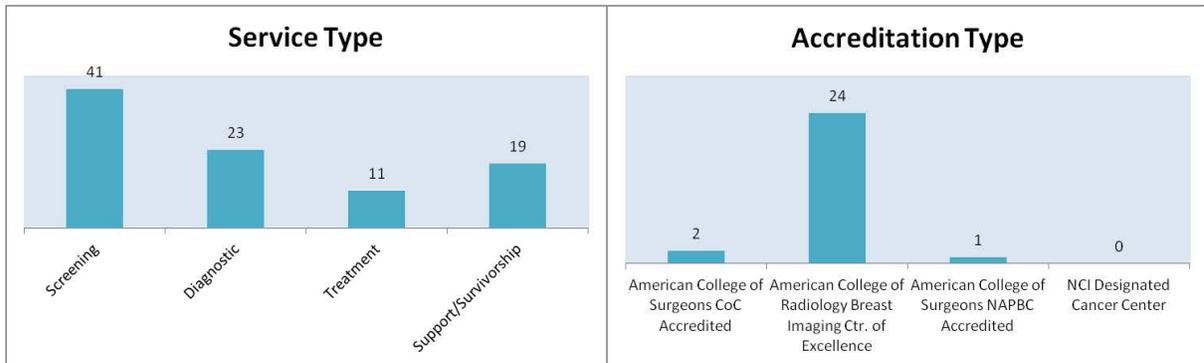


Figure 3.2. Breast Cancer Services Available in Shelby County, TN

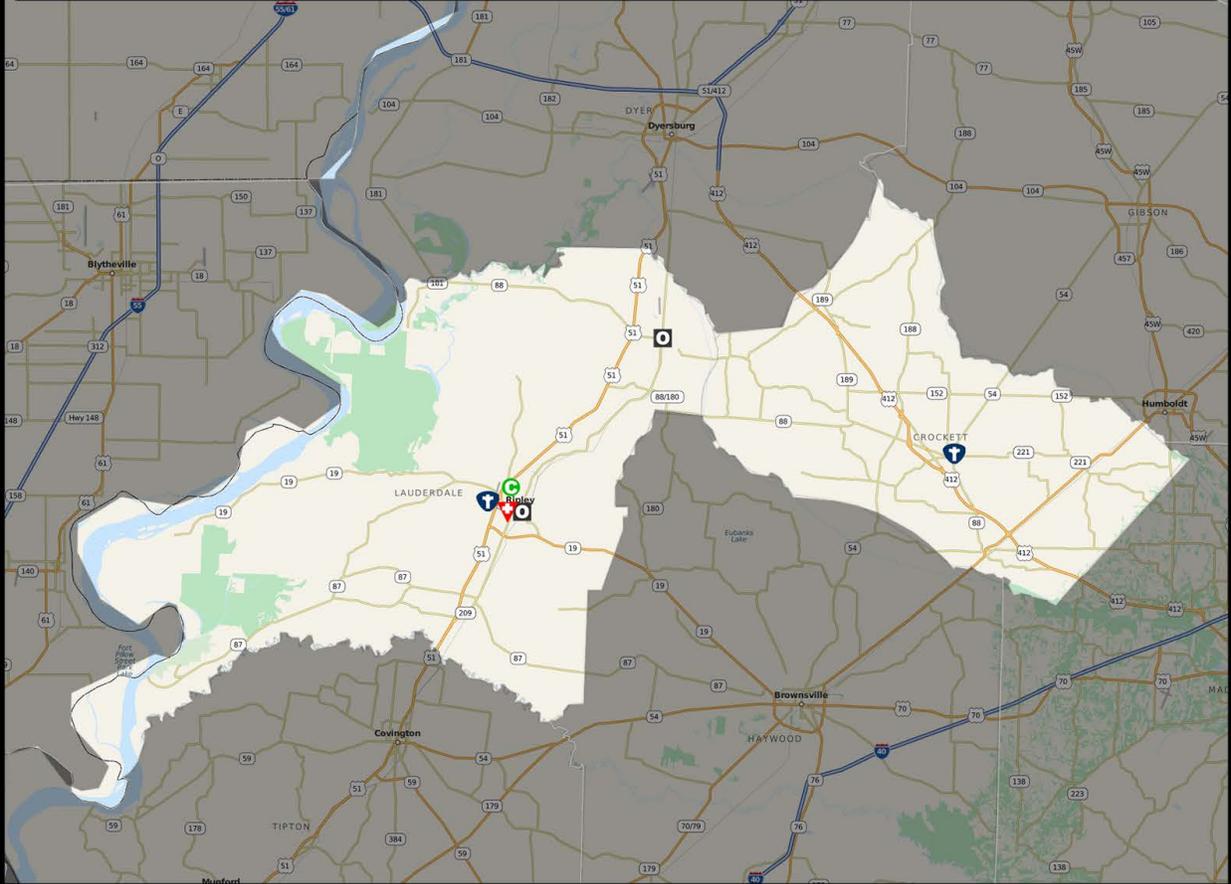
### **Crockett County and Lauderdale County, TN**

Lauderdale and Crockett Counties have few breast health services available (Figure 3.3). The county health departments provide screening clinical breast exams and are the access point for eligible women to be enrolled in the BCCP program. The BCCP is of value to the area as a safety net program, providing an entry point to the CoC for underserved women. The screening mammogram providers for BCCP are actually located in neighboring Dyer and Madison counties and women must travel there for those services as well as for any further diagnostics or treatment (R. Robertson, personal communication, June 4, 2014). The only hospital in the area, Lauderdale Community Hospital (with 25 beds), is not a provider in the BCCP. Lauderdale Community Hospital does perform screening and diagnostic mammograms and has some financial assistance for those services available for eligible women. The Baptist Mobile Mammography Unit visits the county annually and provides screening mammograms for one day (L. Sperling personal communication, July 23, 2014). There are at least four hospice providers that make home visits and provide end-of-life services in these two counties, but none that are headquartered there. These hospices are headquartered in adjacent counties. A support group for cancer survivors and co-survivors meets monthly at the First United Methodist Church in Ripley (J. Cook personal communication, July 24, 2014). Other residents travel to participate in support groups in adjoining Tipton and Madison counties. With so few services in the county, women must cross county lines to remain in the CoC. Some providers in Shelby County can serve uninsured and low-income women in this area. With support from the Affiliate, Regional One Health has been able to provide mammograms to eligible women who reside anywhere in the Affiliate area and other organizations supported by Komen Memphis-MidSouth have been able to provide diagnostic and treatment services to residents of the 14 Tennessee counties. However, it can take nearly two hours to reach these providers from parts of this rural area, creating a formidable barrier to accessing these free services. Few providers in the county, along with long distances to services, are barriers which could lead to delays in diagnosis and treatment. A lack of service providers located in the county could be contributing to this area's failure to make satisfactory progress toward HP2020 targets for death rates and late-stage incidence and will be further explored in the qualitative data analysis.

Lauderdale and Crockett were added to the Affiliate area in 2012. Komen Memphis-MidSouth is actively working to develop partnerships with local entities, which may ultimately result in more breast health services and programs. Komen educational materials are provided during Breast Cancer Awareness month for events at the Ripley campus of the University of Tennessee at Martin and the Affiliate is currently providing educational sessions in this area.

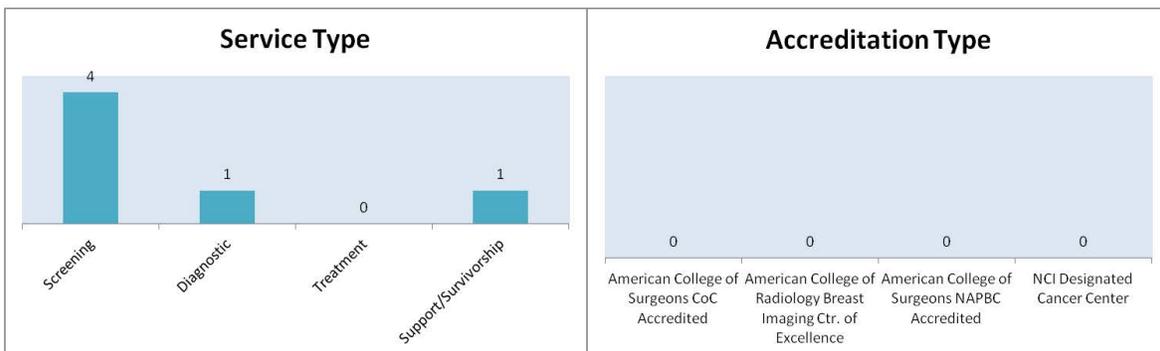
# Crockett & Lauderdale Counties

+ Hospital     
 C Community Health Center     
 O Other  
F Free Clinic     
 + Department of Health     
 ☆ Affiliate Office



## Statistics

Total Locations in Region: 6



**Figure 3.3.** Breast Cancer Services Available in Crockett and Lauderdale Counties, TN

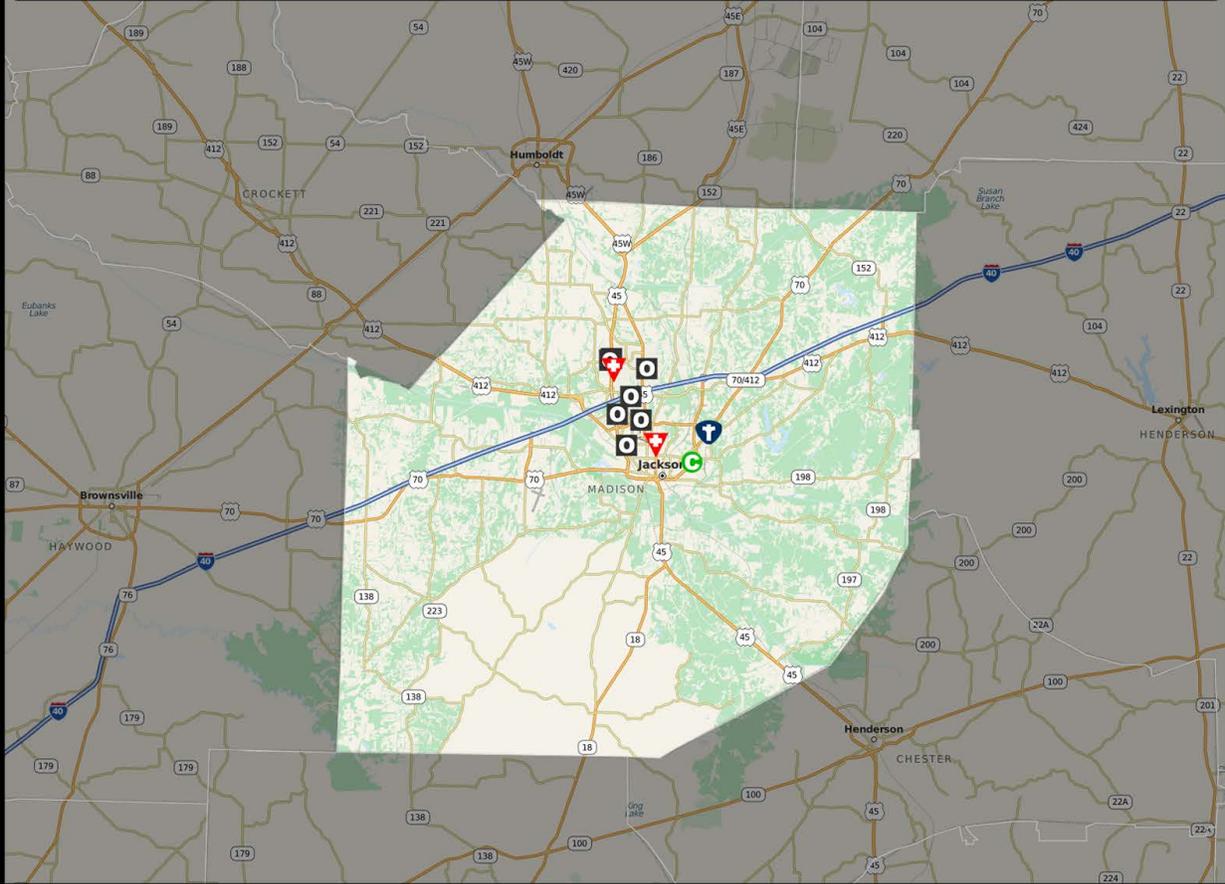
**Madison County, TN:**

Madison County has several service providers (Figure 3.4). The mammography centers correlate with population density, as all are located in the city of Jackson. There are two hospitals that serve this area, both offering services along the full continuum of care. Local residents also sometimes elect to travel to the nearest large urban areas, Memphis and Nashville, for breast cancer treatment. It takes approximately one and one-half hours to travel to Memphis and approximately two hours to Nashville. Several hospices operate in Jackson and survivor services and support groups are available. The health department provides an access point for the BCCP program through the community health center East Jackson Family Health Clinic. Since the above service providers are located in Jackson, geographical distance could be a barrier to the 25 percent of the population that is designated as rural. Few entities other than BCCP offer free mammograms in Madison County, which could point to a problem with access for uninsured and low-income women. Free screening mammography is offered to eligible women on one day annually in October through Jackson-Madison County General Hospital. Though uninsured and low-income Madison residents are eligible for some services through Shelby County-based grantees, it would clearly be beneficial if more local programs existed, eliminating the need for travel. According to the QDR, the screening rate of 79.2 in Madison is slightly higher than the rates of the Affiliate area and the US. With these documented higher screening rates and CoC services available locally, factors other than quantity and location of services may be contributing to the late-stage incidence trend of 4.1 percent that led to designation as a high priority area for HP 2020.

Since Madison was added to the Affiliate area in 2012, Komen Memphis-MidSouth has reached out to providers in an effort to develop partnerships and promote awareness of Komen activities and opportunities. Outreach from Komen has included targeted mailings to health care providers and nonprofits and attendance at conferences and other events in the county. The Affiliate is currently providing quarterly educational sessions.

# Madison County

 Hospital	 Community Health Center	 Other
 Free Clinic	 Department of Health	 Affiliate Office



## Statistics

Total Locations in Region: 11

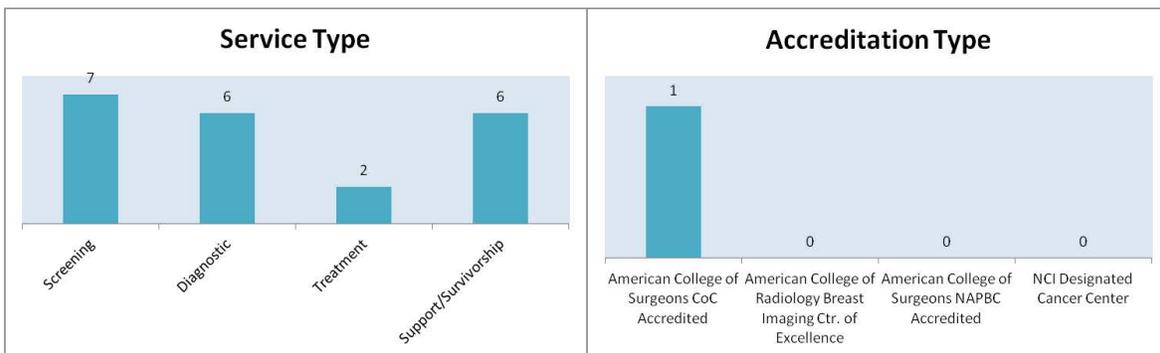


Figure 3.4. Breast Cancer Services Available in Madison County, TN

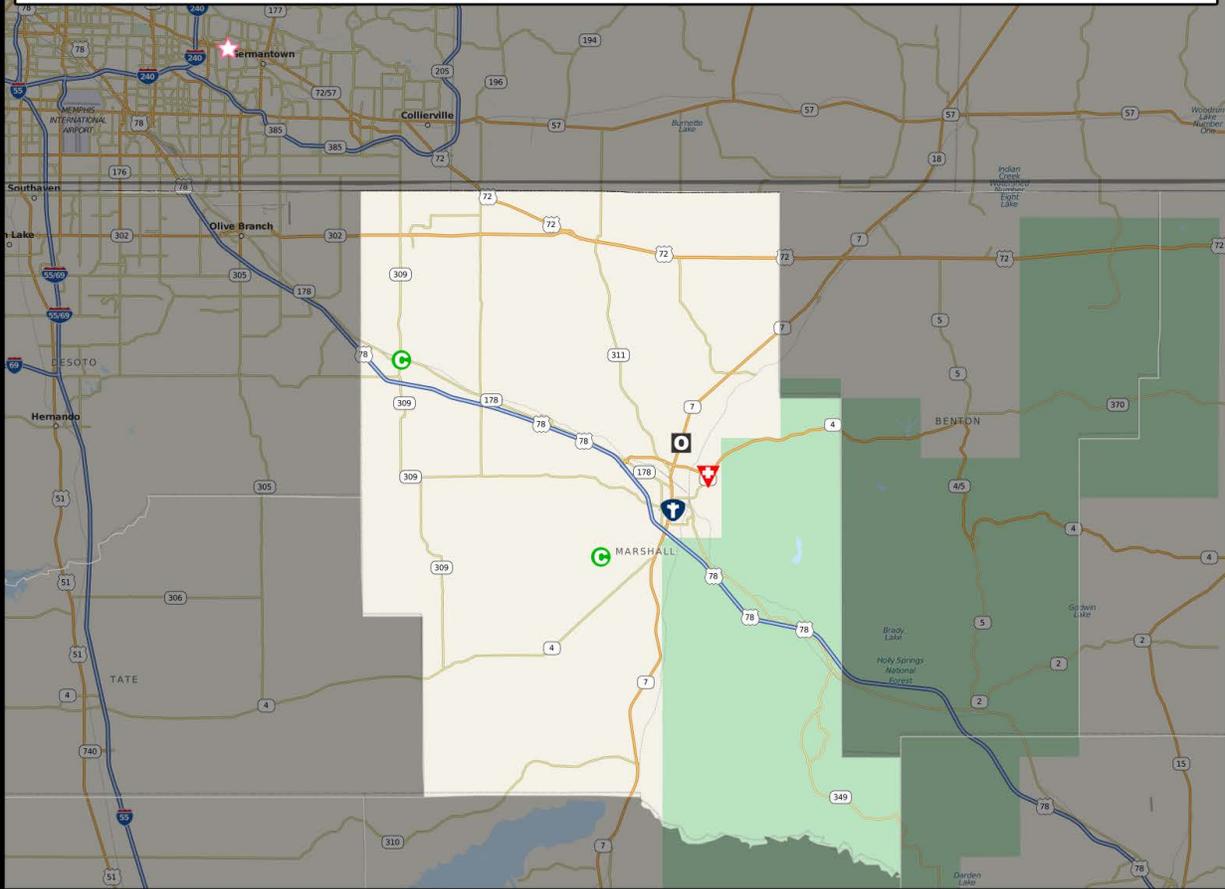
**Marshall County, MS:**

Marshall County, Mississippi, is a rural county with few breast health services available (Figure 3.5). The Mississippi Breast and Cervical Screening Program (BCCP) is available to eligible residents for screening services. Through BCCP, screening clinical breast exams are available at a clinic in Byhalia and women are referred for mammograms to either Alliance Health System in Marshall County or Baptist DeSoto Hospital in neighboring DeSoto County. Beginning in 2014, Alliance Healthcare System in Holly Springs, through support from Komen Memphis MidSouth, has been able to provide free screening and diagnostic mammograms to eligible women. Underserved residents no longer have to travel to another county for these free services. Screening and mammography have been previously available in Marshall through Alliance Healthcare System, but some women were unaware that mammography was available in the county, which points to the need for breast health education (A. Lang, personal communication, June 26, 2014). Women must still travel out-of-county for treatment. They typically travel to oncologists and hospitals located in neighboring DeSoto and Shelby counties (A. Lang, personal communication, June 26, 2014). Underserved residents who meet eligibility criteria can receive free mammograms from an Affiliate grant at Baptist Hospital DeSoto. No survivor support groups are known to exist in Marshall County (T. Leeks, personal communication, 6-26-14). The fact that so few services are actually located in the county could be a contributing factor to this area's expected failure to meet the HP2020 target for breast cancer death rates.

The Affiliate has partnered for several years with Baptist Hospital DeSoto to serve women in Marshall County to increase access to screening mammography. Another key collaboration is with Alliance Charitable Foundation and their No S.E.C.R.E.T.S. project that provides free mammograms and diagnostics. In partnership with Alliance, the Affiliate has participated in health fairs and awareness events, and is spearheading efforts to establish breast health education initiatives.

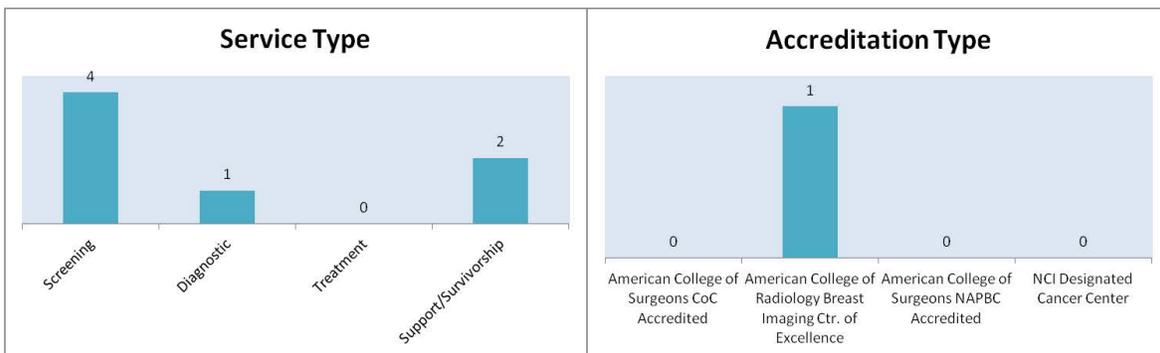
# Marshall County

 Hospital	 Community Health Center	 Other
 Free Clinic	 Department of Health	 Affiliate Office



## Statistics

Total Locations in Region: 5



**Figure 3.5.** Breast Cancer Services Available in Marshall County, MS

## **Public Policy Overview**

### **National Breast and Cervical Cancer Early Detection Program**

Congress created the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) in 1990 to reduce deaths from breast and cervical cancer among underserved women. It is administered by the Center for Disease Control and Prevention (CDC) and brings screening, information, and follow-up services to women in 50 states, the District of Columbia, five US territories, and eleven American Indian/Alaska Native organizations (CDC, 2014a).

In Tennessee, it is known as the Breast and Cervical Screening Program (BCCP) and is operated by the Tennessee Department of Health through the county health departments. It operates in all 95 counties of the state (Tennessee Department of Health [TDOH]), 2012). Funding comes from the CDC with additional funds from the state legislature and additional support from Susan G. Komen Tennessee Affiliates, but costs continue to exceed the dedicated funding (M. Dewey, personal communication, February 24, 2014). Since 2007, the CDC has allocated approximately \$1.2 million annually to BCCP while the state has remained steady with its giving at \$1 million (K. Luskin, personal communication, June 24, 2014). The six Tennessee Komen Affiliates have also provided funding. The Affiliate has provided funds to the BCCP to provide additional breast cancer services and maintains a strong relationship with this program. In addition to directly funding the program, the Affiliate has funded clinics that serve as BCCP providers in the local community. Komen Memphis-MidSouth intends to maintain this relationship over the next four years and work collaboratively with the BCCP to meet the breast health needs of underserved women.

BCCP provides breast and cervical cancer screening to eligible women and diagnostic follow up tests for those with suspicious results. Women who are diagnosed with breast or cervical cancer or pre-cancerous conditions are enrolled for treatment in TennCare, Tennessee's Medicaid program, for treatment coverage.

To be eligible for the program, women must be uninsured or underinsured, aged 40 to 64 and have income at or below 250 percent of the Federal Poverty Level (FPL). Mammograms are only available for women aged 50-64. With a family history of breast cancer, a woman can receive screening services starting at age 40. Women who are younger than 40 can be enrolled for diagnostic and treatment services when they have suspicious results from screening services (TDOH, 2012).

Program services can be accessed through each county health department and also certain community health centers in Nashville, Memphis, Chattanooga, and some rural areas. Additionally, each public health region has an approved network of providers who perform screenings, diagnostic tests, and follow-up appointments (TDOH, 2012). The telephone information line for the Tennessee BCCP is 1-877-969-6636.

In Mississippi, the program is also known as the Breast and Cervical Program (BCCP) and operates through the Mississippi Department of Health. It is also supported with federal funds from the CDC and a matching fund program. The BCCP provides breast and cervical cancer screening to eligible women and diagnostic follow up tests for those with suspicious results (Mississippi Department of Health [MSDH], 2014a). Women who are diagnosed with breast or cervical cancer are enrolled for treatment in Mississippi Medicaid.

To be eligible for BCCP in Mississippi, a woman must be between 40 and 64, uninsured or underinsured, and have income at or below 250 percent of the FPL. Mammography screening is available through contracted providers to women between 50 and 64 years of age. Women 40 to 49 are eligible for screening mammograms when special funding is available from the National Breast Cancer Foundation (MSDH, 2014c). Special exceptions are available for women between the ages of 18 and 39 (MSDH, 2014a). Women must enroll in the program through their county health departments. Between 2008 and 2012, there were 21,124 mammograms provided by the program in Mississippi and 335 breast cancers were detected (CDC, 2014b). The Mississippi BCCP telephone information line is (601) 576-7466. Komen Memphis-MidSouth supported programs in Mississippi refer women to the BCCP program when necessary and work collaboratively with the program to meet the needs of Mississippians. The Affiliate intends to strengthen its relationship with the MSDH/BCCP over the next four years.

### **Comprehensive Cancer Control Coalition**

Since 1998, the CDC National Comprehensive Cancer Control (CCC) Program has worked to reduce the burden of cancer in the United States. This program operates in every state, the District of Columbia, seven tribal groups, and seven US Associated Pacific Islands/Territories. CCC works in every state to promote healthy lifestyles and cancer screenings, provide education, increase access to quality care, and enhance cancer survivors' quality of life (CDC, 2013).

The Tennessee Cancer Coalition (TC2) was established in 2003 and is funded by the CDC. In the 2013 – 2017 State of Tennessee Cancer Plan, the breast cancer goal is to reduce the breast cancer death rate from 24.0 to 22.0 by 2017. To reach this goal, TC2's objectives are to: 1) "Increase awareness of these cancers, current incidence rates, current death rates and screening guidelines and to promote access to services and increase screenings by conducting annual updates on the rates to each of the TC2 regions," and 2) "By June 2017, increase funding for breast and cervical cancer screening" (Tennessee Cancer Coalition, 2013).

Seven regional coalitions and a total of over 500 individual and organizational members work to reach the goals of TC2. Komen Memphis-MidSouth is a member of TC2 West Region. The Mission Manager is the 2015-2016 Co-Chair, attends the quarterly meetings, serves on the Women's Cancer Committee, and works with other coalition members to promote education efforts and meet the group's objectives. The Affiliate will maintain this relationship and continue to work collaboratively with the coalition over the next four years.

Mississippi's CCC program was established in 2002 when the Mississippi State Department of Health received funding from the CDC (MSDH, 2014b). The Mississippi Partnership for Comprehensive Cancer Control (MP3C) has an integrated and coordinated approach to cancer control. They work to improve care along the continuum, from risk reduction and screening to treatment, survivorship, and end-of-life care. (MSDH, 2014b) There are over 100 members of MP3C, spread over five regions in Mississippi. There are regional meetings and an annual statewide meeting to collaborate on cancer control efforts. Komen Memphis-MidSouth is a member of MP3C and will work to strengthen its role in this organization over the next four years.

Breast cancer objectives of the MP3C include passing meaningful legislation that helps prevent cancer, educating the public on early detection, ensuring that adequate patient support services are available and accessible for cancer patients and their families, and instituting more effective health education policies in Mississippi's schools (MSDH, 2014b).

### **Affordable Care Act**

According to the Kaiser Family Foundation, "The 2010 Affordable Care Act (ACA) has the potential to extend coverage to many of the 47 million nonelderly uninsured people nationwide, including the 850,000 uninsured Tennesseans. The ACA establishes coverage provisions across the income spectrum, with the expansion of Medicaid eligibility for adults serving as the vehicle for covering low income individuals and premium tax credits to help people purchase insurance directly through new Health Insurance Marketplaces serving as the vehicle for covering people with moderate income" (Kaiser Family Foundation, 2014). Since the implementation of the Patient Protection and Affordable Care Act (ACA), health care has changed to include the expansion of covered services, the inclusion of patients with pre-existing conditions, increased access to insurance coverage through Insurance Marketplaces, potentially expanding eligibility for Medicaid to people with incomes up to 138 percent of the FPL (Harrison, 2013), and other provisions for those with limited or no prior access to medical care.

With the June 2012 Supreme Court ruling, Medicaid expansion became optional for states (Narden, Zallman, McCormick, Woolhandler, & Himmelstein, 2013). Both states in the Affiliate area, Tennessee and Mississippi, have chosen not to expand Medicaid coverage at this time due to the expense to the state (Harrison, 2013; Kaiser Family Foundation, 2014). This decision could change in the future if state legislators revisit the issue in future sessions. Because the ACA was written to mandate the expansion of Medicaid in every state, there was not a provision for financial assistance, such as premium tax credits, to purchase insurance through the health insurance marketplace for individuals or families whose income would have made them eligible for Medicaid under the expansion. With the Supreme Court ruling that Medicaid expansion is optional for states, Tennesseans and Mississippians whose income is below 138 percent of the FPL (\$16,100 for an individual, \$27,300 for a family) find that they are eligible to purchase a plan through the marketplace, but at full cost, a virtual impossibility for this vulnerable group. Hundreds of thousands will, therefore, remain uninsured. According to The Tennessee Justice Center, a small nonprofit law firm that provides free legal services to vulnerable Tennesseans, "Statewide, 47.0 percent of all uninsured Tennesseans, ages 18 to 64 have incomes below 138 percent of the federal poverty level, which would make them eligible for Medicaid under the new law. Expanding Medicaid, which is called TennCare in Tennessee, could extend health coverage to over 300,000 Tennesseans" (Tennessee Justice Center, 2014b).

One of the requirements of the ACA is that each state must have a State Health Insurance Exchange, known as the Marketplace, by 2014. A State may operate a Marketplace for individual consumers, a Marketplace for small businesses, which is known as a Small Business Health Options Program (SHOP), or both. A State may administer its own Marketplace or it may default to the Federally Facilitated Marketplace.

In 2012, it was announced that Tennessee would not develop and administer a Marketplace for individual consumers or a SHOP, but had chosen instead to default to the Federally Facilitated Marketplace for these.

Mississippi has also opted to default to the Federally Facilitated Marketplace for individual consumers to purchase health insurance, but Mississippi offers a state-run SHOP exchange, referred to as One, Mississippi (National Conference of State Legislatures, 2014). Additionally, since 1991, Mississippi has had the Mississippi Comprehensive Health Insurance Risk Pool Association, which offers insurance to high-risk individuals who were unable to obtain health insurance. This exchange will continue (National Conference of State Legislatures, 2014).

Prior to the ACA, an estimated 841,000 people in the State of Tennessee were uninsured. With the implementation of the ACA, it is estimated that the number of uninsured has dropped to 686,000. In Mississippi, 476,000 were uninsured and now it is estimated that the number is 395,000 (Narden et al., 2013).

The ACA identifies and mandates breast cancer mammography screenings as free preventive services every one to two years for women over age 40. BCCP programs in both Tennessee and Mississippi provide mammography to eligible women. With the implementation of the ACA, more women ages 40 to 49 that were probably not covered by BCCP may be able to obtain insurance that mandates coverage of mammography screenings. Although the ACA opens the door for those previously uninsured to become insured, this does not guarantee individuals will access their new coverage. Women will still have barriers that include access to services, limited health literacy, and distance to service locations. Many women who have never received mammogram services may not be aware of the importance of being regularly screened and can benefit from breast health education.

The ACA brings changes for health care providers. The new law emphasizes the importance of quality of care for patients in contrast to the amount of services provided (Hammerstrom, 2012). According to the ACA, the government can withhold Medicare and Medicaid payments from hospitals if many patients regularly need to be re-treated for ongoing illnesses. In order to remain in compliance, hospitals may require that staff follow up with patients to make sure prescriptions are filled and being taken according to instructions, and to schedule a checkup visit with the doctor (O'Brien, 2013). This new requirement could increase the number of patients remaining in the CoC.

The decisions not to expand Medicaid under the ACA by the states of Tennessee and Mississippi will especially affect rural hospitals and disproportionate share hospitals (DSH), which serve a high number of uninsured individuals. These hospitals receive DSH payments. To quote the Tennessee Justice Center "In a world where almost everybody had insurance, as envisioned by the law, hospitals could afford to take those cuts. Without the expansion, hospitals will still be stuck providing care to lots of uninsured patients, but they will have to do it on tighter budgets. Many hospitals will not be able to survive if Tennessee does not expand Medicaid." (Tennessee Justice Center, 2014a). The state's refusal to expand Medicaid is cited as a factor in the decision by a rural Tennessee hospital in the Affiliate's service area to close, ending in-patient and emergency services and becoming an urgent care clinic (Culp-Ressler, 2014).

Additionally, the law requires hospitals and physicians' offices to change to an electronic filing system to ensure record keeping is more efficient and accessible. The cost of converting is

expensive and may lead smaller physician offices to close and hospitals to merge limiting access to health care in some areas (O'Brien, 2013).

Implementation of the ACA has implications for the Affiliate. Although newly covered individuals will now be eligible to receive mammography screening at no cost to them, they may be unable to take advantage of this benefit due to distance to a facility, lack of transportation, or a lack of programs with extended or Saturday hours. Funding programs that incorporate mobile mammography units, transportation programs, and extended hours should allow the newly insured access to care. Additionally, programs that reach out to educate the newly insured on the need for breast cancer screening should become a priority.

Although the ACA mandates that mammography screening is a free wellness service covered by insurance and Medicaid, additional diagnostic services and treatments are sometimes not covered. Due to high deductibles, many patients may have to pay high out-of-pocket expense for diagnostic testing. Affiliates may choose to fill the gap by shifting some grant priorities to include eligibility for those with high deductibles in order to ensure that patients remain in the CoC.

Although some previously uninsured individuals will now have coverage and access to care, some uninsured will remain. Some will earn too much to qualify for Medicaid but not enough to afford insurance through the marketplace without subsidies and will opt to remain uninsured and pay the penalty. These individuals will need access to screening and will rely on breast cancer programs that provide mammography to uninsured individuals.

As the ACA continues implementation, there will be new information. The Affiliate will continue to stay updated on changes associated with ACA and make addendums to the Community Profile to reflect the most current information available.

### **Affiliate's Public Policy Activities**

Komen Memphis-MidSouth adheres to Susan G. Komen Headquarters Public Policy Model guidelines in promoting the following advocacy priorities for both Tennessee and Mississippi:

- Protecting federal and state funding for the National Breast and Cervical Cancer Early Detection Program (NBCCEDP), to ensure all women have access to potentially lifesaving breast cancer screening;
- Ensuring continued federal investment in cancer research through the National Institutes of Health (NIH), National Cancer Institute (NCI) and Department of Defense (DOD), to discover and deliver the cures.
- Requiring insurance companies provide coverage for oral anti-cancer drugs on a basis that is no less favorable than what's already provided for intravenously-administered chemotherapy, to protect patients from high out-of-pocket costs; and
- Expanding Medicaid Coverage to ensure the availability of the full-range of breast health services to low-income women, including cancer screening, diagnostics and treatment.

In February of 2014, the Affiliate participated in "The Racial Gap in Breast Cancer Outcomes in Memphis", a session in a series on Wellness in the Ninth District hosted by Congressman Steve Cohen. The Affiliate's Executive Director and Board President will continue to keep board members and staff informed of policy issues and opportunities to reach out to state and national

legislators on breast health related issues. The MidSouth exists in an environment of polarizing opposing political positions. In order to best serve all its constituents, the Affiliate elects to remain apolitical and direct its efforts toward raising funds and granting them to organizations that provide breast health care, including screenings, mammograms, diagnostics, treatment, education, and support and that increase access to, utilization and quality of care.

### **Health Systems and Public Policy Analysis Findings**

Findings indicate that there is a need in each of the four target areas for education that encourages women to enter and remain in the CoC. The Affiliate is actively working to provide additional sites for regular, ongoing education in all four areas. In the two most rural target areas, Lauderdale/Crockett and Marshall, large gaps in accessibility exist, as there are no local providers of some services and women must travel to other counties for care, including diagnosis, treatment and some support services. This could lead to delays in diagnosis and treatment. Madison County also has problems with accessibility, as there is a large rural population, but services and hospitals are located in the city of Jackson. In urban Shelby County, extensive services along the CoC are available, but poverty creates barriers to accessing them and large racial disparities exist. Poverty and the associated lack of insurance can also lead to delays in diagnosis and treatment. Qualitative data analysis will yield more insight into these barriers and disparities.

The Affiliate has committed partners in Shelby County and Marshall County and is actively working to develop new collaborations that will further its mission, especially in the counties that were added to the Affiliate area in 2012.

The public policy initiative with the single largest impact on breast health care in the next few years is the ACA. Free screening mammograms are a mandated benefit of the ACA. There will be some women who are now utilizing NBCCEDP programs and Komen grantee programs that will be eligible for tax credits that lower the cost of private insurance and make it affordable for individuals of moderate income. These tax credits target individuals with moderate income, but not those who would have been eligible for Medicaid under expanded eligibility. These newly insured women will have access to free screening mammograms and will no longer utilize NBCCEDP or grantee programs. However, as neither Tennessee nor Mississippi has expanded Medicaid eligibility, some individuals will be ineligible for Medicaid and ineligible for the tax credits. Their income is too high for Medicaid and too low to qualify for tax credits. Unable to afford the high cost of private insurance without tax credits and also unable to qualify for Medicaid, these low-income individuals could choose to remain uninsured with no access to screening mammograms. These women will continue to need to access free screening and other services through NBCCEDP or Komen grantees. High deductibles will be a continuing problem, as insured women will find that they cannot afford the personal expense of diagnostics.

The Affiliate is committed to the policy goals of Susan G. Komen and will work to further these goals, including continued participation in local forums and breast health events.

# Qualitative Data: Ensuring Community Input

## Qualitative Data Sources and Methodology Overview

### *Methodology*

Key assessment questions were identified by the Community Profile Team and were modeled on questions in the Komen Qualitative Data Question Bank. These questions were selected to further explore the issues highlighted by the quantitative data and health systems analysis. All methods of data collection included these key questions that concerned the variables of interest. In each of the target communities, respondents were asked about barriers to access and utilization of breast cancer screening and diagnostic services, and the most effective methods of breast health education for the local community. Access to screening and education were viewed as the entry point to the CoC in each community. A question regarding disparities among different populations was included.

Data collection consisted of focus groups and key informant interviews (KI interviews). Focus groups and KI interviews were considered to be the most effective methods of data collection in all four target communities. Interviews with key informants allowed the Affiliate to strengthen existing relationships and create new ones. It was particularly important to develop relationships in the counties that joined the Affiliate area in 2012. Focus groups and KI interviews allow participants to explore topics with great depth and clarify issues as needed. Focus groups encourage individuals to share more openly, which the Affiliate felt enhanced the quality of the information obtained. Surveys were not selected as a method of data collection due to the expense, the uncertain response rates, and the inability to clarify questions or responses.

The KI interviews and focus groups were conducted by the Affiliate Mission Manager (a Licensed Master Social Worker) or the Community Profile Intern, a Middle Tennessee State University Senior majoring and graduating in Public Health. The Mission Manager and the Intern traveled to the target communities for the focus groups and most of the Key Informant Interviews. On occasions, due to the distance involved, the KI interviews were conducted via telephone. Both the KI interviews and the focus groups were transcribed by hand on the appropriate forms as they occurred. Coding and data analysis were then performed by the Mission Manager and Intern with input from the Executive Director.

The use of focus groups and KI interviews enable the Affiliate to compare and contrast different perspectives regarding the barriers to screening, effective methods for breast health education, and attitudes toward disparities in each of the four target areas. This triangulation of the data enhanced the Community Profile Team's understanding of these key issues for each area.

### *Sampling*

The population of interest in Shelby County was African-American/Black women aged 21 and older. In the other three target areas, the population of interest was women aged 21 and older.

In Shelby County, focus groups were conducted with three groups of African-American/Black women (32 participants) at the Church Health Center, at Mt. Pisgah C.M.E. Church, and with

members of the Carin' and Sharin' support group for survivors. The focus in Shelby County was African-American/Black women because of the racial disparity in breast cancer death rates highlighted in the quantitative data. Twelve KI interviews took place with providers of breast health services, with recognized community health advocates, and with survivors. In Crockett and Lauderdale counties, three focus groups took place (27 participants), with two at public libraries and one at the Lauderdale County Commission on Aging. Groups were publicized and self-selection was utilized for respondents. Twelve KI interviews were done with breast health providers, BCCP staff, community leaders, and survivors. In Madison County, a focus group was held at the Jackson Housing Authority and another at a local restaurant with community leaders and breast cancer survivors, as well as meeting with some members from a Jackson Cancer Coalition meeting (20 total participants). Twelve key informant interviews were conducted with breast health providers and with recognized leaders in the community, including breast cancer survivors. In Marshall County, three focus groups were conducted (19 participants.) Two focus groups took place at Williams Medical Clinic and a third was conducted with a church-affiliated group of women residents. Twelve key informant interviews were conducted with providers and community leaders.

Sample sources were selected using non-probability sampling techniques. A combination of purposive and convenience methods was utilized. Komen Memphis MidSouth has an extensive network of contacts in Shelby County and is rapidly developing relationships and contacts in counties new to the Affiliate area.

Sources of data collection and sample sizes were selected based on Komen's "best practice" recommendations of twelve KI interviews per target community and a minimum of three focus groups per target community. Several of the KI interview informants were known to Komen as providers of breast health services and community leaders. The Community Profile Team also spent extensive time making phone calls and traveling to facilities and events in order to develop new sources of information in the four target communities. Contacts in each area provided assistance in recruiting group participants and referring the Community Profile Team to other potential sources of breast health information.

### *Ethics*

Participants in focus groups and KI interviews were provided with a consent form to be signed which detailed the use of the information, their rights to refuse to participate or answer certain questions, and anonymity. All were made aware that the information being gathered would be used to determine service priorities for the area. If a KI interview was conducted by phone, the consent form was discussed and verbal permission was received and documented. All the materials used in data collection remain confidential and are securely stored in the Affiliate office.

### **Qualitative Data Overview**

The Community Profile Team used the findings from the quantitative data to develop instruments for gathering data from KI interviews and focus groups. These instruments or forms were developed using Komen Community Profile materials and the same form was used consistently for each KI interview and focus group. The original data were recorded by hand on the forms as the KI interview or focus group was being conducted.

Once the data had been collected, hand analysis of the textual data were used to record and analyze the information. Using the textual data, codes were assigned to units of meaning and a codebook was developed to manage the data. Data reduction was then used to identify redundancy and reduce the number of codes to a few important themes that provided meaningful information to the Affiliate about the key questions of interest. These themes expounded upon the information gained in the quantitative data and health systems analysis.

Hand analysis was selected for data analysis due to budgetary constraints and because it was felt to be the method most likely to provide in-depth insight into the data. In addition to the expense of purchasing a computer program, the Community Profile Team believed that computer programs for analysis might miss subtle levels of meaning that could be retained by human analysis.

### **Shelby County, TN:**

The qualitative data gathered from both KI interviews and focus groups yielded striking consistencies about the most common barriers to breast cancer screening. A key theme and the barrier most often cited from both sources was “no health insurance” or “can’t afford health insurance or private pay” (poverty). Analysis of the data reveal that 100 percent of the key informants and a large majority of focus group members believed the lack of health insurance to be the most common barrier to screening. Closely related to this barrier was “Not knowing where to go for free or low-cost screening” which was among the top five mentioned.

The barriers that were the next two most commonly mentioned after “no health insurance” and “where to go” appear to be related and were discussed in all three groups as a joint issue. Discussion of the first, “Fear”, led to discussion of the second, “Lack of knowledge about the value of early detection”. In all three of the focus groups, one of the top three barriers to screening listed was “Fear of what screening might lead to” – further detailed as possibly finding cancer, possible death from cancer, losing a breast, loss of work and income, and other negative outcomes. Discussion of that fear and the societal, cultural, and familial sources of information about cancer and screening in all three focus groups led directly to a discussion of the related and the third most often mentioned barrier, “Lack of knowledge about the value of early detection”. A story was related in one focus group of a young mother who had suspicious breast symptoms, but was unaware of the importance of early detection. As a result, she delayed screening and diagnosis. Her cancer was detected in a late-stage and she did not survive. The group was passionate about the need for culturally competent education to help prevent more deaths from breast cancer.

In all three focus groups, the church or place of worship was listed as one of the most effective ways to provide education to women, second only to their medical providers and health fairs as a source of health information. This theme of the place of worship as a trusted source of information emerged among the key informants as well.

For key informants, another common finding (shared by 100 percent of key informants) was that they believe African-American/Black women, as a population in Shelby County, are not getting the breast services that they need. Many of the key informants indicated a need for collaboration among service providers all along the CoC to explore and address the factors leading to the known disparity in breast cancer deaths, including education. Key informants also cited a need for more culturally competent breast health education. Among key informants,

additional free or low cost services for the uninsured and more education were cited as important steps to reduce barriers to screening.

### **Crockett and Lauderdale County, TN:**

Key informants and focus group participants consistently agreed on the three most common barriers to screening: first, “no insurance”, and then the related “distance to services” and “lack of transportation.” “Lack of knowledge and “fear of what screening might lead to” were identified as interrelated barriers and discussed as a unit and these two rounded out the top five barriers to screening that were revealed by both focus groups and key informants.

A majority of respondents made it clear that with only one mammogram provider in the entire two-county area, distance and transportation were issues that rivaled the lack of insurance as barriers to screening. Related to the issues of both the lack of insurance and distance to providers was the barrier of having very few free or low cost mammogram options locally. As a participant in a focus succinctly put it, “A check-up equals money - and if you don’t have it, you aren’t going.” There were several comments from respondents that there is a need for more free local screening.

Information was also gathered on the most effective methods of breast health education for local women. The most common response was that education should take place where women are already gathering, like churches and community centers. This, too, was related to transportation. A majority of key informants and focus group participants also voiced the importance of culturally competent education.

The majority of respondents said that African-American/Black and low-income women were not getting the breast health services that they need and 50.0 percent of the key informants also responded that the rising Hispanic population in the counties was underserved.

### **Madison County, TN:**

The most common finding revealed by the qualitative data in Madison County is that the two largest barriers to screening are believed to be “no health insurance” and “no transportation”. The lack of insurance was cited by 100 percent of the key respondents and was mentioned first as a barrier in each focus group. In the focus group at Jackson Housing Authority, all present shook their heads in agreement when one women mentioned transportation as a problem and there was then a discussion of local bus schedules. Several key respondents made the point the much of the county is rural and women must come a long distance for screening appointments or any follow-up care, which was also raised as a discussion point in two of the groups.

The third most cited barrier to screening was found to be “lack of knowledge” about the value of screening and early detection and about local resources for breast health. In one focus group, the point was made that the public receives mixed messages from the media and health advocacy organizations about the value of mammography and how often screening is needed. All present stated that a consistent message would strengthen confidence in the value of screening and encourage women to participate. A large majority of key respondents and focus group members said they believe women receive much of their health care education from their health care providers. Focus group members suggested that, in order to reach women who are not regularly seeing health care providers, education efforts should be concentrated in areas

where women already congregate and should be culturally competent. Churches, women's group meetings, and public meeting places with easy access such as Jackson Housing Authority and community clinic sites were all suggested.

### **Marshall County, MS:**

The most common qualitative finding among key respondents and focus group participants was that both believe "no health insurance", which they related to poverty and low incomes in the area, is the largest barrier to screening. The second most frequently mentioned barrier was "lack of knowledge", both of the importance of early detection and the availability of local resources. Several key informants indicated that they believe many women in Marshall County don't know that they don't have to travel to nearby urban counties for breast cancer screening but can get those services in Marshall County. This finding was supported when 50 percent of participants in a focus group said that they were unaware of mammography services in Marshall County. Two key informants were also unaware that mammography was available in the county. Cultural competence was emphasized in all three focus groups as a key component of any educational effort for the women of the county, as a large percentage of the county is African-American/Black.

Seventy-five percent of the key informants and the majority of those in the focus groups indicated that they felt that African-American/Black women were not getting the breast care services that they needed. A majority felt that culturally competent education could increase screening rates.

### **Qualitative Data Findings**

#### *Limitations of the Qualitative Data*

The primary limitation of the qualitative data is the use of a non-probability sampling technique. As a result, the findings may not necessarily be generalized to the population at large in each target community. The available staff time and financial resources of the Affiliate did not allow a probability sampling technique to be used. With the use of convenience and purposive sampling, including self-selection, the participants may not be representative of all the women in each target area and so it is possible that the results may not be applicable to the entire area. There may also be some unavoidable bias since many of the contacts with qualitative informants were initially made by members of the Community Profile Team with individuals already known to them. Relative to the population, especially in the two largest target areas, the small size of the samples can also be considered a limitation and may also limit the generalization to the greater population. Despite these limitations, the congruence of the responses among the focus groups and key informants, even across target communities, indicates a high degree of reliability on the accuracy of the findings.

### **Shelby County, TN:**

The findings of the qualitative data, quantitative data, and the health system analysis are strongly linked. The quantitative data indicate that Shelby County has high rates of poverty and that Memphis is the poorest city in the US among large metropolitan areas. That statistic is consistent with the qualitative data gathered in focus groups and KI interviews which depicts that the most often cited barrier to breast cancer screening is the lack of health insurance due to poverty. The health system analysis reveals that Shelby County has a large number of breast health providers, providing all services along the CoC. However, it also reveals that the free and

low cost resources are quickly exhausted and poor women must wait months for routine screenings when the BCCP and Komen grant funds have been depleted. The focus group and key informant data reveal that the lack of health insurance and the fear of the unknown, fueled by a lack of education about early detection and breast health, are major barriers to the screening which is the entry point to the CoC. This fear, which qualitative data reveal may be partially attributed to a lack of culturally competent breast health education, could help to explain why even when African-American/Black women have adequate insurance, their screening rates lag, as indicated in the health system analysis. The qualitative data suggest that these barriers are also likely to play a role in the racial disparities in breast cancer deaths in Shelby County.

Another qualitative finding, also supported by the quantitative data showing that the Shelby metropolitan area has the worst racial disparity in breast cancer death rates in the country, was that the local key informants believe that African-American/Black women in Memphis are not getting the breast health services they need. Each key informant identified African-American/Black women as an underserved population. A majority of the key informants expressed a desire to see both more culturally competent breast health education and more coordination of local services along the CoC.

The role of public policy is important and the full ramifications of the ACA are yet to be known. Tennessee has not expanded Medicaid, which leaves a large group of women who cannot access health insurance because they are not eligible for either Medicaid or for subsidies to help pay for health insurance. A majority of key informants were aware of this gap as an added barrier to increasing the number of insured women.

In conclusion, triangulation of the data reveals that two of the major barriers to breast cancer screening are a lack of health insurance, fueled by poverty, and a woman's fear of what screening may reveal, related to the lack of adequate breast health education. More free and low cost screening resources are needed in Shelby County. The data from both focus groups and KI interviews further reveals that more culturally competent education may be a way to address both the fear of screening and the lack of knowledge of free screening resources. It can also be concluded that key informants are aware of the racial disparity in breast cancer deaths and want to see it addressed with more education, more resources and better coordination of existing resources and services. Public policy decisions will affect the numbers of insured in Tennessee over the next four years and should have an effect on the insurance-related barriers cited above.

### **Crockett County and Lauderdale County, TN:**

The qualitative data reveal findings that are supported by the quantitative data and the health systems analysis. The analysis noted that having few providers in these two counties and long distances to services were barriers which could discourage screening and lead to delays in diagnosis and treatment. There is only one mammography provider in the county, no treatment services, and women in the BCCP must travel to neighboring counties for mammography. The qualitative findings that "distance to services" and "no transportation to services" were among the top three barriers to screening reported support the health system data.

The quantitative data reveal that Lauderdale County incomes are substantially lower than the Affiliate area as a whole, which is likely to be contributing to the reported barriers of lack of insurance and lack of transportation (no money for gas or to pay for transportation). All these

barriers- “distance to services”, “no transportation to services” and “no health insurance” can reasonably be assumed to be affecting the high rates of late-stage incidence in both counties and the high breast cancer death rate in Lauderdale County.

Even with some financial assistance for mammograms provided by the local hospital, the BCCP, and the option of traveling to Shelby County to obtain free screenings (all noted in the health systems analysis) there was a strong feeling among the respondents that there is a need for more free local screening.

Information was also gathered on the most effective methods of breast health education. Among the most common responses were that education should be brought to places where women meet already – to church, to women’s clubs, to clinics. A majority of women also voiced the importance of culturally competent education.

In conclusion, the women residents of Crockett and Lauderdale Counties could benefit from more free screening resources locally, assistance with transportation to screening, and more providers of breast health services in the two-county area. Culturally competent education efforts should focus on reaching women where they are already congregating and have existing trusted relationships

#### **Madison County, TN:**

The qualitative findings that the lack of health insurance and difficulty with transportation are major barriers to breast cancer screening are consistent with the health system analysis and quantitative data. The health system analysis reveals a county where there are very few sources of free or low cost breast cancer screening other than the BCCP. Health care services are concentrated in one city, possibly making access difficult for rural residents. The quantitative data indicate that 38.6 percent of women live below 250 percent of the poverty level, which is consistent with the qualitative findings that women believe that the costs of health insurance and transportation are a deterrent to screening. Qualitative findings also show that key informants and focus group members believe that there is a need for more education about the benefits of early detection, and that the education should be culturally competent and at sites easily accessible to women.

In conclusion, the women of Madison County could benefit from more sources of free and low cost breast cancer screening, low cost transportation, and from more opportunities for education about the value of early detection.

#### **Marshall County, MS:**

There is strong agreement found among all three sources of data for this county. The quantitative data indicate that the county is medically underserved and not expected to meet the Healthy People 2020 target for breast cancer death rates. This is supported by the health system analysis showing few medical providers or sources for free and low cost screening. Strong qualitative findings reveal that the lack of health insurance is perceived as the biggest barrier to screening services. As a result, a majority of qualitative data respondents feel that more free and low cost services are needed in the county and would lead to higher screening rates.

The qualitative findings indicate that a majority of key informants and support group members also feel that more culturally competent education about both breast health and local resources in the county would increase screening rates. This is supported by the quantitative data which show that Marshall has a larger African-American/Black population and substantially lower education levels than the Affiliate area as a whole.

In conclusion, more sources of free and low cost breast cancer screening and more opportunities for culturally competent education about both the value of early detection and about local breast care resources would benefit the women of Marshall County.

# Mission Action Plan

## **Breast Health and Breast Cancer Findings of the Target Communities**

### **Shelby County, TN:**

Shelby County was selected as a target community based on findings from the Quantitative Data Report. The data reveal that Shelby County's breast cancer incidence rate is significantly higher than the Affiliate service area as a whole and trending upward. Death rates and late-stage rates are also higher than the rates for the US and the Affiliate area. Data also indicate that Memphis, located in Shelby County, has the worst racial disparity in breast cancer deaths among the 25 largest metropolitan areas in the US and that twice as many non-Hispanic African-American/Black women as non-Hispanic Caucasian/White women die from breast cancer in the city (Whitman, et al, 2011). Shelby County is home to 57.5 percent of the women in the Affiliate area and has a substantially larger African-American/Black female population than the Affiliate area as a whole. In Table 5, the Quantitative Data Report indicates that 38.4 percent have income below 250 percent of the poverty level and a national study identified Memphis, located in Shelby, as the poorest city in the US among metropolitan areas of at least one million (Charlier, 2011). County residents have a high unemployment percentage of 10.9 percent and 14.5 percent of them have less than a high school education. Poverty, poor education and high unemployment are linked to disparities across the breast cancer Continuum of Care (CoC).

The health systems analysis identified a large number of service providers in Shelby County, but also weaknesses in the CoC. High numbers of women rely on local clinics for the uninsured and underserved in order to receive breast health services. Free screening mammograms that are provided through the Tennessee Department of Health's BCCP are exhausted many months before the fiscal year's end and other providers of free mammograms also run out of funds each year, contributing to a lengthy wait for screening mammograms for poor and uninsured women.

The public policy analysis reveals that Tennessee has not chosen to expand Medicaid coverage under the Affordable Care Act and many poor residents remain without health insurance. According to Table 5 in the Quantitative Data Report, 18.8 percent of Shelby County residents are uninsured. Many uninsured women rely on the BCCP and other providers of free services for their screening mammograms.

The qualitative data findings in Shelby are consistent with the Quantitative Data Report, health systems analysis, and public policy analysis. Focus group members and key informants were asked about barriers to accessing the local CoC, with an emphasis on accessing screening. Respondents indicated that the lack of health insurance (related to poverty) and the lack of knowledge about where to go for free or low cost screening contribute to an inability to access screening as an entry point to the CoC. Failure to understand the value of early detection, due to a lack of education, was also cited as a barrier. Key informants and focus group members also stressed the need for culturally competent education to reach the African-American/Black community and indicated that places of worship were trusted sources of information. Additional free or low cost services for the uninsured and more culturally competent education about early

detection and local resources were seen as the most important steps to be taken to reduce barriers to screening.

### **Crockett and Lauderdale County, TN:**

According to the Quantitative Data Report, these two contiguous counties, Crockett and Lauderdale, are the only two counties in the Affiliate area that are designated in the highest priority category for not being able to meet Healthy People 2020 (HP 2020) breast cancer late-stage and death rate targets, a major federal government program that has set specific targets for improving Americans' health by the year 2020. This designation is due to their expected failure to meet HP 2020 breast cancer related targets and led to their selection as an area for further study. Lauderdale County is not expected to meet the targets for either the late-stage incidence rate or the death rate. Crockett County is not on track to meet the late-stage incidence rate target. These counties are both rural and 100 percent medically underserved. Both counties have substantially lower education levels than the Affiliate area as a whole and Lauderdale County has substantially lower income levels.

The health systems analysis reveals that there are few providers of breast health services in this area. Local health departments provide screening clinical breast exams and are the point of access for the BCCP program. Mammogram providers for the BCCP are located in adjoining counties. There is only one mammogram provider in the area, Lauderdale Community Hospital. A mobile mammography unit also visits Lauderdale County once annually. Women must travel out of these two counties for breast cancer treatment. There are a few providers of free and low cost breast health services in nearby counties that serve residents of the area, but travel to those providers can be expensive and time-consuming.

As indicated in the public policy analysis, Tennessee has not chosen to expand Medicaid coverage under the Affordable Care Act and many Tennesseans continue to lack health insurance. Approximately one-fifth of the population in each of these two counties has no health insurance, making it difficult for them to access the breast health CoC.

In collecting qualitative data, key questions dealt with the barriers most often faced by women in accessing the CoC. Qualitative data gathered from key informant interviews and focus groups indicate that the three most cited barriers to breast cancer screening were the lack of health insurance, the distance to services, and the lack of transportation, supporting the findings of the quantitative data and the health services analysis. Both key informants and focus group members voiced the need for more local free and low cost services. "Lack of knowledge" and "fear of what screening might lead to" were also identified as barriers that respondents felt could be addressed with culturally competent breast health education.

### **Madison County, TN:**

The Quantitative Data Report shows that the breast cancer late-stage incidence rate in Madison County is trending upward at 4.1 percent annually, which makes this area a high priority county for HP 2020 and led to the inclusion of the county as a target community. The area is 25.1 percent rural and 17.5 percent of women are living below 250 percent of the poverty level.

The health systems analysis reveals several service providers, including two hospital systems that offer the full CoC. Few entities other than BCCP offer free and low cost mammograms locally, although at least two providers offer some free mammograms in October. The service

providers are all located in the City of Jackson, creating potential transportation and distance issues for the rural residents of the county.

Tennessee has not expanded Medicaid coverage under the Affordable Care Act and many Tennesseans continue to lack health insurance. In Madison County, 17.5 percent of residents do not have health insurance, making it difficult for them to access the breast health CoC.

In focus groups and key informant interviews Madison County residents were asked about barriers to accessing the CoC. They cited the three most common barriers to screening as “no health insurance”, “transportation” and “lack of knowledge” about the value of screening and early detection. Related to “no health insurance”, respondents noted a lack of free and low cost services locally. It was felt by focus group members that educational efforts should be directed to areas where women are already congregating, like churches, women’s groups, and public meeting places with easy access.

### **Marshall County, MS:**

The Quantitative Data Report reveals that Marshall County breast cancer death rates are trending upward and the county is not expected to reach the HP 2020 death rate target. The area is 83 percent rural and 100 percent medically underserved, with substantially lower education levels than the Affiliate area as a whole. The African-American/Black female population is substantially larger than in the Affiliate area as a whole, which is important as they have the highest death rates from breast cancer of any racial or ethnic group.

The health systems analysis shows few providers in Marshall County. Screening and diagnostic mammograms are available in the county through the Alliance Health System. The Mississippi BCCP provides screening breast exams for uninsured women at a clinic in Byhalia and refers to Alliance Health System in Holly Springs or to Baptist Hospital DeSoto in neighboring DeSoto County for mammograms. No treatment services are available in the county and no survivor support groups are known to exist. Free screening and diagnostic mammograms are offered to eligible women through Alliance Health System and Baptist Hospital DeSoto, but the slots are usually exhausted before the end of the year.

Mississippi has not expanded Medicaid coverage under the Affordable Care Act. Many residents continue to lack health insurance, making it difficult for them to access the breast health CoC.

Qualitative data questions focused on barriers to accessing the CoC, especially screening. The most common finding among key respondents and focus group members was that the top two barriers were “no health insurance” and the “lack of knowledge” of both the value of early detection and of local resources for the uninsured. Respondents indicated that cultural competence was an important component of any educational effort as a large percentage of the county is African-American/Black.

## **Mission Action Plan**

In order to create the Mission Action Plan (MAP), the Community Profile Team reviewed the breast health and breast cancer findings for each target community, identified the most pressing concerns, and developed a statement of need for each area. The Team then used a collaborative process to develop possible priorities for each area. The priorities were ranked by Team members to determine which were ultimately included in the MAP. The Team deliberately selected priorities that were broad, but measurable and attainable, and it was recognized by the committee that it may be several years before a notable change is observed. A maximum of five realistic and achievable objectives related to each priority were then developed for each target area.

### **Shelby County, TN**

#### **Need Statement**

Women in Shelby County have breast cancer incidence rates, death rates, and late-stage rates that are higher than Affiliate service area rates and US rates. Memphis, in Shelby County, has the worst racial disparity in breast cancer deaths among the 25 largest metropolitan areas in the US. The lack of health insurance and a lack of knowledge about free and low cost breast health resources are major barriers to increased screening and utilization of the CoC. There is not enough funding for breast health services to meet the needs of underserved women. A lack of culturally competent breast health education contributes to underutilization of services by African-American/Black women.

<b>Priorities</b>	<b>Objectives</b>
1. Increase access to the breast health CoC for poor and uninsured women.	<ol style="list-style-type: none"><li>1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Shelby County who are uninsured, underinsured, and poor as priorities for funding.</li><li>2. From FY2016 through FY2019, meet at least twice annually with at least one local coalition of health care providers or community based organizations in Shelby County to communicate grantmaking priorities, encourage applications, foster discussion about increased access, and promote collaboration among breast health providers serving poor and uninsured women.</li><li>3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Shelby County women.</li></ol>

<b>Priorities</b>	<b>Objectives</b>
<ol style="list-style-type: none"> <li>1. Increase access to the breast health CoC for poor and uninsured women (<i>continued</i>).</li>   <li>2. Increase culturally competent education that may assist in reducing the racial disparities in breast cancer deaths.</li> </ol>	<ol style="list-style-type: none"> <li>4. From FY2016 through FY2019, publicize free and low cost breast health resources at least twice annually, in spring and fall, through press releases to known media outlets, the Affiliate website, Facebook, and other social media outlets that specifically reach Shelby County.</li>   <li>5. From FY2016 through 2019, provide 15,000 educational materials with local resource information to organizations, businesses, educational institutions, places of worship, and others in Shelby County.</li>   <li>1. From FY2016 through FY2019, coordinate an annual Pink Sunday event which focuses on African-American/Black churches and will reach at least 75 churches each year with culturally competent education.</li>   <li>2. In FY2016, hold quarterly educational sessions for African-American/Black women that provide culturally competent education about breast health and local breast health resources.</li>   <li>3. From FY2016 through FY2019, Community Grant RFA funding priorities will include education and support with a special emphasis on culturally competent education and survivor support for African-American/Black women.</li> </ol>

## Crockett County and Lauderdale County, TN

### Need Statement

Women in the adjoining counties of Crockett and Lauderdale have high rates of late-stage incidence and high death rates. These two counties are designated as highest priority for expected failure to meet HP 2020 target rates based on current trends. Lauderdale County will fail to meet both the late-stage incidence rate target (with late-stage incidence increasing annually), and the death rate target. Crockett County is not expected to meet the late-stage incidence rate target. There are very few services in the breast cancer CoC provided in the two counties. A lack of health insurance, high poverty percentages, few free and low cost services, and the distance to service providers are also barriers to accessing the CoC. Lack of knowledge and the “fear of what screening may lead to” contribute to decreased access and lead to less utilization of the CoC.

Priority	Objectives
<p>Increase access to the breast health CoC for poor and uninsured women.</p>	<ol style="list-style-type: none"> <li>1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Crockett and Lauderdale Counties who are uninsured, underinsured, and poor as priorities for funding.</li> <li>2. In FY2016, participate in at least one meeting of local health care providers or community based organizations in Crockett and Lauderdale Counties to communicate grantmaking priorities, encourage applications from local providers, and foster discussion about improved access to the CoC.</li> <li>3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Crockett County and Lauderdale County women.</li> <li>4. From FY2016 through FY2019, publicize free and low cost breast health resources and Komen grant opportunities at least twice annually, in spring and fall, through press releases to known media outlets in these counties, the Affiliate website, Facebook, and other social media outlets that specifically reach Crockett and Lauderdale Counties.</li> <li>5. In FY2016, hold quarterly culturally competent educational sessions about breast health and local breast health resources in Crockett and Lauderdale Counties and follow up with participants after the sessions to provide information that can link them to services.</li> </ol>

# Madison County, TN

## Need Statement

The late-stage incidence rate in Madison County is trending upward annually, which makes this area a high priority county for HP 2020. There are few free or low cost breast health services available from local providers, although 38.6 percent of women in this area live below 250 percent of the poverty level and 17.5 percent have no health insurance. The lack of health insurance, the lack of transportation to services, and the lack of knowledge of the value of early detection and of local resources are all barriers to accessing the breast cancer CoC.

Priority	Objectives
<p>Increase access to the breast health CoC for poor and uninsured women.</p>	<ol style="list-style-type: none"> <li>1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Madison County who are uninsured, underinsured, and poor as priorities for funding.</li> <li>2. In FY2016, participate in at least one meeting of local health care providers or community based organizations in Madison County to communicate grantmaking priorities, encourage applications from local providers, and foster discussion about improved access to the CoC.</li> <li>3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Madison County women.</li> <li>4. From FY2016 through FY2019, publicize free and low cost breast health resources and Komen grant opportunities at least twice annually, in spring and fall, through press releases to known media outlets in Madison County, the Affiliate website, Facebook, and other social media outlets that specifically reach Madison County.</li> <li>5. In FY2016, hold quarterly educational sessions in Madison County that provide culturally competent education about breast health and local breast health resources and follow up with participants after the sessions to provide information that can link them to services.</li> </ol>

## Marshall County, MS

### Need Statement

Marshall County breast cancer death rates are trending upward and the county is not expected to reach the Healthy People 2020 death rate target. There are few providers of breast health services in the county and very few free or low cost services. Poverty, lack of insurance, and lack of knowledge create barriers to accessing the breast health CoC.

Priority	Objectives
<p>Increase access to the breast health CoC for poor and uninsured women</p>	<ol style="list-style-type: none"> <li>1. In the FY2016 through FY2019 Community Grant RFAs, include screenings, diagnostics, treatment, and education for women in Marshall County who are uninsured, underinsured, and poor as priorities for funding.</li> <li>2. From FY2016 through 2019, participate annually in the Women’s Health Day in Marshall County to communicate grantmaking priorities, encourage applications from local providers, and foster discussion about improved access to the CoC.</li> <li>3. From FY2016 through FY2019, participate in at least one public policy event or initiative annually that addresses the need for increased access to breast health services for underserved Marshall County women.</li> <li>4. From FY2016 through FY2019, publicize free and low cost breast health resources and Komen grant opportunities at least twice annually, in spring and fall, through press releases to known media outlets in Marshall County, the Affiliate website, Facebook, and other social media outlets that specifically reach Marshall County</li> <li>5. In FY2016, hold quarterly educational sessions in Marshall County that provide culturally competent education about breast health and local resources and follow up with participants after the sessions to provide information that can link them to services.</li> </ol>

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