



COMMUNITY

PROFILE REPORT 2015



SUSAN G. KOMEN[®] MICHIGAN

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Acknowledgments

The Community Profile Report could not have been accomplished without the exceptional work, effort, time and commitment from many people involved in the process.

Susan G. Komen® Michigan would like to extend its deepest gratitude to the Board of Directors, staff leadership, and the following individuals who participated on the 2015 Community Profile Team:

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A special thank you to the following individuals and entities for their assistance with strategy, data collection and analyses, as well as providing information included in this report:

- Kristen Sauerhoff, Board Member
- Grand Valley State University
- Michigan Public Health Institute
- Kent County Health Department, especially Sally Cory and Ariadna Ochoa
- Teresa Jones
- Erin Mulvihill
- Joan Schmidt
- Katie Gundersen
- Rose Lucker, CCRP
- Rosie Morrison
- Lynn Ann Jones
- Jan Miller
- ... and to all of the key informants who did not wish to be named.

Thank you to the women who graciously served as focus groups for qualitative data collection:

- Berrien County Strong Women of Faith, especially Bertha King
- Hispanic American Center of West Michigan, especially Deisy Madrigal

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Executive Summary

Introduction to the Community Profile Report

Susan G. Komen[®] Michigan is the result of a merger of three separate entities in the beginning of 2015. Taking the existing service areas of West (including the City of Grand Rapids), Southwest (including the City of Kalamazoo), and Mid-Michigan (including the state capitol, Lansing) and combining them into one Affiliate has been a challenge and a triumph, with each area having its own unique history and distinct character. The first Susan G. Komen Affiliate in Michigan started in 1996 as a Race for the Cure[®] in Battle Creek. As this race evolved, it became Komen Southwest Michigan, expanding to the surrounding seven counties—Allegan, Berrien, Branch, Calhoun, Cass, Kalamazoo, St. Joseph, and Van Buren. Not long after, the first Grand Rapids Race for the Cure was held in 1998, and an Affiliate was incorporated in 1999. This new Komen West Michigan encompassed the counties of Kent, Ottawa, Muskegon, Newago, and Montcalm. As word of Komen's work spread across Michigan, what would become Komen Mid-Michigan was established in 2001 to serve women in the counties of Clinton, Eaton, Ingham, Jackson, Livingston, Shiawassee, and Washtenaw. Now serving 20 counties, Komen Michigan is run by 13 full and part time staff and countless dedicated interns and volunteers, continuing in the mission to *end breast cancer forever*.

Each year as Komen Michigan requests applications from potential grantees, the intention is to funnel grant dollars to programs which target the most in-need communities in its Michigan footprint. It is important to take a step back every few years and reassess community need. As the health care landscape transforms and socioeconomic conditions change, the needs in a community also shift. The Community Profile is a useful tool for Komen Michigan to regularly assess breast health needs and set priorities to address them. The Community Profile is a collection of data: quantitative data such as numbers of new breast cancer diagnoses or deaths, qualitative data in the form of focus groups and interviews with health care professionals, and additional information to add depth to these numbers and stories.

There are disparities in breast health care and outcomes. Black/African-American women, for example, are less likely to be diagnosed with breast cancer but more likely to die from it. Women living in rural areas of Michigan are more likely to undergo partial or total mastectomy in lieu of breast-sparing procedures (such as radiation therapy) due to long travel to treatment centers in the snowy winter months. Hispanic/Latina women face several unique challenges to receiving breast care, including language and financial barriers. A subculture of the Hispanic/Latina population of interest consists of migrant farmworkers. For these workers and new immigrants alike, language and documentation barriers can keep women from seeking care altogether. Many barriers to accessing services, navigation, and survivorship programs transcend race, culture, and geographic boundaries. Financial burden, transportation issues, and knowledge of services available are the most common concerns across all populations.

For the purposes of this assessment, Black/African-American, Hispanic/Latina, and underserved rural residents have been identified as populations of interest. Because each population faces unique challenges, subset communities of interest have been selected based on breast cancer incidents, death, rates of late-stage diagnosis, "high priority" designation by Healthy People

2020, socioeconomic status, and concentration of the population of interest. Chosen Black/African-American communities included counties of Berrien, Jackson, and Muskegon. To understand Hispanic/Latina disparities, the Affiliate examined Kent, Ottawa, and Van Buren Counties. To address rural residents, the counties of Cass, Montcalm, and Livingston were selected.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

Quantitative data revealed stark contrasts in diagnosis and prognosis of Black/African-American women versus White women. Black/African-American women are less likely than their White counterparts to have breast cancer, but are more likely to receive a later-stage diagnosis and die from the disease than state averages. Black/African-American women in the Southwest Michigan service area are 41 percent more likely to be diagnosed with breast cancer at a later stage and 49 percent more likely to die from the disease. Perplexingly, this service area also has the highest (self-reported) rate of screening with almost three-quarters of women having had a breast screening recently. Social determinants of poor health pervade Black/African-American communities across the Affiliate service area. Muskegon County has an unemployment percentage of 31.2 percent among Blacks/African-Americans. Similarly, Jackson and Berrien Counties have a higher percentage of citizens living in poverty and without health insurance than the US average. These socioeconomic factors amplify barriers faced by Black/African-American women in Berrien, Jackson, and Muskegon Counties.

Similarly, Hispanic and Latina residents of Van Buren, Kent, and Ottawa Counties disproportionately experience poverty, unemployment, and other factors generally understood as social determinants of health. These counties are home to higher concentrations of Hispanics/Latinos (between 9.5- 10 percent of the population) than other counties in Michigan, allowing the Affiliate the opportunity to examine population-level data more closely. Ottawa County Hispanics experience high unemployment percentages with nearly one in five people without work. In Van Buren County, rates of Medicaid-funded births and use of free school lunch programs are higher than the Michigan state average. Similarly, in Kent County, it was found that 34 percent of Hispanic/Latina women forgo visiting a doctor due to the cost. While the Affiliate sought to understand these populations as a whole, it is important to recognize that in the West and Southwest Michigan service areas there is a large Hispanic/Latino subculture of migrant farmworkers. Nearly 100,000 migrant farmworkers and their families travel to Michigan each year. The largest concentration of these workers reside seasonally in Van Buren County with an estimated 6,524 farmworkers and non-worker household members at the peak of harvest. Migrant farmworkers are transient and more likely to be medically isolated, thus not knowing what health care options may exist in their current area of residence. Sixty-one percent of migrant women have never received a breast exam. Systems distrust is high among members of this group, so migrant farmworkers may not be adequately represented in studies conducted by the federal or state government.

Residents of rural areas are at a distinct disadvantage when it comes to access to breast health services. Typically low-income, women in rural areas face multiple barriers to service, including: transportation and cost of services. The Affiliate identified the counties of Montcalm, Cass, and

Livingston as communities of interest regarding rural populations. Montcalm County, located in West Michigan, showed significantly less favorable trends in breast cancer death rates than in the Affiliate as a whole, meaning that more women die from breast cancer in that area. More than 20 percent of adult Montcalm residents are without health insurance, and 16 percent reported delay of care primarily due to cost. Montcalm was the only county in the West-Michigan area to have an increase in breast cancer-related deaths (1.9 percent). Livingston County, located in the Mid-Michigan area, had a lower incidence of breast cancer diagnosis, but a much higher incidence of late-stage diagnosis than other counties. Obesity, a social determinant of health, is a number one health concern for Livingston, with 64 percent of residents identified as overweight or obese. Availability of services is another determinant and rural residents have fewer options for services and many are located in designated medically underserved areas. Cass County has a patient to physician rate eight times higher than the State of Michigan average. This weakens access to primary care, either forcing some residents into the emergency department for non-emergent concerns or causing them to wait until a condition becomes serious before seeking treatment.

Health Systems and Public Policy Analysis

A review of the health system resources available to the three populations of interest reveals that access to local services and connection to resources impact breast health care. The Mid-Michigan service area, for example, has providers and community centers to meet the majority of the needs required to move through the continuum of care. The HSA, however, revealed substantial gaps in care coordination which could prevent women from receiving initial screenings or moving through the continuum of care in a time-appropriate manner in Mid-Michigan. The Southwest service area, similarly, has access to continuum of care services, but accessing services from outlying areas can be challenging. For example, Berrien County—located in the left-southernmost corner of Michigan—has local screening, diagnostics, and some treatment procedures, but for more advanced care—such as reconstruction—patients must travel to other nearby areas, such as Kalamazoo County (located two counties away) or Grand Rapids (one to two hours away). In West Michigan, resources for comprehensive breast services including screening, diagnostics, treatment, and reconstructive services are clustered in and around the urban centers of Grand Rapids and Holland. Distance from service locations and connection to resources impact a woman's ability to receive care.

Analyzing health systems in relation to each population to interest revealed other factors indicating breast health care. For Black/African-American women, they may have access to breast health services, but progression through continuum of care services could be improved with coordination of care and navigation. For Hispanic/Latina women, language may be a barrier to care. Across the region, most providers reduce language barriers through translation lines, but few have bilingual providers. For women in rural areas, access to health care services is impeded by geographical isolation and reduced access to service providers. Rural women are particularly isolated from services. Most rural counties have at least one service provider for mammograms, but follow up diagnostics usually require travel to other cities or counties. Additionally, even if diagnostic services can be provided locally, often the interpretation and reading of the test is centralized at a distant facility, sometimes spreading follow up tests across

multiple appointments. The rural nature of these counties, coupled with the distance to major hospitals, result in long trips for individuals needing to access all of the services in the Continuum of Care.

Michigan public policy impacts the breast health resources available. The State of Michigan opted to use the federal Marketplace Exchange for health insurance purchasing under the Affordable Care Act. Implementation of the Affordable Care Act and expansion of Medicaid has impacted the health system and has resulted in more Michiganders with access to health care. Michigan has expanded Medicaid and has a strong Breast and Cervical Cancer Control and Navigation Program (BCCCNP), with which all Komen Michigan grantees must partner. This results in more women needing assistance to reduce other barriers or to meet high deductibles. Additionally, high risk women with increased surveillance programs—even with insurance—may face substantial financial barriers. The Michigan Cancer Consortium has set goals in relation to breast health, which align well with Affiliate mission goals. The Affiliate engages coalition members to work toward achieving those goals and serves on the consortium in a number of sub-committees. From new breast density legislation to an effort for oral chemotherapy parity, the Affiliate's advocacy efforts continue to support improving breast health in the community.

Qualitative Data: Ensuring Community Input

While the quantitative data quantifies need from a public health perspective, qualitative data explains the lived experiences of health care providers and patients to understand need on a more personal level. The Affiliate elected to perform key informant interviews of health care providers within each of the communities of interest, ensuring that the informant had experience with issues specific to the population of interest. Another dimension was added through the incorporation of focus groups of survivors and women over 30 years old. The data collected was used to both strengthen and explain some key components of the quantitative data. A central assessment question framed the Affiliate's process: to what extent do sociodemographic factors such as race, ethnicity, and geographic location impact the experience and access of service for survivors and the underserved? Central to this question are the issues of access, available resources, cultural differences, community knowledge and the understanding of the gaps that exist in each of these communities. Related to the central questions, other inquiries include:

- What barriers impact a woman's progression through the continuum of care?
- How do sociodemographic characteristics relate to social determinants of health?

Identifying the most important questions to ask health care providers was a key step in the process to collecting the most accurate and thorough information. Providers were asked to generalize the needs and barriers of the population they served and to provide theoretical background. Some questions asked included:

- Are there certain types of patients who may have difficulty accessing services at [organization] (i.e. racial, ethnic groups, geographic outliers)?
- Where are women in [county] most likely to get breast health information?
- Does [organization] assist with transportation?
- Where do you refer women for diagnostics? Treatment?
- What do you believe are barriers to access of services for women?

Interview responses to key informants shaped the important components of the focus group meetings.

Connecting to underserved women and survivors was a challenging aspect of qualitative data collection. While key informant interviews were one-on-one, each of the two focus groups consisted of 22 participants, reducing the number of questions that could be asked. For this reason, questions were prioritized based on themes raised in key informant interviews. Key questions included:

- Where do you go for health information?
- If you have/do not have a yearly screening, why/why not?
- Are [African-Americans/Latinas/rural residents] treated differently by health care providers?
- Do you trust what your health care provider tells you?
- What advice would you give your health care provider to help them improve?

These questions increased understanding of barriers, levels of access which differed among populations, use of systems, and experiences related to health care concerns. Collecting input from both patients and providers produced a more comprehensive view of breast health care.

A final component to qualitative data collection was the inclusion of findings based on a review of documents relevant to the populations of interest as well as those which provided insight into the health care landscape of the State of Michigan as a whole. These documents included two community health needs assessments for each of the nine counties of interest (18 total assessments) as well as multiple studies of demographic and social determinants of health and their relation to breast cancer. These documents filled gaps in data collected from health care providers and focus group participants.

Community Profile Findings

Synthesizing the information and themes gathered through quantitative analysis, health system analysis, and qualitative analysis, the Affiliate has identified the following findings.

After interviewing health care service providers in Berrien, Muskegon, and Jackson Counties and holding a focus group in Berrien County, several key insights were uncovered with regard to Black/African-American women's access to services. Women and providers alike saw barriers to access as being transportation, affordability (including health insurance), systems knowledge/trust, and simply not knowing what services may be available to them. Transportation issues included navigational complexities of public transit in urban areas and lack of a reliable personal vehicle in suburbs and outskirts. Medical systems are complex and intimidating, especially when health insurance is a concern. Deeply-ingrained historical experiences of institutional racism is a barrier impacting trust in a provider. Medical mistrust can be worsened by tight scheduling and abrupt entry or exit by the medical professional or perceived incidents of disparate treatment. A couple key informants indicated that they viewed Black/African-American women as "lacking immediacy" in their desire to receive care. While there was no indication that these health care professionals treated patients differently based on

race, it was clear that this perception is one that can be harmful to Black/African-American women who may be perceived to “lack immediacy” due to wanting to consider options and might be unfairly pressured to make a decision based on emotion and not information. One focus group participant shared that there is an unfair perception that Black/African-American women who advocate for themselves are considered “angry Black women.” These interpersonal factors are all vitally important to bridging the gaps in service in the Black/African-American community. However, women first must know about the services available to them in their area. A common thread in the dialogues with key informants and focus group participants was the need for more community-based navigation. Several women cited lay health ministers or parish nurses as trustworthy resources and others cited individuals that are well-known within the community who informally serve as navigators helping to reduce fear, dispel myths, and connecting women to resources for services. While there are multiple barriers, community-based navigation provides a great opportunity and direction for improvement of systems and outreach.

Hispanic/Latina women face similar barriers to Black/African-American women, though they experience these barriers differently. One key informant pointed out that both populations are negatively impacted by the frequent changes in the American health care landscape especially with screening recommendations and insurance coverage procedures. Having insurance is a privilege that many Hispanic/Latinas don't have. According to the Pew Research Center, 20 percent of Michigan's overall Hispanic/Latino population is without health insurance with this number climbing to 45 percent for foreign-born Hispanics. In Kent County alone, 36 percent of Hispanics go without doctor visits due to lack of insurance or inability to pay. Van Buren and Ottawa Counties are home to large numbers of migrant Hispanic/Latino farmworkers who are transient and tend to not stay in one area for long, impeding progression through the continuum of care. While many of these workers are documented, some are not, adding barriers to eligibility for services. Regardless of documentation status, Hispanic/Latina women are less likely to seek health care for themselves due to culturally-ingrained fear of systems. Another culturally-specific barrier is language, a difference from the other two populations of interest. Hispanic/Latinos who speak limited or no English face difficulties when attempting to relate to doctors, especially when a language line is used in lieu of bilingual medical staff. Although translation lines help reduce language barriers, it does not eliminate them and may impede the medical professional's ability to pick up on subtle cues that could improve care.

Rural counties of Montcalm, Cass, and Livingston are areas lacking in breast health resources for women, regardless of race. The isolated nature of rural culture is a barrier in itself with many women preferring to stay within their county of residence, which usually have limited breast health services. Women who live in these more rural areas are also more likely to undergo drastic medical procedures such as mastectomy rather than breast-sparing procedures like chemotherapy due to lack of adequate transportation and rough driving conditions in the snowy Michigan winters. This makes access to services a multi-dimensional issue that transcends obvious socioeconomic factors. Montcalm County, the northernmost county in Komen Michigan's service area, has a lower proportion of residents receiving mammograms than the state average, likely contributing to the rising death rate in this area. Transportation to and from health services is a challenge for residents of rural areas as public transit doesn't typically extend far past small city limits—if it exists at all. Systems fear is a concern for rural women,

though their experience of systems differs from Black/African-American or Hispanic/Latina women. This fear is related to travel to urban areas and the navigation of complex medical campuses which often resemble small cities. One key informant indicated that rural women tend to feel “forgotten” by health systems and nonprofits because they exist so far outside of metropolitan areas. With this group, it is important to actively engage by acting as a resource to connect to care.

Black/African-American, Hispanic/Latina, and rural women all face disparities in their access to breast health services. Though many challenges and barriers are similar, needs are unique and must be addressed in a culturally-appropriate manner that is reflective of the community. Programs for these populations must move beyond one-size-fits-all approaches and emerge with fresh ideas to reach out to women in need.

Mission Action Plan

It is evident through examination of the health systems analysis, quantitative and qualitative data that disparities exist based on race, ethnicity, and geographical location which contribute to social determinants of health. Utilizing the information obtained through this study, the Affiliate recognizes that the following needs are present:

- Hispanics/Latinas may experience difficulty accessing health care services due to language, cost, and/or documentation barriers;
- Black/African-American women are less likely overall to be diagnosed with breast cancer though more likely to be diagnosed with breast cancer at a late-stage *and* more likely to die from the disease;
- Women in rural areas are less likely to leave their area for services due to lack of reliable transportation or fear of larger cities. Furthermore, rural breast cancer survivors are more likely to die of breast cancer;
- Black/African-Americans and Hispanics/Latinas report higher levels of medical mistrust which makes them less likely to seek medical care including preventative services;
- Breast cancer survivors across the Komen Michigan service area lack access to survivor support programs that include wellness and lifestyle interventions, particularly services for rural residents and programs that are linguistically inclusive and culturally competent.

Utilizing this information as a lens, the Affiliate analyzed common themes to identify Mission priorities. First, across all communities of interest, the Affiliate recognizes a need for screening and diagnostic programs to fill the gaps in existing programs. Second, culturally competent navigation and education programs will help address the specific needs of the population to be served, including reducing fear and dispelling myths. Third, there is a need for survivor support programs that incorporate lifestyle interventions like exercise and nutrition. The Affiliate has proposed several priorities to address these needs across all communities it serves: Improved access, culturally appropriate community navigation, and survivorship programs.

Need Statement: In rural communities, the access to services is limited due to geographic distance and lack of reliable transportation. Black/African-American women experience access issues due to lack of reliable transportation as well, though problems and solutions require different approaches in urban versus rural settings. Hispanic/Latinas have a unique difficulty accessing services due to language barriers and some—particularly migrant farm workers—may lack legal documentation (ID cards, birth certificates, etc.). Because of its commonality among populations, “Improved Access” was chosen to represent the necessity of connecting all women to services, including those populations that fall through gaps in insurance and other programs such as high-risk women with high cost surveillance programs, and women under 40 who may face insurance denials.

Priority: Improve access to the breast health continuum of care for Black/African-American, Hispanic/Latina, high-risk women, women under 40, and women residing in rural areas.

Objectives:

1. The Affiliate will encourage FY2016-FY2019 grantees to thoughtfully consider how to reduce barriers as part of their program design such as including transportation, transportation partnerships, child care options, alternative hours, or mobile mammography as part of their cancer care programs to ensure that underserved women can obtain needed services.
2. The Affiliate will act as a community connector from FY2016 to FY2019 by answering calls and emails from women seeking no/low cost breast health services and connecting them with service providers.
3. The Affiliate will ensure grantee programs connect those who qualify to existing programs like Breast and Cervical Cancer Control and Navigation Program and Healthy Michigan Plan from FY2016 to FY2019 as long as those programs exist.

Need Statement: Navigation has become a necessary component of successful health care programs, even BCCCP recently added navigation as a component—becoming BCCCNP. Navigation can be a key tool to address needs from initially entering the continuum of care to timely progressing through the continuum. Navigation programs can address some of the barriers and needs identified. Community-based navigation—focused on education, dispelling myths, and reducing barriers to screening—can help connect underserved women to the preventative services they need. Community navigation often utilizes community health workers that reflect the populations they serve and approach health in a culturally competent way. Once a woman enters the continuum of care, health institutions often have navigators to help schedule follow up care and treatment; however, few have bilingual navigation staff and most rely on translation services.

Priority: Support Culturally Appropriate Community Navigation

Objectives:

1. From FY 2016 – FY 2019, the Affiliate will support strong community education, outreach, and community navigation programs focused on dispelling myths, reducing fears, and providing support services related to breast cancer, including navigation and barrier-reduction programs (e.g. co-pays, deductibles, transportation, child care etc.) to connect clients to screening services.
2. The Affiliate will increase outreach program services, specifically focused on connecting with the faith community through Pink in the Pews. In FY2016, the program will expand to include a Hispanic/Latina initiative in addition to the existing Black/African-American program.
3. The Affiliate will partner with organizations and community groups in rural counties of Cass, Livingston, and Montcalm to exchange information regarding services and support.

Need Statement: Accessing important survivor-specific programs is key to a high quality of life after a breast cancer diagnosis; however, there are barriers to accessing services. First, there are few survivor-related resources located in each county, with many of them only serving a city-wide population. Second, transportation is a barrier for programs that serve a wider community. Third, most of these programs do not have language support services—meaning many Hispanic/Latinas may be left out of participating in these vital resources.

Priority: Increase access, use, and, availability of survivorship programs

Objectives:

1. The Affiliate will create a resource list of existing programs for health care providers and survivors to be included in its online resources guide starting in FY2016 to be updated yearly.
2. In FY2016, the Affiliate will continue to support the formation and continuation of Spanish language support groups and create a model to share with other community organizations.
3. Grant applications from FY2016 to FY2019 will be reviewed with specific and careful consideration given to survivorship programs which focus on social and emotional wellbeing, wellness programs, and lifestyle intervention strategies.

Disclaimer: Comprehensive data for the Executive Summary can be found in the 2015 Susan G. Komen[®] Michigan Community Profile Report.

Introduction

Affiliate History

Susan G. Komen fought breast cancer with her heart, body and soul. Throughout her diagnosis, treatments, and endless days in the hospital, she spent her time thinking of ways to make life better for other women battling breast cancer instead of worrying about her own situation. Moved by Susan's compassion for others and commitment to making a difference, Nancy G. Brinker promised her sister that she would do everything in her power to end breast cancer.

Though Susan was killed by metastatic breast cancer, her legacy lives on through the work of Susan G. Komen®, the organization Nancy started in her honor. Komen is the global leader of the breast cancer movement, having invested more than \$2.6 billion since its inception in 1982. Komen's promise is to save lives and end breast cancer forever by empowering people, ensuring quality care for all and energizing science to find the cures. Across the country, that promise is upheld by a network of over 100 local Affiliate offices. At the heart of each Affiliate is a person or group of people who, like Susan, wanted to make a difference.

At the beginning of 2015, Susan G. Komen Michigan was formed from three separate Affiliates which previously operated as stand-alone entities. These three service areas make up Komen Michigan: Mid, Southwest, and West Michigan each have a distinct character and history, adapted to the areas surrounding them and the communities they serve.

The first Affiliate organization in the State of Michigan started as a Race for the Cure® in Battle Creek, Michigan, in 1996. Raising \$10,000 that year, the very first grant was awarded to a breast cancer screening program in Calhoun County. Shortly thereafter, founding President Toni Freed led a grass-roots effort to create Susan G. Komen Southwest Michigan. In its early inception, the Southwest service area included Calhoun (covering the City of Battle Creek) and Kalamazoo Counties. As the Affiliate grew, additional counties were added, including: Allegan, Berrien, Branch, Cass, St. Joseph, and Van Buren. Since that inaugural Race for the Cure, the Affiliate has awarded more than \$2 million in community grants to fill gaps in breast health education, breast cancer screening, and treatment programs in Southwest Michigan.

Not long after the initial Battle Creek Race, Lori Fedewa who was a breast cancer survivor, met with friends in the hope of bringing the Race to the Grand Rapids area. Her tenacity and passion for the Race caught on and in 1998, the first Grand Rapids Race for the Cure was held at the Ford Museum. In 1999, the Grand Rapids Affiliate of the Susan G. Komen Breast Cancer Foundation was incorporated and a Board of Directors was established to oversee the activities of the Affiliate and the service area of Kent, Montcalm, Ottawa, Newago, and Muskegon Counties. Several fundraising, celebration, and awareness-raising events were pioneered thereafter, such as the Grantee Recognition Reception—Powerfully Pink, and the annual Survivor Gala—Wings of Hope. The dream of Lori Fedewa to bring the Race to Grand Rapids has led to a legacy which created Susan G. Komen West Michigan, opening its very first office in 2003 and granting over \$4.5 million in community grants to providers of breast health services over the course of its 15-year history.

Activated in 2001, Susan G. Komen Greater Lansing was established to spread the message of early detection and to support breast cancer screening, education, outreach, and treatment. As with the other two Affiliates, Mid-Michigan started with an abbreviated service area, focusing on: Clinton, Eaton, and Ingham Counties. With steady growth and obvious community need, the Affiliate expanded to include: Jackson, Livingston, Shiawassee, and Washtenaw Counties. With the broadened service area, Komen Greater Lansing adopted the new moniker of Susan G. Komen Mid-Michigan.

The newly merged Susan G. Komen Michigan continues to serve 20 Michigan counties. Komen Michigan's Board of Directors currently has 16 members from a variety of backgrounds and geographies with room for growth. With a full and part-time staff of 13 and many dedicated volunteers the Affiliate oversees three Races, a Ride for the Cure, Stand Up for the Cure (a paddleboard race) and other third party events, and continues to organize new events to engage communities in education, advocacy, and action-oriented activities.

Affiliate Organizational Structure

As a newly-merged entity, Komen Michigan has continued to maintain a blended staff comprised of positions stationed in each of the three service areas (Figure 1.1). On a day-to-day basis, all three Affiliate offices are open with at least one staff member present. On a weekly basis, Directors make an effort to travel to each of the offices to maintain contact with the community in those locations or to touch base with staff that may be stationed there.

Komen Michigan currently employs five Directors, including Directors of: Development, Finance, Special Events, Mission & Grants, and an Executive Director. The Development Director oversees major sponsorships, media relations, and planned giving. Additionally, the position supervises the Community Events Managers—one in each of the three regions, and a Development Manager in the Southwest service area. Community Events Managers coordinate third-party events, volunteers, and are the on-the-ground contact for events happening in their local communities. The Finance Director oversees budget-related items and supervises the Finance Coordinator, who assists with contracts, invoices, and bank deposits. The Special Events Director coordinates Race operations and manages the logistics of all three Komen Michigan Races. Coordinating the grantor side of Komen Michigan is the Mission & Grants Director. This position is responsible for advocacy and education activities coupled with grant management responsibilities over all three service areas. The position supervises both a Grants Coordinator—who assists grantees as well as leads efforts related to the Community Profile—as well as a Community Outreach Coordinator, who engages with underserved communities and provides Komen education materials. Supervised by the Executive Director, the Digital Marketing Specialist and Marketing Managers develop marketing content disseminated on social media, the Komen Michigan website, and via newsletters. Finally the Executive Director of Komen Michigan leads the organization's strategy and is the "face" of the organization by maintaining major partnerships and speaking engagements.

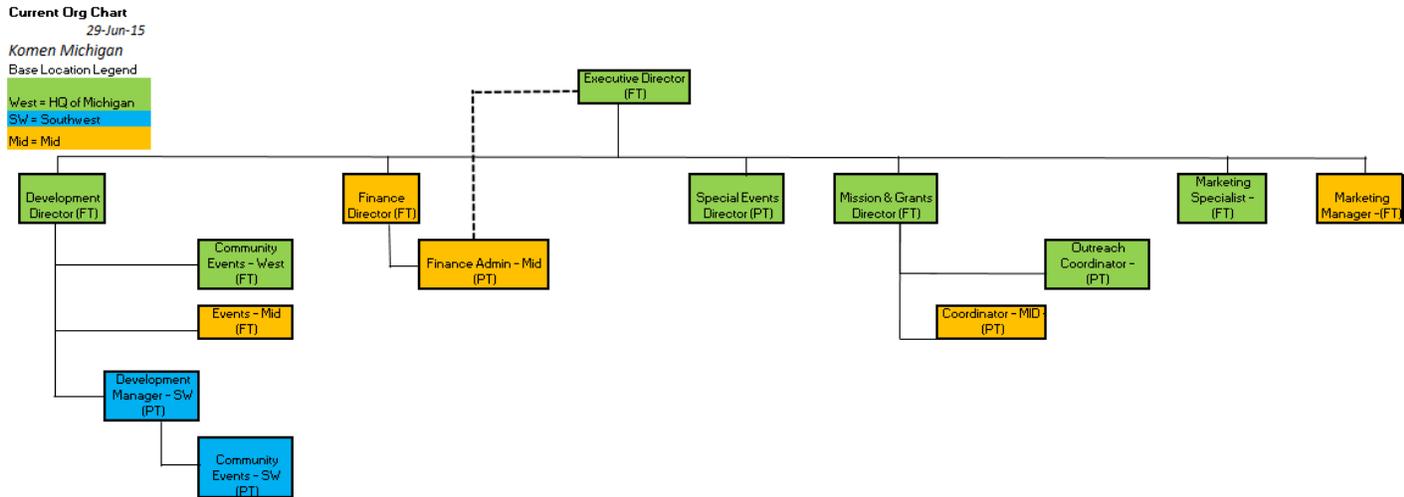


Figure 1.1. Komen Michigan organizational structure

The Komen Michigan Board of Directors functions to advise, assist, and aid the organization’s efforts to support breast cancer education, screening, diagnostics, and outreach programs serving the Affiliate’s service areas. The board directs the strategic vision and leadership of the Affiliate’s presence and focus in the service area. Seventeen members strong, the Board of Directors is a diverse group of volunteers who are survivors, advocates, and allies from all corners of industry, including medical, business, and finance experts. Board members serve for three-year terms at a maximum of two terms. The Executive Director of Komen Michigan serves as board liaison to the organization.

In addition to the voluntary service of the Board of Directors, Komen Michigan could not exist without the support of key volunteers. Volunteers and interns provide assistance with Race for the Cure, special events—such as “You are the Cure” luncheon, grants—writing and researching, marketing, education, and community outreach.

Affiliate Service Area

Komen Michigan Service Area

Komen Michigan is made up of three distinct service areas concentrated in the lower peninsula of the State of Michigan (Figure 1.2). As a whole, the Komen Michigan contains roughly 3.3 million residents, with an average of 166,217 per county of each Affiliate service area (US Census Bureau, 2014). Fifty percent of the population within the Affiliate’s footprint are female, nearly 89.0 percent are White, 6.4 percent identify as Black/African-American, 1.8 percent identify as Asian/Pacific Islander, just under one percent (0.7) identify as American Indian, and 5.5 percent identify as Hispanic/Latino (US Census Bureau, 2014). The median income of all of the Affiliate’s service areas is \$48,759 with an average of 16.0 percent of persons in poverty (US Census Bureau).

The Southwest Michigan service area of Komen Michigan is made up of Kalamazoo, Calhoun, Allegan, Berrien, Branch, Cass, St. Joseph, and Van Buren Counties. Berrien and Van Buren

Counties have been selected as focus communities for the purpose of this profile as Berrien is designated medically underserved and rural, while Van Buren's Hispanic/Latino population has limited access to medical resources. The average population of the Southwest service area is 111,759, with 50.3 percent of those persons being female (Table 1.1) (US Census Bureau, 2014). Eighty-eight percent of the population identifies as White while 6.7 percent identifies as Black/African-American, 1.2 percent identifies as Asian/Pacific Islander, 5.8 percent identifies as Hispanic/Latino, and just less than 1.0 percent (0.8) identifies as American Indian (US Census Bureau, 2014). As compared to the Affiliate as a whole, the Southwest service area has a slightly higher poverty percentage (at 17.0 percent) and a slightly lower median income (at \$44,865), according to the US Census Bureau (2014).

The West Michigan service area is comprised of five counties: Kent, Montcalm, Ottawa, Newago, and Muskegon. By far, Kent County is the most populous of the whole Komen Michigan service area with a population of 629,237 (Table 1.1) (US Census Bureau, 2014). Even more substantial within Kent is the Hispanic/Latino population accounting for some 10.0 percent of residents, according to the US Census Bureau (2014). Neighboring Ottawa County also has a high percentage of Hispanic/Latino residents at 9.3 percent. For this reason, the Community Profile Team will focus on Kent and Ottawa Counties to examine access to medical services for the Hispanic/Latino population. Muskegon County has the second-highest concentration of Blacks/African-Americans within the Affiliate at 14.0 percent, according to US Census data and therefore will be a population of interest for the purpose of this assessment. Of further interest is Montcalm County for its rural and low income populations. While quantifying the number of residents living in rural areas may be difficult, it is important to note that Montcalm County had the lowest median income of the entire Affiliate footprint at just \$40,451—nearly one-fifth less than the Affiliate average as a whole.

The Mid-Michigan service area contains Clinton, Eaton, Ingham, Jackson, Livingston, Shiawassee, and Washtenaw Counties. This service area as a whole contains the highest concentration of Black/African-American residents at 6.7 percent, the lowest median income at \$44,865, and the highest overall percentage of poverty at 17.3 (Table 1.1) (US Census Bureau, 2014). Of particular interest to this assessment is the county of Livingston. With its very high median income (\$72,359), it becomes obvious that there is a clear delineation between the wealthy and those in poverty. Though the county boasts the lowest poverty percentage of the entire Affiliate footprint, those 6.2 percent in poverty, because of the income gap, could actually be less-served than their counterparts in other areas. This inference will be explored further within the qualitative data section. Additionally, the high poverty of Jackson County (17.0 percent) coupled with the higher concentration of Black/African-American residents (8.3 percent) and the lack of medical resources within the community will also provide an area for further exploration for Komen Michigan.

Table 1.1. Komen Michigan demographics

	Population	% Female	% White	% Black	% API	% NA	%H/L	Median Income	% Poverty
Clinton	77,297	50.6%	94.2%	1.90%	1.50%	0.50%	4.3%	\$60,466.00	11.1%
Eaton	108,579	51.2%	88.3%	7.00%	1.90%	0.50%	5.2%	\$54,115.00	10.8%
Ingham	284,582	51.5%	77.9%	12.20%	5.60%	0.70%	7.6%	\$45,321.00	21.9%
Jackson	159,741	48.8%	88.0%	8.30%	0.80%	0.40%	3.2%	\$46,613.00	17.0%
Livingston	185,596	50.0%	96.8%	0.60%	0.90%	0.40%	2.2%	\$72,359.00	6.2%
Shiawassee	68,933	50.6%	97.0%	0.60%	0.50%	0.50%	2.7%	\$46,214.00	15.3%
Washtenaw	356,874	50.7%	75.0%	12.90%	8.40%	0.40%	4.4%	\$59,055.00	15.4%
Allegan	113,847	50.0%	95.0%	1.40%	0.80%	0.70%	7.0%	\$52,061.00	13.5%
Berrien	155,233	51.0%	79.8%	15.40%	1.80%	0.60%	5.0%	\$43,600.00	17.5%
Branch	43,545	48.3%	95.3%	2.10%	0.60%	0.50%	4.3%	\$41,855.00	18.7%
Calhoun	134,878	51.2%	83.2%	11.10%	1.90%	0.70%	4.7%	\$42,110.00	17.8%
Cass	51,608	50.0%	89.8%	5.40%	0.80%	1.10%	3.2%	\$44,346.00	14.5%
Kalamazoo	258,818	50.9%	82.4%	11.20%	2.60%	0.50%	4.5%	\$45,775.00	19.1%
St. Joseph	60,946	50.4%	93.9%	2.70%	0.70%	0.60%	7.0%	\$44,051.00	17.6%
Van Buren	75,199	50.6%	91.4%	4.20%	0.60%	1.30%	10.8%	\$45,129.00	19.4%
Kent	629,237	50.9%	83.6%	10.30%	2.60%	0.70%	10.0%	\$51,667.00	15.5%
Montcalm	62,893	48.2%	95.0%	2.50%	0.50%	0.60%	3.2%	\$40,451.00	18.6%
Muskegon	172,344	50.6%	81.4%	14.20%	0.70%	1.00%	5.2%	\$40,979.00	19.9%
Newago	47,900	49.7%	96.0%	1.20%	0.40%	0.90%	5.8%	\$42,571.00	18.6%
Ottawa	276,292	50.8%	93.1%	1.80%	2.80%	0.60%	9.3%	\$56,453.00	11.2%

KOMEN MICHIGAN SERVICE AREA

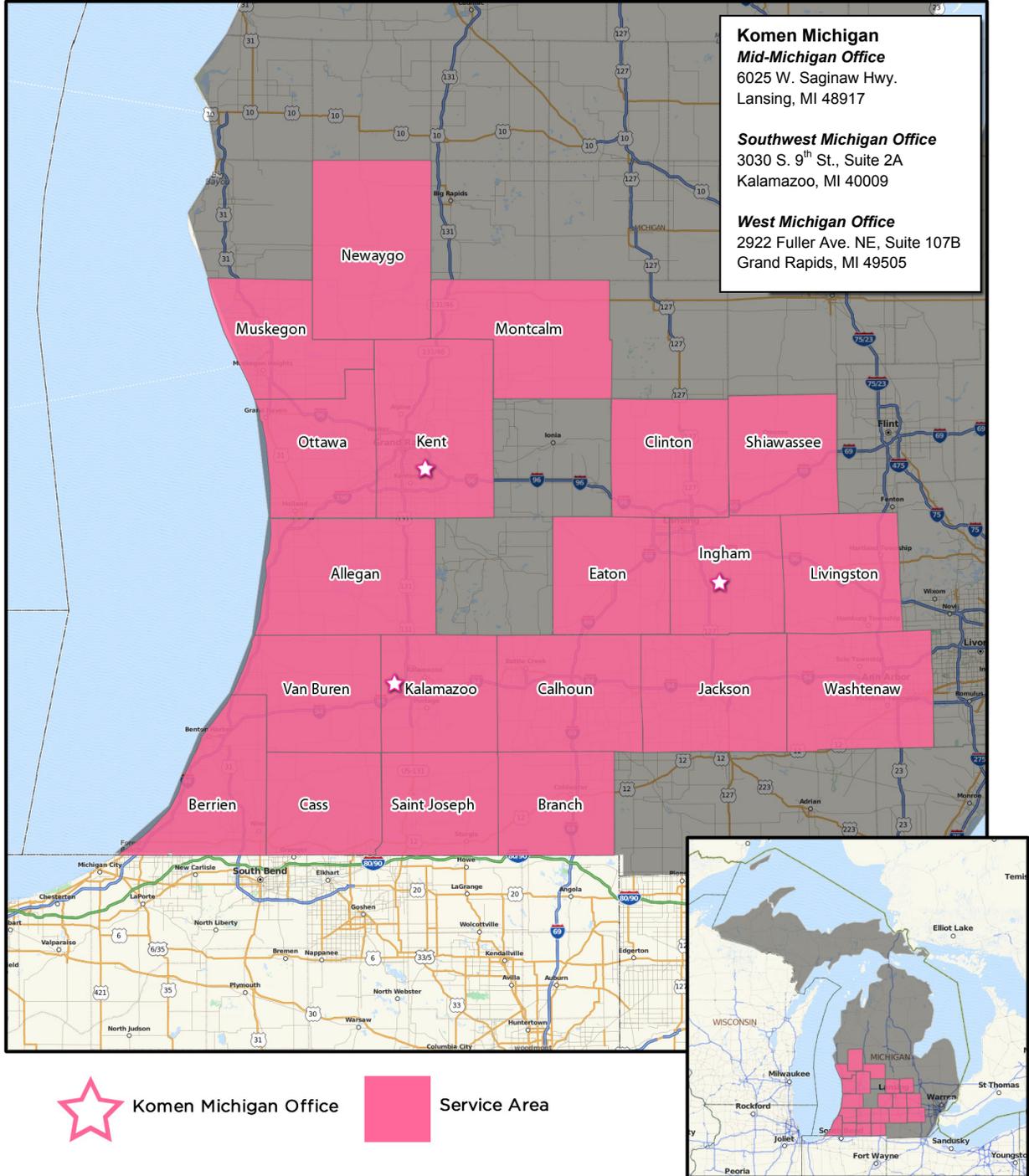


Figure 1.2. Susan G. Komen Michigan service area

Purpose of the Community Profile Report

Komen Michigan invites community organizations to apply for funding through one of its Affiliate Grant programs, with consideration given to those organizations whose objectives most match with the funding priorities for that grant cycle. Every four years, priorities are re-aligned with the needs of the communities served by the Affiliate through the completion of the Community Profile and updated annually to meet changing needs.. The Community Profile is a collection of data: quantitative data such as numbers of new breast cancer diagnoses or deaths, qualitative data in the form of community listening sessions and informal surveys, and additional data—including independent community health assessments or research—to add depth to these numbers and stories. The Community Profile is a useful tool to assess community needs, the impact of current health care laws, and socioeconomic shifts. Every year the Community Profile is updated to reflect changes and revise priorities as needed.

The need for breast health services varies across the State of Michigan. For the purposes of this project, Komen Michigan will be focusing on three distinct populations: rural-area residents, Hispanic/Latinas, and Black/African-Americans. To further drive Komen Michigan's focus, the Affiliate has identified communities of need for each of the aforementioned populations. In assessing the need of Hispanic/Latina populations, the Affiliate has identified Kent, Ottawa, and Van Buren Counties. For Black/African-American populations, the Affiliate will be examining the counties of Muskegon, Berrien, and Jackson. Finally, to inform the assessment of rural populations, Komen Michigan's focus will be Montcalm, Cass, and Livingston Counties.

The Community Profile guides Komen Michigan's grantmaking, partnerships, coalition activities, and outreach and education activities.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

In 2015, Susan G. Komen West, Southwest, and Mid-Michigan merged to become Komen Michigan. As such, the Community Profiles for these regions are presented herein as a single merged document, reflective of the communities which have been identified as communities of high need.

Quantitative Data Report

Introduction

The purpose of the quantitative data report for Susan G. Komen® Michigan 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 report examines the needs of the three service areas of Komen Michigan: Mid-Michigan, Southwest Michigan, and West Michigan.

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 the Komen Michigan's Quantitative Data Report. For a full report please contact the Affiliate or download a copy at <http://komenmichigan.org/grants/how-to-apply-for-community-grants/>.

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. Black/African-American women).

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	198,602	122.1	-0.2%	40,736	22.6	-1.9%	70,218	43.7	-1.2%
HP2020	.	-	-	-	-	20.6*	-	-	41.0*	-
Michigan	5,067,869	7,029	120.0	-1.1%	1,468	24.0	-2.0%	2,371	41.0	-0.6%
Mid-Michigan	617,467	774	118.6	-0.9%	155	23.5	NA	237	36.6	-0.9%
White	533,422	686	115.8	-1.0%	139	23.1	NA	205	35.2	-0.7%
Black/African-American	54,750	47	110.9	-4.4%	14	34.3	NA	19	43.3	-3.7%
American Indian and Alaska Native (AIAN)	3,699	SN	SN	SN	SN	SN	SN	SN	SN	SN
Asian and Pacific Islander (API)	25,595	14	82.7	-5.2%	SN	SN	SN	3	18.1	-5.1%
Non-Hispanic/ Latina	592,647	765	119.9	-1.0%	153	23.8	NA	233	37.0	-1.4%
Hispanic/ Latina	24,820	8	58.9	11.7%	SN	SN	SN	3	24.6	NA
Clinton County - MI	37,697	35	82.3	-5.4%	9	21.4	-2.3%	9	22.3	-3.7%
Eaton County - MI	55,401	64	97.5	6.8%	14	21.1	-1.7%	21	33.7	21.3%
Ingham County - MI	144,742	184	132.3	0.7%	35	24.7	6.6%	59	42.7	-3.5%
Jackson County - MI	79,026	107	114.4	-3.1%	23	22.6	-3.0%	34	37.1	-6.8%
Livingston County - MI	90,415	103	100.3	0.9%	24	25.6	-2.1%	33	31.6	9.7%
Shiawassee County - MI	36,230	52	120.4	-1.2%	11	24.5	-2.0%	15	36.0	-14.7%
Washtenaw County - MI	173,955	228	136.1	-2.9%	39	22.9	-2.2%	65	38.5	-3.2%
Southwest Michigan	451,202	604	115.2	-2.3%	132	23.9	NA	198	38.3	-3.5%
White	397,542	551	114.5	-2.8%	119	23.1	NA	178	37.6	-3.6%
Black/African-American	43,112	43	124.0	5.1%	13	35.8	NA	18	52.3	-1.7%
American Indian and Alaska Native (AIAN)	3,568	SN	SN	SN	SN	SN	SN	SN	SN	SN
Asian and Pacific Islander (API)	6,979	4	75.0	12.5%	SN	SN	SN	SN	SN	SN
Non-Hispanic/ Latina	430,280	598	116.1	-2.2%	131	24.1	NA	196	38.7	-3.7%
Hispanic/ Latina	20,922	6	69.1	-14.6%	SN	SN	SN	SN	SN	SN
Allegan County - MI	55,939	78	124.0	-14.6%	13	21.1	-1.9%	23	36.9	-5.8%
Berrien County - MI	80,707	126	122.3	0.4%	25	22.2	-3.2%	47	46.0	-3.8%
Branch County - MI	21,900	28	107.7	-6.5%	7	25.3	-1.1%	7	25.8	3.5%
Calhoun County - MI	70,163	83	98.5	2.2%	23	26.3	-0.8%	26	31.3	-5.0%
Cass County - MI	26,256	32	95.8	-8.8%	9	25.4	-2.2%	10	29.4	-6.8%

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)
Kalamazoo County - MI	126,461	176	131.9	2.2%	38	27.0	-1.6%	57	43.1	-2.7%
St. Joseph County - MI	31,213	38	102.2	-5.8%	8	18.3	-2.3%	13	35.7	-4.6%
Van Buren County - MI	38,563	44	95.8	-4.2%	10	20.8	-1.4%	16	35.7	-4.0%
West Michigan	581,012	777	127.2	-0.5%	135	21.3	NA	239	39.4	2.4%
White	513,210	722	128.3	-0.6%	123	20.8	NA	220	39.5	3.0%
Black/African-American	50,095	40	111.4	-2.4%	10	32.2	NA	15	41.1	-7.5%
American Indian and Alaska Native (AIAN)	4,703	SN	SN	SN	SN	SN	SN	SN	SN	SN
Asian and Pacific Islander (API)	13,003	6	66.1	-4.2%	SN	SN	SN	SN	SN	SN
Non-Hispanic/ Latina	537,390	757	128.3	-0.3%	132	21.5	NA	231	39.5	1.9%
Hispanic/ Latina	43,621	20	94.9	-17.7%	SN	SN	SN	8	31.6	12.2%
Kent County - MI	305,543	415	133.4	1.3%	65	20.2	-3.1%	133	43.0	5.0%
Montcalm County - MI	30,754	41	115.3	-7.3%	11	29.3	1.9%	12	35.9	-22.2%
Muskegon County - MI	87,190	120	120.3	-4.4%	26	24.9	-1.7%	36	36.6	-2.7%
Newaygo County - MI	24,321	32	110.7	-5.9%	6	20.5	-2.8%	10	35.2	-12.3%
Ottawa County - MI	133,203	168	125.9	0.8%	27	19.3	-3.3%	47	35.1	8.5%

*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: NAACCR – CINA Deluxe Analytic File.

Source of death rate data: CDC – NCHS death data in SEER*Stat.

Source of death trend data: NCI/CDC State Cancer Profiles.

Incidence rates and trends summary

Mid-Michigan

Overall, the breast cancer incidence rate in the Mid-Michigan service area was slightly lower than that observed in the US as a whole and the incidence trend was lower than the US as a whole. The incidence rate and trend of the Mid-Michigan service area were not significantly different than that observed for the State of Michigan.

For the United States, breast cancer incidence in Blacks/African-Americans is lower than in 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 Whites and Blacks/African-Americans. The most recent estimated incidence rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks/African-Americans. For

the Mid-Michigan service area as a whole, the incidence rate was slightly lower among Blacks/African-Americans than Whites and lower among APIs than Whites. There were not enough data available within the Mid-Michigan 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 counties had an incidence rate significantly higher than the Mid-Michigan service area as a whole:

- Ingham County
- Washtenaw County

The incidence rate was significantly lower in the following counties:

- Clinton County
- Eaton County
- Livingston County

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

- Eaton County

The rest of the counties had incidence rates and trends that were not significantly different than the Mid-Michigan service area as a whole.

Southwest Michigan

Overall, the breast cancer incidence rate and trend in the Southwest Michigan service area were lower than that observed in the US as a whole. The incidence rate and trend of the Southwest Michigan service area were not significantly different than that observed for the State of Michigan.

For the United States, breast cancer incidence in Blacks/African-Americans is lower than in Whites overall. The most recent estimated breast cancer incidence rates for APIs and AIANs were lower than for Non-Hispanic Whites and Blacks/African-Americans. The most recent estimated incidence rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks/African-Americans. For the Southwest Michigan's service area as a whole, the incidence rate was higher among Blacks/African-Americans than Whites and lower among APIs than Whites. There were not enough data available within the Southwest Michigan 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 Southwest Michigan service area as a whole:

- Kalamazoo County

The incidence rate was significantly lower in the following counties:

- Calhoun County
- Van Buren County

The rest of the counties had incidence rates and trends that were not significantly different than the Southwest Michigan service area as a whole.

West Michigan

Overall, the breast cancer incidence rate in the West Michigan service area was higher than that observed in the US as a whole and the incidence trend was slightly lower than the US as a whole. The incidence rate of the West Michigan service area was **significantly higher** than that observed for the State of Michigan and the incidence trend was not significantly different than the State of Michigan.

For the United States, breast cancer incidence in Blacks/African-Americans is lower than in Whites overall. The most recent estimated breast cancer incidence rates for APIs and AIANs were lower than for Non-Hispanic Whites and Blacks/African-Americans. The most recent estimated incidence rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks/African-Americans. For the West Michigan service area as a whole, the incidence rate was lower among Blacks/African-Americans than Whites and lower among APIs than Whites. There were not enough data available within the West Michigan 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.

None of the counties in the West Michigan service area had substantially different incidence rates than the West Michigan service area as a whole.

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

Mid-Michigan

Overall, the breast cancer death rate in the Mid-Michigan service area was similar to 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 Mid-Michigan service area was not significantly different than that observed for the State of Michigan.

For the United States, breast cancer death rates in Blacks/African-Americans are substantially higher than in Whites overall. The most recent estimated breast cancer death rates for APIs and AIANs were lower than for Non-Hispanic Whites and Blacks/African-Americans. The most recent estimated death rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks/African-Americans. For the Mid-Michigan service area as a whole, the death rate was higher among Blacks/African-Americans than Whites. There were not enough data available within the Mid-Michigan 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

Mid-Michigan service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

None of the counties in the Mid-Michigan service area had substantially different death rates than the Mid-Michigan service area as a whole.

Southwest Michigan

Overall, the breast cancer death rate in the Southwest Michigan service area was slightly 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 Southwest Michigan service area was not significantly different than that observed for the State of Michigan.

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

None of the counties in the Southwest Michigan service area had substantially different death rates and trends than the Southwest Michigan service area as a whole.

West Michigan

Overall, the breast cancer death rate in the West Michigan service area was slightly lower 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 West Michigan service area was significantly lower than that observed for the State of Michigan.

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

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

- Montcalm County

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

- Kent County

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

Late-stage incidence rates and trends summary

Mid-Michigan

Overall, the breast cancer late-stage incidence rate in the Mid-Michigan service area was lower than that observed in the US as a whole and the late-stage incidence trend was slightly higher than the US as a whole. The late-stage incidence rate of the Mid-Michigan service area was significantly lower than that observed for the State of Michigan and the late-stage incidence trend was not significantly different than the State of Michigan.

For the United States, late-stage incidence rates in Blacks/African-Americans are higher than among Whites. Hispanics/Latinas tend to be diagnosed with late-stage breast cancers more often than Whites. For the Mid-Michigan service area as a whole, the late-stage incidence rate was higher among Blacks/African-Americans than Whites and lower among APIs than Whites. There were not enough data available within the Mid-Michigan 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 county:

- Clinton County

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

- Eaton County

The rest of the counties had late-stage incidence rates and trends that were not significantly different than the Mid-Michigan service area as a whole.

Southwest Michigan

Overall, the breast cancer late-stage incidence rate and trend in the Southwest Michigan service area were lower than that observed in the US as a whole. The late-stage incidence rate and trend of the Southwest Michigan service area were not significantly different than that observed for the State of Michigan.

For the United States, late-stage incidence rates in Blacks/African-Americans are higher than among Whites. Hispanics/Latinas tend to be diagnosed with late-stage breast cancers more

often than Whites. For the Southwest Michigan service area as a whole, the late-stage incidence rate was higher among Blacks/African-Americans than Whites. There were not enough data available within the Southwest Michigan 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 Southwest Michigan service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

None of the counties in the Southwest Michigan service area had substantially different late-stage incidence rates than the Southwest Michigan service area as a whole.

West Michigan

Overall, the breast cancer late-stage incidence rate in the West Michigan service area was lower than that observed in the US as a whole and the late-stage incidence trend was higher than the US as a whole. The late-stage incidence rate and trend of the West Michigan service area were not significantly different than that observed for the State of Michigan.

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

None of the counties in the West Michigan service area had substantially different late-stage incidence rates than the West Michigan service area as a whole.

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 Comprehensive Cancer Network	US Preventive Services Task Force
<p>Informed decision-making with a health care provider at age 40</p> <p>Mammography every year starting at age 45</p> <p>Mammography every other year beginning at age 55</p>	<p>Mammography every year starting at age 40</p>	<p>Informed decision-making with a health care provider ages 40-49</p> <p>Mammography every 2 years ages 50-74</p>

*As of October 2015

Because having regular 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. 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 that 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 that 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%
Michigan	4,151	3,285	79.5%	77.9%-81.0%
Mid-Michigan	441	352	83.6%	78.8%-87.5%
White	409	329	83.7%	78.7%-87.7%
Black/African-American	20	16	82.8%	54.0%-95.2%
AIAN	SN	SN	SN	SN
API	SN	SN	SN	SN
Hispanic/ Latina	SN	SN	SN	SN
Non-Hispanic/ Latina	437	348	83.4%	78.6%-87.3%
Clinton County - MI	38	34	89.7%	73.2%-96.5%
Eaton County - MI	43	34	84.8%	69.8%-93.1%
Ingham County - MI	101	80	82.2%	69.6%-90.2%
Jackson County - MI	66	50	81.4%	66.8%-90.5%
Livingston County - MI	51	39	78.7%	62.2%-89.3%
Shiawassee County - MI	19	18	96.0%	71.8%-99.6%
Washtenaw County - MI	123	97	83.3%	73.6%-89.9%
West Michigan	445	367	82.4%	77.6%-86.4%
White	408	339	82.7%	77.7%-86.7%
Black/African-American	30	24	88.7%	66.4%-96.9%
AIAN	SN	SN	SN	SN
API	SN	SN	SN	SN
Hispanic/ Latina	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Non-Hispanic/ Latina	438	362	82.6%	77.9%-86.6%
Kent County - MI	207	184	89.8%	83.5%-93.9%
Montcalm County - MI	28	20	76.3%	53.1%-90.1%
Muskegon County - MI	100	80	83.0%	72.5%-90.0%
Newaygo County - MI	22	13	62.8%	38.9%-81.8%
Ottawa County - MI	88	70	74.0%	61.2%-83.7%
Southwest Michigan	362	264	73.2%	67.1%-78.5%
White	321	232	72.6%	66.1%-78.2%
Black/African-American	31	24	73.8%	49.6%-89.0%
AIAN	SN	SN	SN	SN
API	SN	SN	SN	SN
Hispanic/ Latina	SN	SN	SN	SN
Non-Hispanic/ Latina	359	262	73.2%	67.2%-78.5%
Allegan County - MI	31	24	77.1%	54.1%-90.5%
Berrien County - MI	84	62	71.2%	57.4%-82.0%
Branch County - MI	14	10	65.3%	36.1%-86.3%
Calhoun County - MI	54	43	81.5%	66.2%-90.9%
Cass County - MI	21	16	76.9%	50.0%-91.7%
Kalamazoo County - MI	101	73	78.0%	66.7%-86.2%
St. Joseph County - MI	30	18	55.6%	35.3%-74.1%
Van Buren County - MI	27	18	59.4%	34.0%-80.7%

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

Mid-Michigan

The breast cancer screening proportion in the Mid-Michigan service area was significantly higher than that observed in the US as a whole. The screening proportion of the Mid-Michigan service area was not significantly different than the State of Michigan.

For the United States, breast cancer screening proportions among Blacks/African-Americans are similar to those among Whites overall. APIs have somewhat lower screening proportions than Whites and Blacks/African-Americans. Although data are limited, screening proportions among AIANs are similar to those among Whites. Screening proportions among Hispanics/Latinas are similar to those among Non-Hispanic Whites and Blacks/African-Americans. For the Mid-Michigan service area as a whole, the screening proportion was not significantly different among Blacks/African-Americans than Whites. There were not enough

data available within the Mid-Michigan 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 Mid-Michigan service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

None of the counties in the Mid-Michigan service area had substantially different screening proportions than the Mid-Michigan service area as a whole.

West Michigan

The breast cancer screening proportion in the West Michigan service area was not significantly different than that observed in the US as a whole. The screening proportion of the West Michigan service area was not significantly different than the State of Michigan.

For the United States, breast cancer screening proportions among Blacks/African-Americans are similar to those among Whites overall. APIs have somewhat lower screening proportions than Whites and Blacks/African-Americans. Although data are limited, screening proportions among AIANs are similar to those among Whites. Screening proportions among Hispanics/Latinas are similar to those among Non-Hispanic Whites and Blacks/African-Americans. For the West Michigan service area as a whole, the screening proportion was not significantly different among Blacks/African-Americans than Whites. There were not enough data available within the West Michigan 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 West Michigan service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

None of the counties in the West Michigan service area had substantially different screening proportions than the West Michigan service area as a whole.

Southwest Michigan

The breast cancer screening proportion in the Southwest Michigan service area was not significantly different than that observed in the US as a whole. The screening proportion of the Southwest Michigan service area was not significantly different than the State of Michigan.

For the United States, breast cancer screening proportions among Blacks/African-Americans are similar to those among Whites overall. APIs have somewhat lower screening proportions than Whites and Blacks/African-Americans. Although data are limited, screening proportions among AIANs are similar to those among Whites. Screening proportions among Hispanics/Latinas are similar to those among Non-Hispanic Whites and Blacks/African-Americans. For the Southwest Michigan service area as a whole, the screening proportion was not significantly different among Blacks/African-Americans than Whites. There were not enough data available within the Southwest Michigan 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 Southwest Michigan service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

None of the counties in the Southwest Michigan service area had substantially different screening proportions than the Southwest Michigan 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	White	Black /African-American	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 %
Michigan	80.8 %	15.5 %	0.9 %	2.8 %	95.6 %	4.4 %	50.5 %	36.7 %	15.6 %
Mid-Michigan	85.7 %	9.2 %	0.6 %	4.4 %	95.7 %	4.3 %	47.3 %	33.7 %	13.4 %
Clinton County - MI	95.2 %	2.5 %	0.6 %	1.7 %	96.2 %	3.8 %	49.9 %	35.0 %	14.2 %
Eaton County - MI	89.9 %	7.5 %	0.6 %	2.0 %	95.3 %	4.7 %	52.5 %	38.5 %	15.9 %
Ingham County - MI	79.7 %	13.8 %	0.9 %	5.7 %	92.8 %	7.2 %	41.7 %	30.3 %	12.1 %
Jackson County - MI	91.1 %	7.5 %	0.5 %	1.0 %	97.0 %	3.0 %	51.9 %	38.1 %	16.4 %
Livingston County - MI	97.6 %	0.7 %	0.5 %	1.2 %	98.0 %	2.0 %	53.5 %	36.4 %	13.5 %
Shiawassee County - MI	98.0 %	0.8 %	0.7 %	0.6 %	97.5 %	2.5 %	53.0 %	38.1 %	16.1 %
Washtenaw County - MI	76.4 %	14.2 %	0.6 %	8.8 %	95.8 %	4.2 %	43.4 %	30.4 %	11.7 %
Southwest Michigan	87.7 %	9.8 %	0.8 %	1.7 %	95.0 %	5.0 %	49.9 %	36.8 %	16.0 %
Allegan County - MI	96.5 %	1.8 %	0.8 %	0.9 %	93.5 %	6.5 %	50.5 %	35.9 %	14.5 %
Berrien County - MI	80.4 %	17.0 %	0.7 %	1.9 %	95.7 %	4.3 %	53.5 %	40.1 %	18.5 %
Branch County - MI	97.8 %	0.9 %	0.6 %	0.6 %	96.0 %	4.0 %	51.9 %	38.8 %	17.5 %
Calhoun County - MI	85.1 %	12.2 %	0.9 %	1.9 %	95.6 %	4.4 %	50.9 %	37.7 %	16.7 %
Cass County - MI	91.4 %	6.4 %	1.3 %	1.0 %	97.2 %	2.8 %	54.9 %	40.8 %	17.3 %
Kalamazoo County - MI	84.3 %	12.4 %	0.7 %	2.6 %	96.0 %	4.0 %	45.0 %	32.9 %	14.1 %
St. Joseph County - MI	95.0 %	3.4 %	0.7 %	0.9 %	93.7 %	6.3 %	50.3 %	37.7 %	16.8 %
Van Buren County - MI	92.6 %	5.2 %	1.4 %	0.7 %	90.1 %	9.9 %	51.3 %	37.7 %	15.4 %
West Michigan	87.9 %	8.9 %	0.9 %	2.4 %	92.0 %	8.0 %	46.3 %	32.8 %	13.6 %
Kent County - MI	84.9 %	11.4 %	0.8 %	2.8 %	90.5 %	9.5 %	44.9 %	31.4 %	12.8 %
Montcalm County - MI	97.9 %	0.8 %	0.7 %	0.6 %	97.0 %	3.0 %	50.8 %	37.0 %	16.2 %
Muskegon County - MI	82.6 %	15.4 %	1.1 %	0.9 %	95.2 %	4.8 %	49.8 %	36.7 %	15.6 %
Newaygo County - MI	96.8 %	1.5 %	1.1 %	0.6 %	94.7 %	5.3 %	52.9 %	38.7 %	16.9 %
Ottawa County - MI	94.2 %	2.1 %	0.7 %	3.0 %	91.6 %	8.4 %	45.0 %	31.6 %	13.3 %

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	Linguistic-ally Isolated	In Rural Areas	In Medically Under-served 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 %
Michigan	11.6 %	15.7 %	34.1 %	12.3 %	6.0 %	1.7 %	25.4 %	17.6 %	13.4 %
Mid-Michigan	7.9 %	13.8 %	26.9 %	9.5 %	6.4 %	1.8 %	28.4 %	5.5 %	10.4 %
Clinton County - MI	7.1 %	10.3 %	23.2 %	7.9 %	2.6 %	1.2 %	52.9 %	0.0 %	9.0 %
Eaton County - MI	7.0 %	9.7 %	25.4 %	9.3 %	3.9 %	0.9 %	38.0 %	0.0 %	10.2 %
Ingham County - MI	9.4 %	20.4 %	32.6 %	9.6 %	8.5 %	2.9 %	13.2 %	19.8 %	11.4 %
Jackson County - MI	11.1 %	15.1 %	36.0 %	11.3 %	1.8 %	0.5 %	41.8 %	0.0 %	12.9 %
Livingston County - MI	6.0 %	6.3 %	19.9 %	9.0 %	3.2 %	0.6 %	36.9 %	0.0 %	9.9 %
Shiawassee County - MI	10.4 %	14.2 %	34.9 %	11.5 %	0.9 %	0.1 %	55.0 %	0.0 %	12.5 %
Washtenaw County - MI	6.2 %	14.2 %	22.0 %	8.8 %	11.3 %	2.7 %	16.4 %	3.4 %	8.6 %
Southwest Michigan	11.7 %	16.8 %	36.2 %	11.2 %	4.3 %	1.1 %	40.7 %	34.0 %	14.2 %
Allegan County - MI	10.6 %	12.6 %	33.3 %	8.3 %	3.3 %	0.8 %	64.5 %	100.0 %	14.7 %
Berrien County - MI	13.3 %	16.7 %	38.8 %	11.0 %	6.1 %	1.3 %	32.9 %	8.4 %	16.1 %
Branch County - MI	13.6 %	17.3 %	40.9 %	11.7 %	3.2 %	2.2 %	62.7 %	100.0 %	15.6 %
Calhoun County - MI	12.2 %	17.0 %	38.1 %	12.7 %	3.7 %	1.0 %	31.0 %	29.1 %	13.8 %
Cass County - MI	13.5 %	13.3 %	36.5 %	9.7 %	2.4 %	0.6 %	71.2 %	55.8 %	15.0 %
Kalamazoo County - MI	7.7 %	18.6 %	31.7 %	11.5 %	4.7 %	1.1 %	17.5 %	0.0 %	11.3 %
St. Joseph County - MI	16.1 %	16.7 %	40.1 %	14.5 %	3.5 %	1.6 %	54.4 %	48.2 %	15.1 %
Van Buren County - MI	15.4 %	18.9 %	39.0 %	10.6 %	4.8 %	0.8 %	70.9 %	44.9 %	16.0 %
West Michigan	11.4 %	14.7 %	33.6 %	10.8 %	5.6 %	2.0 %	24.6 %	2.7 %	12.8 %
Kent County - MI	11.4 %	14.8 %	32.1 %	9.8 %	7.3 %	2.7 %	15.7 %	0.0 %	12.4 %
Montcalm County - MI	14.2 %	19.6 %	43.1 %	14.7 %	1.4 %	0.6 %	84.6 %	0.0 %	15.5 %
Muskegon County - MI	12.2 %	18.5 %	41.5 %	15.8 %	1.9 %	0.7 %	23.3 %	0.0 %	13.5 %
Newaygo County - MI	14.7 %	17.2 %	42.6 %	13.8 %	2.5 %	0.8 %	83.8 %	36.3 %	16.5 %
Ottawa County - MI	9.4 %	10.1 %	27.4 %	8.3 %	5.7 %	1.6 %	20.3 %	4.9 %	11.7 %

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

Mid-Michigan

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

The following county has substantially larger API female population percentages than that of the Mid-Michigan service area as a whole:

- Washtenaw County

The following county has substantially lower income levels than that of the Mid-Michigan service area as a whole:

- Ingham County

Southwest Michigan

Proportionately, the Southwest Michigan service area has a substantially larger White female population than the US as a whole, a slightly smaller Black/African-American female population, a substantially smaller Asian and Pacific Islander (API) female population, a slightly smaller American Indian and Alaska Native (AIAN) female population, and a substantially smaller Hispanic/Latina female population. The Southwest Michigan service area's female population is slightly older than that of the US as a whole. The Southwest Michigan service area's education level is slightly higher 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 Southwest Michigan service area. The Southwest Michigan 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 substantially larger percentage of people living in rural areas, a slightly smaller percentage of people without health insurance, and a substantially larger percentage of people living in medically underserved areas.

The following county has substantially larger Black/African-American female population percentages than that of the Southwest Michigan service area as a whole:

- Berrien County

The following county has substantially lower employment levels than that of the Southwest Michigan service area as a whole:

- St. Joseph County

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

- Montcalm County
- Muskegon County

West Michigan

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

The following county has substantially larger Black/African-American female population percentages than that of the West Michigan service area as a whole:

- Muskegon County

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: 20.6 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 Michigan 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 Michigan service area with predicted time to achieve the HP2020 breast cancer targets and key population characteristics

County	Komen Michigan Service Area	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Livingston County - MI	Mid-Michigan	High	11 years	13 years or longer	Rural
Eaton County - MI	Mid-Michigan	Medium High	2 years	13 years or longer	Rural
Ingham County - MI	Mid-Michigan	Medium High	13 years or longer	2 years	Poverty, medically underserved
Kalamazoo County - MI	Southwest Michigan	Medium High	13 years or longer	2 years	
Branch County - MI	Southwest Michigan	Medium	13 years or longer	Currently meets target	Rural, medically underserved
Calhoun County - MI	Southwest Michigan	Medium	13 years or longer	Currently meets target	
Kent County - MI	West Michigan	Medium	Currently meets target	13 years or longer	
Montcalm County - MI	West Michigan	Medium	13 years or longer	Currently meets target	Employment, rural
Ottawa County - MI	West Michigan	Medium	Currently meets target	13 years or longer	
Berrien County - MI	Southwest Michigan	Medium Low	3 years	3 years	%Black/African-American
Cass County - MI	Southwest Michigan	Medium Low	10 years	Currently meets target	Rural, medically underserved
Muskegon County - MI	West Michigan	Medium Low	12 years	Currently meets target	%Black/African-American, employment
Shiawassee County - MI	Mid-Michigan	Medium Low	9 years	Currently meets target	Rural
Clinton County - MI	Mid-Michigan	Low	2 years	Currently meets target	Rural
Jackson County - MI	Mid-Michigan	Low	4 years	Currently meets target	Rural
Washtenaw County - MI	Mid-Michigan	Low	5 years	Currently meets target	%API
Allegan County - MI	Southwest Michigan	Low	2 years	Currently meets target	Rural, medically underserved
Van Buren County - MI	Southwest Michigan	Low	1 year	Currently meets target	Rural, medically underserved
Newaygo County - MI	West Michigan	Lowest	Currently meets target	Currently meets target	Rural, medically underserved
St. Joseph County - MI	Southwest Michigan	Lowest	Currently meets target	Currently meets target	Employment, rural, medically underserved

Map of Intervention Priority Areas

Figures 2.1, 2.2 and 2.3 show 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.

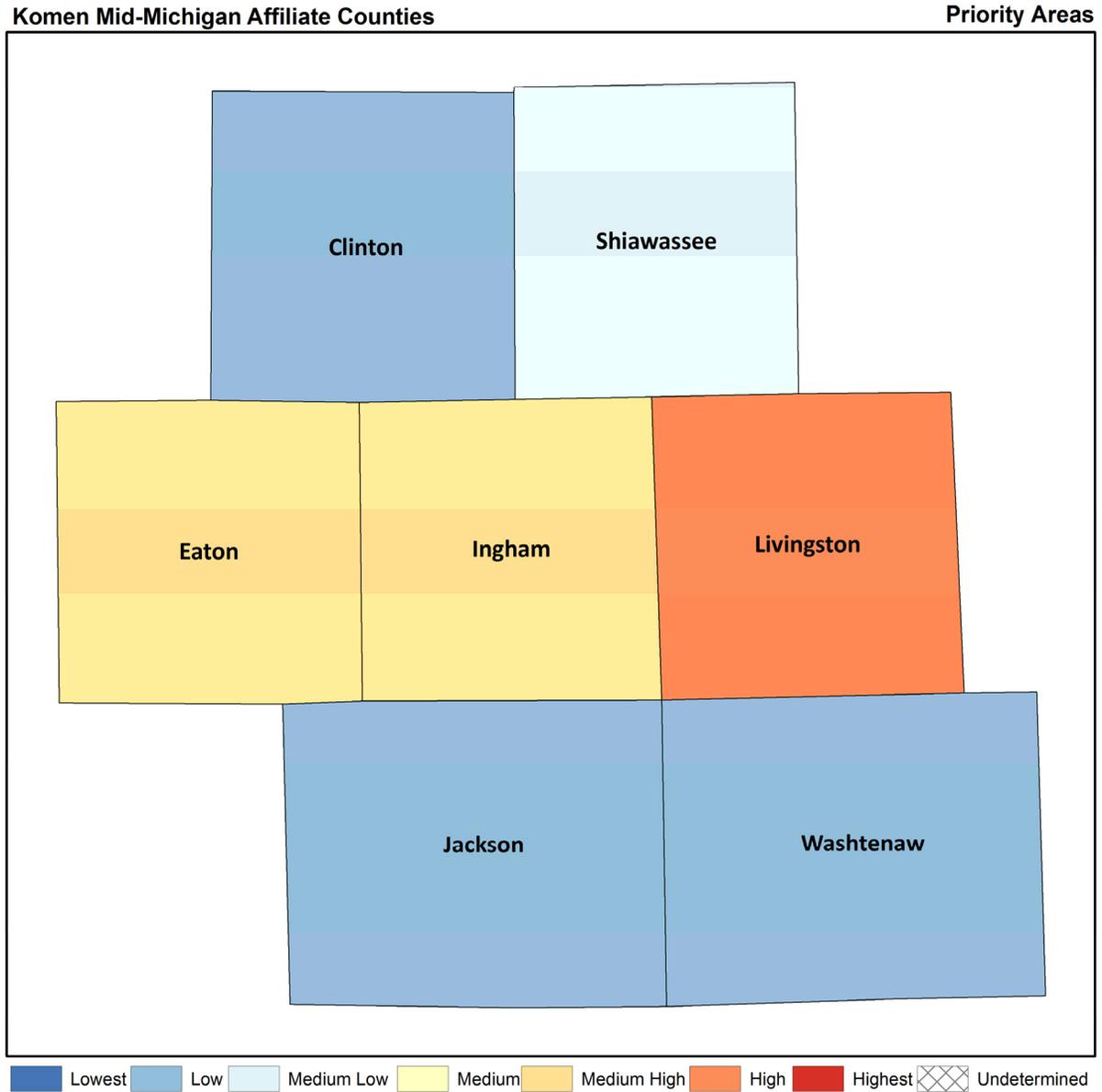


Figure 2.1. Intervention priorities, Mid-Michigan

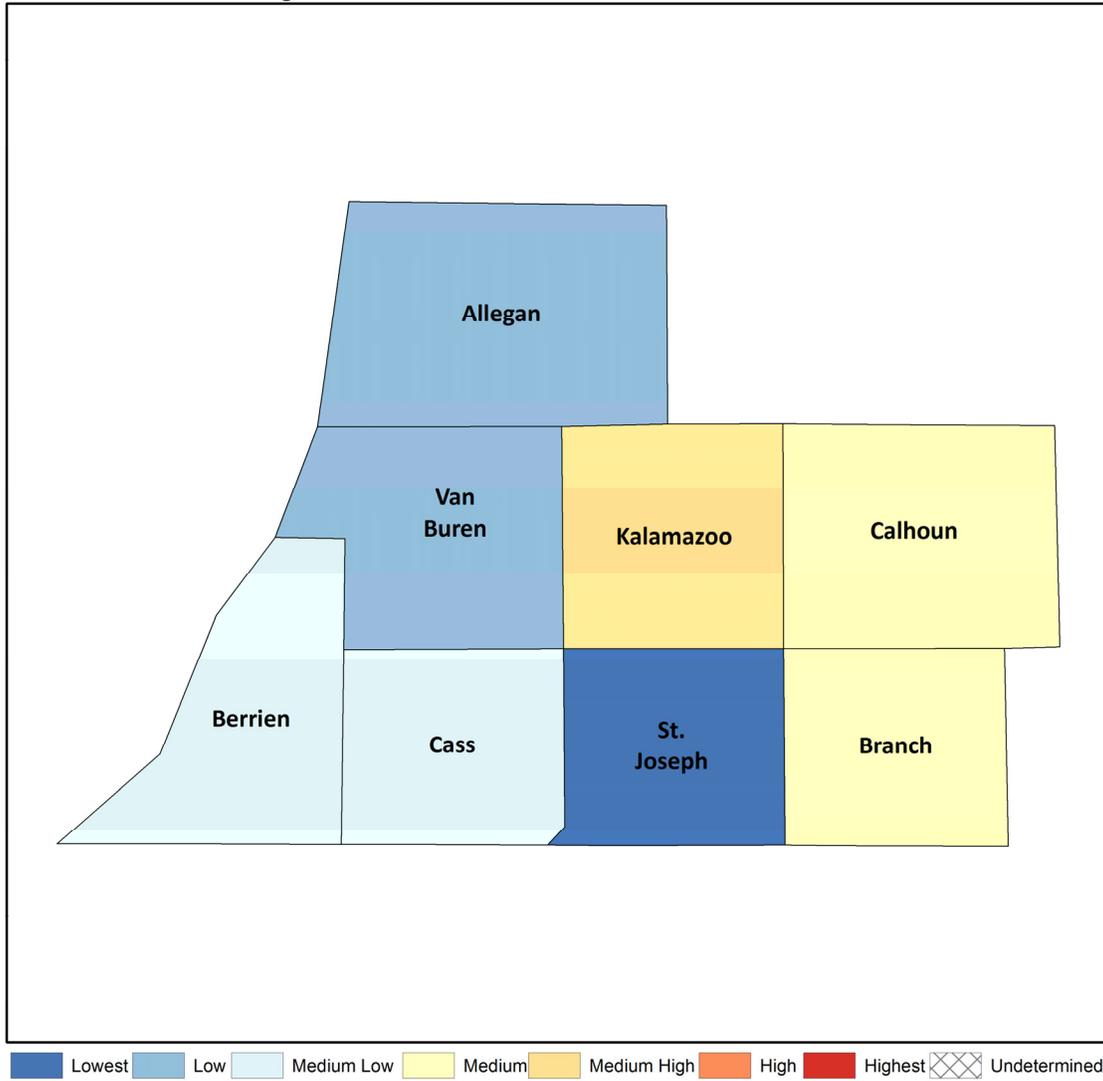


Figure 2.2. Intervention priorities, Southwest Michigan

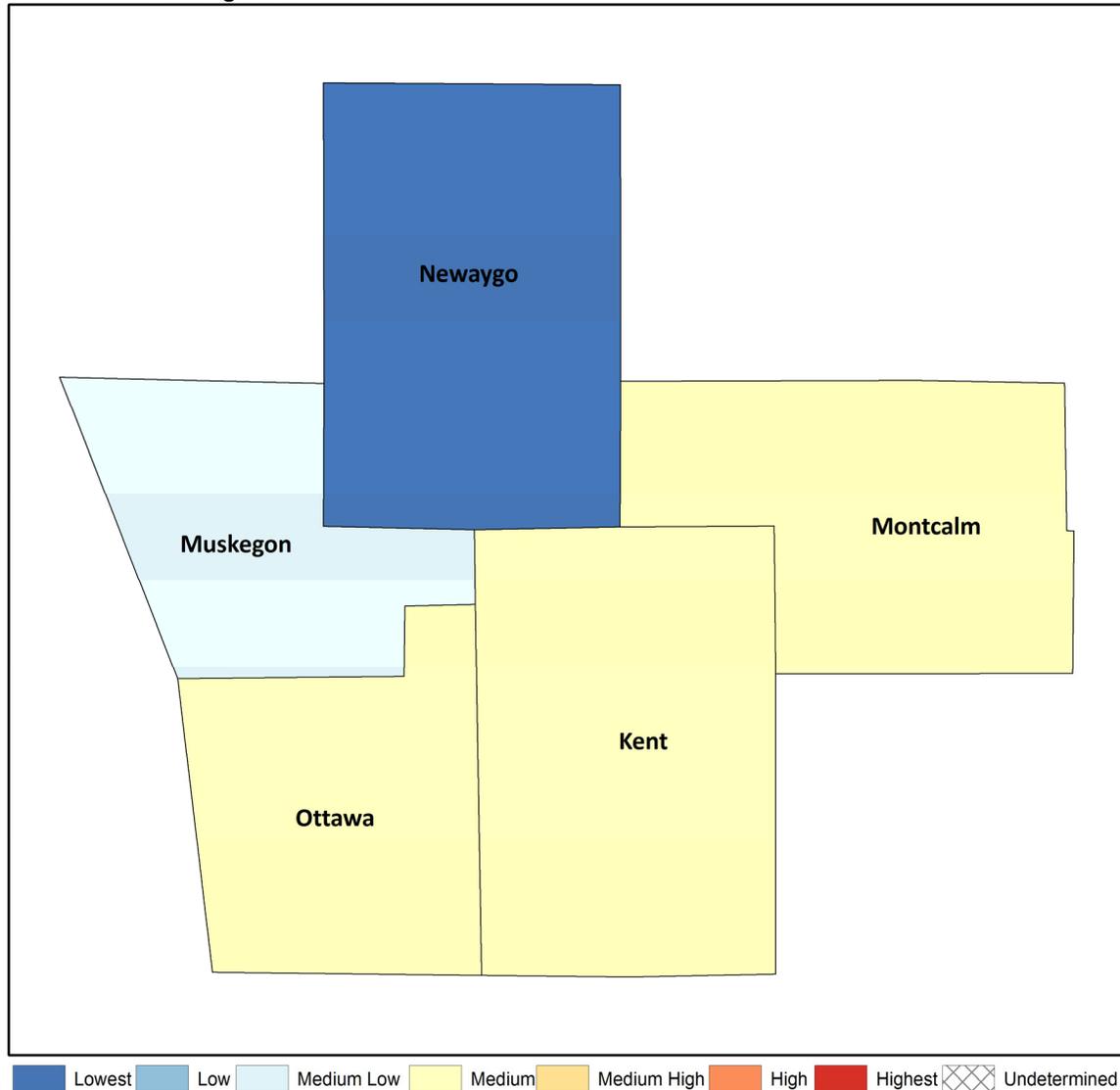


Figure 2.3. Intervention priorities, West Michigan

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

High priority areas

Mid-Michigan

One county in the Mid-Michigan service area is in the high priority category. Livingston County is not likely to meet the late-stage incidence rate HP2020 target.

Medium high priority areas

Mid-Michigan

Two counties in the Mid-Michigan service area are in the medium high priority category. One of the two, Ingham County is not likely to meet the death rate HP2020 target. One of the two, Eaton County is not likely to meet the late-stage incidence rate HP2020 target.

The incidence rates in Ingham County (132.3 per 100,000) are significantly higher than the Mid-Michigan service area as a whole (118.6 per 100,000). Incidence trends in Eaton County (6.8 percent per year) are significantly less favorable than the Mid-Michigan service area as a whole (-0.9 percent per year). Late-stage incidence trends in Eaton County (21.3 percent per year) are significantly less favorable than the Mid-Michigan service area as a whole (-0.9 percent per year).

Ingham County has high poverty levels.

Southwest Michigan

One county in the Southwest Michigan service area is in the medium high priority category. Kalamazoo County is not likely to meet the death rate HP2020 target.

The incidence rates in Kalamazoo County (131.9 per 100,000) are significantly higher than the Southwest Michigan service area as a whole (115.2 per 100,000).

Medium priority areas

West Michigan

Three counties in the West Michigan service area are in the medium priority category. One of the three, Montcalm County is not likely to meet the death rate HP2020 target. The other two, Kent County and Ottawa County, are not likely to meet the late-stage incidence rate HP2020 target. Montcalm County has high unemployment.

Southwest Michigan

Two counties in the Southwest Michigan service area are in the medium priority category. Both of the two, Branch County and Calhoun County, are not likely to meet the death rate HP2020 target.

Additional Quantitative Data Exploration

Additional data were needed to examine the breast health needs of certain sub-populations. In particular, the Komen Michigan service area has a sizable migrant and Hispanic/Latino population, and larger urban centers have a high density of Blacks/African-Americans.

Community health indicators also include social determinants of health (See World Health Organization, 2008). Employment and earning a living wage are important indicators to review in assessing the needs of populations. Low income individuals are less likely to have health insurance. (American Communities Survey, 2010). Those people living in poverty and without health insurance are less likely to receive annual screening (ACS, 2010).

Both Hispanic/Latino and Black/African-American communities in Michigan disproportionately suffer from poverty and unemployment. In order to better understand the socioeconomic disparities in each county, information from the American Communities Survey conducted by the US Census Bureau was reviewed. This sub-population county level data will enhance the socioeconomic data provided in QDR Table 2.8 and 2.9.

Mid-Michigan Additional Data

Table 2.8. The American Communities Survey conducted by the US Census: Selected socioeconomic data by race/ethnicity in the Komen Mid-Michigan service area

County	Race/Ethnicity	% Concentration*	% Unemployed	% Families Below Poverty
Clinton	White	93.7%	7.6%	11.1%
	Black/African-American	1.5%	9%	NA
	Hispanic/Latino	4.2%	10.1%	9.4%
Shiawassee	White	96.9%	12.5%	15.2%
	Black/African-American	0.6%	1.3%	NA
	Hispanic/Latino	2.6%	17.8%	23.5%
Eaton	White	88%	9.9%	10%
	Black/African-American	6.4%	13.1%	23.9%
	Hispanic/Latino	5.1%	20.8%	21%
Ingham	White	76.4%	9.2%	20.4%
	Black/African-American	11%	20.9%	34.4%
	Hispanic/Latino	7.5%	15.2%	34.9%
Livingston	White	96.6%	8.7%	5.8%
	Black/African-American	0.4%	2.5%	NA
	Hispanic/Latino	2.1%	6.3%	11.7%
Jackson	White	87.7%	11.6%	15.9%
	Black/African-American	8.5%	25.3%	46.6%
	Hispanic/Latino	3.2%	15.4%	38%
Washtenaw	White	78%	7.9%	12.7%
	Black/African-American	14.2%	17.7%	30.5%
	Hispanic/Latino	4.3%	10.1%	29.3%

Source: American Communities Survey (2010), US Census Bureau.

*Source: QDR Table 4 estimating women in the population in 2011 based on US Census estimates.

Note: Hispanic/Latino includes mixed race individuals so percentages will not total 100 percent.

The largest concentration of Hispanic/Latinos in the Mid-Michigan service area live in Ingham County (7.5 percent) (Table 2.8). Jackson County has a smaller Hispanic/Latino population, but it is impacted by troubling socioeconomic factors. The American Communities Survey performed by the US Census reveals 34.9 percent of Hispanic/Latinos in Ingham County and 38.0 percent in Jackson County live on incomes below 100.0 percent of the Federal Poverty Level (Table 2.8). Hispanic/Latinos in Ingham and Jackson Counties had unemployment percentages of 15.2 percent and 15.4 percent respectively (Table 2.8).

The largest concentration of Blacks/African-Americans in the Mid-Michigan service area is in Ingham (11.0 percent), Jackson (8.5 percent), and Washtenaw (14.2 percent) Counties (Table 2.8). The ACS data reveals that 34.4 percent of Blacks/African-Americans in Ingham County, 46.6 percent of Blacks/African-Americans in Jackson County, and 30.5 percent of Blacks/African-Americans in Washtenaw County live on incomes below 100.0 percent of the

Federal Poverty Level (Table 2.8). Blacks/African-Americans in Ingham, Jackson, and Washtenaw Counties had unemployment percentages of 20.9 percent, 25.3 percent, and 17.7 percent respectively (Table 2.8).

A review of Komen Mid-Michigan’s demographics, socioeconomic data, and geography suggested that there could be specific cities and townships that may have different breast cancer data than the county as a whole, and perhaps, due to the diversity of the area, county level data did not reveal significant trends within areas deemed otherwise low-priority. Examining zip code level data should be considered in future studies.

Southwest Michigan Additional Data

Table 2.9. The American Communities Survey conducted by the US Census: Selected socioeconomic data by race/ethnicity in the Komen Southwest Michigan service area

County	Race/ Ethnicity	% Concentration*	% Unemployed	% Families Below Poverty
Allegan	White	90.0%	8.1%	8.0%
	Black/African-American	1.8%	4.0%	27.7%
	Hispanic/Latino	6.5%	16.7%	21.9%
Berrien	White	76.1%	8.4%	6.7%
	Black/African-American	17.0%	22.3%	38.3%
	Hispanic/Latino	4.3%	11.0%	36.6%
Branch	White	94.7%	11.1%	12.0%
	Black/African-American	0.9%	11.3%	27.6%
	Hispanic/Latino	4.0%	21.8%	34.1%
Calhoun	White	80.7%	12.7%	9.9%
	Black/African-American	12.2%	22.8%	30.9%
	Hispanic/Latino	4.4%	19.7%	24.7%
Cass	White	88.6%	9.1%	9.6%
	Black/African-American	6.4%	13.4%	24.1%
	Hispanic/Latino	2.8%	11.8%	26.4%
Kalamazoo	White	80.3%	9.5%	8.2%
	Black/African-American	12.4%	21.1%	31.8%
	Hispanic/Latino	4.0%	19.3%	28.0%
St. Joseph	White	88.7%	13.8%	10.3%
	Black/African-American	3.4%	8.9%	14.6%
	Hispanic/Latino	6.3%	38.6%	40.7%
Van Buren	White	82.7%	10.0%	11.1%
	Black/African-American	5.2%	14.3%	20.2%
	Hispanic/Latino	9.9%	16.6%	23.5%

Source: American Communities Survey (2010), US Census Bureau.

*Source: QDR Table 4 estimating women in the population in 2011 based on US Census estimates.

Note: Hispanic/Latino includes mixed race individuals so percentages will not total 100 percent.

Within Southwest Michigan, the counties with the largest proportion of Hispanic/Latinos are Van Buren (9.9 percent), Allegan (6.5 percent) and St. Joseph (6.3 percent) (Table 2.9). St. Joseph County stands out as having the highest percentage of both unemployment and poverty among Hispanic/Latinos in the region, 38.6 percent and 40.7 percent, respectively (Table 2.9). Following St. Joseph County are Branch (21.8 percent unemployment and 34.1 percent poverty), Kalamazoo (19.3 percent unemployment and 28.0 percent poverty), and Calhoun County (19.7 percent unemployment and 24.7 percent poverty) (Table 15).

Within Southwest Michigan, the counties with the largest proportion of Blacks/African-Americans are Berrien (17.0 percent), Kalamazoo (12.4 percent) and Calhoun (12.2 percent) (Table 2.9). The counties with the highest unemployment among Blacks/African-Americans are Calhoun (22.8 percent), Berrien (22.3 percent), and Kalamazoo (21.1 percent) (Table 2.9). The counties with the highest poverty among Blacks/African-Americans are Berrien (38.3 percent), Kalamazoo (31.8 percent), and Calhoun (30.9 percent) (Table 2.9). Within the counties of Southwest Michigan, Berrien, Calhoun and Kalamazoo Counties stand out as having the highest percentage of both unemployment and poverty among Blacks/African-Americans in the region.

West Michigan Additional Data

Table 2.10. The American Communities Survey conducted by the US Census: Selected socioeconomic data by race/ethnicity in the Komen West Michigan service area

County	Race/Ethnicity	% Concentration*	% Unemployed	% Families Below Poverty
Kent	White	84.9%	8.2%	7.3%
	Black/African-American	11.4%	19.9%	34.5%
	Hispanic/Latino	9.5%	13.7%	31.5%
Montcalm	White	97.9%	14.8%	15.3%
	Black/African-American	0.8%	31.2%	9.1%
	Hispanic/Latino	3.0%	12.1%	21.7%
Muskegon	White	82.6%	13.3%	10.1%
	Black/African-American	15.4%	31.1%	37.4%
	Hispanic/Latino	4.8%	15.7%	22.4%
Newaygo	White	96.8%	13.1%	12.8%
	Black/African-American	1.5%	13.2%	16.1%
	Hispanic/Latino	5.3%	9.4%	41.3%
Ottawa	White	94.2%	7.1%	4.4%
	Black/African-American	2.1%	15.4%	14.5%
	Hispanic/Latino	8.4%	13.3%	18.9%

Source: American Communities Survey (2010), US Census Bureau.

*Source: QDR Table 4 estimating women in the population in 2011 based on US Census estimates.

Note Hispanic/Latino includes mixed race individuals so percentages will not total 100 percent.

The West Michigan service area has a sizable migrant farmworker and Hispanic/Latino population and its urban centers have a high density of Black/African-American individuals.

The largest concentration of Hispanic/Latinos in the West Michigan service area live in Kent and Ottawa Counties (Table 2.10). The American Communities Survey performed by the US Census reveals 31.5 percent of Hispanic/Latinos in Kent County and 18.9 percent in Ottawa County live on incomes below 100.0 percent of the Federal Poverty Level (Table 2.10). Poverty levels for Hispanic/Latinos in the other three counties were also disproportionately high. Hispanic/Latinos in Kent and Ottawa Counties had unemployment percentages of 13.7 percent and 13.3 percent respectively (Table 2.10).

The largest concentration of Blacks/African-Americans in the West Michigan service area is in Kent and Muskegon Counties (Table 2.10). The ACS data reveals that 34.4 percent of Blacks/African-Americans in Kent County and 37.4 percent in Muskegon County live on incomes below 100.0 percent of the Federal Poverty Level (Table 2.10). Blacks/African-Americans in Kent and Muskegon Counties had unemployment percentages of 19.6 percent and 31.2 percent respectively (Table 2.10).

Selection of Target Communities

Susan G. Komen Michigan has identified three populations of interest within the service area, each with three representative communities of interest. Communities of interest include:

Blacks/African-Americans

- Berrien County
- Jackson County
- Muskegon County

Hispanic/Latinos

- Kent County
- Ottawa County
- Van Buren County

Rural Populations

- Cass County
- Livingston County
- Montcalm County

The communities selected have been chosen based on the escalated need that certain populations face in accessing crucial breast screening services. Populations identified for the purpose of this study include: Black/African-American, Hispanic/Latino, and Rural populations. To further inform the assessment, locations where these populations are concentrated have been identified. Black/African-American communities of interest are in Muskegon, Berrien, and Jackson Counties. Hispanic/Latino communities of interest lie within Ottawa and Van Buren

Counties. Rural communities of interest are located within the counties of Montcalm, Cass, and Livingston.

Additional key indicators the Affiliate reviewed when selecting target communities included, but were not limited to:

- Incidence rates and trends
- Death rates and trends
- Late-stage rates and trends
- Below average screening proportions
- Population demographics by race and gender
- Residents living below poverty level
- Residents living without health insurance
- Unemployment percentages
- Residents who are linguistically isolated and/or foreign born

When selecting target communities, the Affiliate reviewed the above referenced data as well as Healthy People 2020 (HP2020), a federal initiative that provides specific health objectives for communities and the US as a whole. The Affiliate also considered information presented in an assessment provided and produced by the Michigan Public Health Institute in August 2013 specific to zip code level data for the Mid-Michigan service area, as well as county-level community health needs assessments. Specific to the goals of Komen Michigan, the Affiliate considered the time needed to meet the HP2020 objectives for reducing women’s death rate from breast cancer and late-stage diagnosis rates.

Black/African-American Populations in Berrien, Jackson, and Muskegon Counties

Berrien, Jackson, and Muskegon Counties are home to the largest concentrations of Black/African-American populations in the Komen Michigan service area. A review of socioeconomic and breast cancer burden data demonstrates that Black/African-Americans in these counties are a population in need. This target population has been chosen because of high rates of poverty, unemployment, breast cancer deaths, and late-stage diagnoses.

Geographic location within the State of Michigan or even within a certain zip code can impact a woman’s chances of survival. In a study by Akinyemiju and colleagues, it was found that “between 1992 and 2009, 3,684 Black/African-American patients and 20,241 White patients died of breast cancer in Michigan [...] Among Black/African-American patients, median age-adjusted breast cancer death rate increased as zip-code level [socio-economic status] increased. As zip-code level HCA [health care access] increased, median age-adjusted death rate increased for Black/African-American patients.” (2013, pg. 4). This means that as location in proximity to health services in more affluent areas increases, the survival of Black/African-American women diagnosed with breast cancer increases. In a study conducted by Amirikia and colleagues, one factor that contributes to a higher proportion of Black/African-American women dying of breast cancer or presenting with later-stage cancer is the ever-changing guidelines surrounding breast screening. “Recent challenges to the traditional recommendations that American women initiate annual screening mammography at age 40 years have the potential for exerting a disproportionately adverse effect on Black/African-

American women because of the well documented younger age distribution for breast cancer in this population” (Amirikia et al, 2011, pg. 2750). This study also found that young Black/African-American women were more likely to have triple-negative breast cancer than any other population group and as guidelines favor screening at an older age, younger women become more likely to present with later stages of cancer.

Social disparities lead to health disparities, and Blacks/African-Americans across the Komen Michigan service area disproportionately experience high levels of poverty and unemployment. Blacks/African-Americans in Berrien County are almost three times as likely as Whites to be unemployed (22.3 percent vs. 8.4 percent), and nearly six times (38.3 percent vs. 6.7 percent) more likely to live below 100.0 percent of the Federal Poverty Level than their White counterparts (Table 2.9). Blacks/African-Americans in Jackson County experience 25.3 percent unemployment and 46.6 percent live on incomes less than 100.0 percent of the Federal Poverty level (Table 2.8). Blacks/African-Americans in Muskegon County experience 31.2 percent unemployment and 37.4 percent live on incomes less than 100.0 percent of the Federal Poverty Level (Table 2.10).

In addition to social determinants of health, indicators of the cancer burden in the Black/African-American population demonstrate a population in need. In the Mid-Michigan service area Black/African-Americans have the highest death rate (34.3 per 100,000) and the highest late-stage diagnosis rate (43.3 per 100,000) (Table 2.1). In the West Michigan service area, Blacks/African-Americans have the highest death rate (32.2 per 100,000) and the highest late-stage diagnosis rate (41.1 per 100,000) (Table 2.3). In the Southwest service area, Black/African-Americans have the highest breast cancer death rate (35.8 per 100,000 women) (Table 2.2). Additionally, while late-stage rates are trending downward, Blacks/African-Americans still have the highest rate of late-stage diagnosis (52.3 per 100,000 women) in the Southwest Michigan service area (Table 2.2).

The health system analysis portion of the Community Profile will examine the breast health resources available to Black/African-American women in Berrien, Jackson, and Muskegon Counties throughout the continuum of care. Further study will provide a better understanding of the cancer burden for Black/African-American women across the Affiliate service areas.

Hispanic/Latinos and Migrant Farmworkers in Kent, Ottawa and Van Buren Counties

The Komen Southwest and West Michigan service areas have a higher percentage of Hispanic/Latinos (5.0 percent and 8.0 percent respectively) than Michigan as a whole (4.4 percent) (Tables 2.2 and 2.3). Van Buren (9.9 percent), Kent (9.5 percent), Ottawa (8.4 percent), Allegan (6.5 percent), and St. Joseph (6.3 percent) Counties in particular, have high Hispanic/Latino populations (Tables 2.9 and 2.10). Hispanic/Latinos in the Komen Michigan service area disproportionately suffer from poverty and low employment rates (Tables 2.8, 2.9 and 2.10). These social determinants of health create barriers to accessing breast health care (Raphael, 2004). Within the Hispanic/Latino population, those who work as migrant farmworkers have also been identified as a population in need.

Hispanic/Latinos and migrant farmworkers were chosen as a target population because of high rates of poverty, unemployment percentages, increased incidence of isolation and transience of migrant farmworkers. Though these influencing factors ripple through the Hispanic/Latino community, this smaller population is often difficult to study quantitatively as incidence/mortality rates are often suppressed or limited due to sample size.

In Southwest Michigan, 10.0 percent of Van Buren County's population is Hispanic/Latino (Bronson Hospital, 2013, pg. 11) with 20.0 percent of Van Buren's residents living in poverty (Bronson Hospital, 2013, pg. 18). A 2012 study by Hill and Brooks found this community to be impoverished, having higher than state average of Medicaid-funded births and free lunch service to students, which are viewed as social indicators of community health. While cancer diagnosis rate is much lower in general, death rate is much higher (pg. 124). This is likely due to costs as a 2013 Bronson Hospital survey indicated that 16.5 percent of residents reported not accessing health care options because they couldn't afford services (pg. 77). In the same report, 51.0 percent of women over the age of 40 in Van Buren County have reported having a breast exam and/or mammogram in the previous year (Bronson Hospital, 2013, pg. 21). Bronson Hospital identified improving access in Van Buren County as a top priority, which relies on "such factors as affordability, physical accessibility, acceptability of services, availability of hours, and coordination of care" (2013, pg. 4). The largest concentration of Hispanic/Latinos in the Southwest Michigan service area lives in Van Buren County (Table 2.9). The American Communities Survey performed by the US Census reveals 23.5 percent of Hispanic/Latinos in Ottawa County live on incomes below 100.0 percent of the Federal Poverty Level (ACS, 2010). Hispanic/Latinos in Van Buren County suffer unemployment percentages of 16.6 percent (ACS, 2010). Van Buren County also has one of the lowest screening percentages in the whole Affiliate area at 59.4 percent (Table 2.6).

In West Michigan, the largest concentration of Hispanic/Latinos lives in Kent and Ottawa Counties (Tables 2.8 and 2.10). The American Communities Survey performed by the US Census reveals 18.9 percent of Hispanics/Latinos in Ottawa County live on incomes below 100.0 percent of the Federal Poverty Level (ACS, 2010). Hispanic/Latinos in Ottawa County had an unemployment percentage of 13.3 percent (ACS, 2010). Ottawa County also has one of the highest incidence rates (125.9 per 100,000) (Table 2.3). 31.5 percent of Hispanics/Latinos in Kent County live on incomes below 100 percent of the Federal Poverty Level (ACS, 2010). Hispanic/Latinos in Kent County had unemployment percentages of 13.7 percent (ACS, 2010). Kent County has similar themes to those in Van Buren. According to a community health needs assessment performed in 2014, priority health issues in Kent County have been identified as: mental health, obesity, substance abuse, poor nutrition, and violence/safety (Chmelar and Birkelbach, pg. 4). There is also a deep division among racial and ethnic groups in this area. In their Health Needs Assessment of Kent County, Chmelar and Birkelbach performed a dissimilarity index, a ranking of 0 to 100 with 0 being complete integration of populations. They found that dissimilarity is highest between Blacks/African-Americans and Whites (71.9) and Whites and Hispanics/Latinos (55.2) (2014, pg. 95). This only escalates distrust in systems (including health care) and stimulates racial tension rather than promoting understanding among groups.

In addition to Hispanic/Latino residents, a large migrant farmworker population resides in Michigan during the harvest months. The Southwest and West Michigan service areas are home to the “Fruit Ridge” where much of the nation’s fruit is produced. As a result, there is a large migrant population that relocates to the Southwest and West Michigan region during the harvest months. Because of the transient and linguistically isolated nature of this population, migrant farmworkers are an underserved medical population.

To better understand the migrant farmworker population, the 2013 Michigan Update Migrant and Seasonal Farmworker Enumeration Profile Study was reviewed (State of Michigan, 2013). Notably, this study only included registered migrant farmworkers, and while registration with the state is increasing, not all workers are properly registered. There were 49,135 migrant farmworkers registered in Michigan at the peak of harvest season with an additional 43,832 non-worker household members joining them (State of Michigan, 2013). Ottawa and Van Buren Counties have some of the highest populations of migrant farmworkers with an estimated 13,345 and 12,527 farmworkers and non-worker household members at the peak of harvest respectively (State of Michigan, 2013). Kent also has a large number of migrant farmworkers with a peak estimate of 4,953 farmworkers and household members (State of Michigan, 2013). This population is of concern because “migrant women over the age of 35 were less likely to have ever received a mammogram (55.4 percent) compared with the general population (84.8 percent). Of women 18 and older, migrant women (61.3 percent) were also much less likely to have ever received a clinical breast exam” (Millard, 2002, pg. 8). The women surveyed for the Millard study were those who were registered with the state as migrant farmworkers, likely having less fear/distrust of the systems they worked within.

In addition to the registered migrant farmworkers, there are many who go unregistered. As a result, legal status may pose a barrier to accessing care. A 2007-2009 National Agricultural Workers Survey indicated that 48.0 percent of farmworkers do not have legal authorization to work in the U.S. (National Center for Farmworker Health, 2013). Changes in the legal landscape of the US has resulted in fewer visas being issued. Prior to the H2 visa program’s implementation from 1942 to 1964, the Bracero Program granted over four million visas to guest workers. In 2010, the U.S. Department of State granted 55,921 H2A visas for agricultural workers. (NCFH, 2013). Without legal authorization, accessing breast health resources can be difficult. Furthermore, many migrant farmworkers are linguistically isolated. Seventy-two percent of farmworkers are foreign-born with 68.0 percent coming from Mexico. Of those surveyed, 35.0 percent reported they could not speak English at all. (National Center for Farmworker Health, 2013).

Data is often limited or suppressed when examining the breast cancer burden for Hispanic/Latinos, and little data is available specifically regarding migrant farmworkers. Due to small sample sizes, data has been suppressed for Hispanic/Latino screening percentages (Table 2.4, 2.5, 2.6) and death rates (Table 2.1, 2.2, 2.3). While the incidence rate for Hispanic/Latinos is reported in Southwest and West Michigan as decreasing, that trend is based on a very small number of cases, just larger than the amount that would have resulted in the data being suppressed for small numbers (Tables 2.2 and 2.3). Small numbers noted for Hispanic/Latinos, which tend to yield wide-spread confidence intervals, is a limitation of the data

in Tables 2.1, 2.2, and 2.3. Further study into these indicators revealed that, across the board, cancer incidence and death rate data for Hispanic/Latinos is limited and data specific to migrant workers is sparse. Better-designed studies are needed to better understand the breast cancer burden in the Hispanic/Latino and migrant population. The lack of data, data suppression, and data limitation are troubling and may indicate a population isolated from local health officials and health systems, and in need of further assessment.

As a result of the limitation of the data available, further exploration is needed to better understand the breast health gaps in the Hispanic/Latino and migrant farmworker population in Kent, Ottawa, and Van Buren Counties. The Health Systems Analysis will provide an opportunity to review the health systems that are serving the Hispanic/Latino population as well as the service providers who are working with the migrant farmworkers in Kent, Ottawa, and Van Buren Counties. Connecting with service providers for these communities will provide a better understanding of the breast cancer burden, as well as the unique language and cultural issues surrounding the provision of breast health to Hispanic/Latinos and migrant farmworkers in Kent, Ottawa and Van Buren Counties.

Rural Populations in Livingston, Montcalm, and Cass Counties

Rural populations in Livingston, Montcalm, and Cass Counties were chosen as communities of interest due to breast health indicators and socioeconomic factors. The health system analysis will explore how transportation and health care factors may play a role in the health outcomes of the population in these rural areas.

Livingston County is a rural area that includes two towns of Howell and Brighton. Livingston County is reported as needing 11 years to achieve the HP2020 target for female breast cancer death rates and 13 years to achieve the HP2020 target for female breast cancer late-stage incidence rates (Table 2.1). Livingston also had higher proportions of late-stage diagnoses compared to the service area as a whole (Table 2.1). According to a community health needs assessment performed by St. Joseph Mercy Livingston Hospital, Obesity is a number one health concern in Livingston County with 44.0 percent of residents identifying as overweight and an additional 20.0 percent identifying as obese (St. Joseph Mercy Livingston Hospital, 2012, pg. 9). Coupled with an unemployment percentage of 7.0 percent, the social indicators of health for Livingston County are poor though the average household income is over \$70,000.

Montcalm County, the northernmost county in Komen Michigan's footprint, "has a lower proportion of adult residents receiving mammograms [...] for the recommended age groups considered to be at higher risk" (Healthy Montcalm Initiative, 2011, pg. 7). More than 20.0 percent of adult Montcalm residents are without health insurance and "16.7 percent of Montcalm County adults reported that they delayed seeking health care [...] primarily due to cost" (Healthy Montcalm Initiative, 2011, pg. 5). Montcalm was chosen as a county of interest not only for its rural population, but also for its rising incidence of breast cancer related deaths (Table 2.3). While being identified as only a "medium" priority (Table 2.7), Montcalm is the only county in the West Michigan service area with an average increase in annual deaths (1.9 percent, Table 2.3). Examining health care systems and access to care could greatly benefit this population.

In the Southwest Michigan service area, Cass County was selected as a community of interest not only for its rural population but also due to its designation as an area that is medically underserved (Table 2.7). Identified as an area of "Medium-Low" priority, Cass County is predicted to take 10 years to meet the death rate target set by Healthy People 2020 (Table 2.7). The county is made up of "about 60.0 percent [...] farm land, ranking it 15th out of Michigan's 83 counties" (Borgess-Lee Memorial Hospital, 2013, pg. 1). Poor indicators of health including a 10.7 percent diabetes rate and an incredibly high patient to physician rate of 8401:1, compared to the state rate of 1,119:1" make the county a community of interest for this study. (Borgess-Lee Memorial Hospital, 2013, pg. 4).

Although these services areas have several metropolitan areas where services are likely to be readily available, the qualitative analysis will provide an in-depth look at barriers to accessing such services, including but not limited to cost, transportation, and cultural barriers related to linguistic isolation.

Conclusions

The aforementioned populations and areas were chosen in an effort to examine disparities in health care services, specifically in accessing these services. The Health Systems Analysis will be utilized to address the question of access while also painting a picture of the gaps needing to be filled when it comes to serving the vulnerable Black/African-American, Hispanic/Latino, and Rural populations and their specific needs.

Health Systems and Public Policy Analysis

Health Systems Analysis Data Sources

Susan G. Komen Michigan conducted an assessment to identify breast health services located in the target communities of Hispanic/Latinos (Ottawa, Kent, and Van Buren Counties); Black/African-Americans (Jackson, Muskegon, and Berrien Counties), and Rural individuals (Montcalm, Livingston, Cass Counties). Using online search portals that provided detailed information on community health centers, free clinics, hospitals, accredited breast care centers and local health departments, the Affiliate performed an online search to identify FDA approved mammography centers, and certifications of excellence through the American College of Radiology Breast Imaging Centers of Excellence. Further, Michigan Breast and Cervical Cancer Control Program (BCCCNP) information was reviewed and the Kent County BCCCNP service coordinator provided information in an interview.

The findings from this exhaustive search were compiled in an excel spreadsheet, organized by target community. Using the diagram of the Continuum of Care (CoC), Komen Michigan then reviewed the findings for each target community in terms of potential gaps in services, and other barriers to access.

Health Systems Overview

The Breast Cancer Continuum of Care (CoC) is a model that summarizes how a woman typically moves through the health care system for breast care (Figure 3.1). A woman would ideally move through the CoC quickly and seamlessly, receiving timely, quality care in order to achieve the best outcomes. Throughout the entire CoC, education plays an important role.

While a woman may enter the continuum at any point, entrance into the CoC is initiated by breast cancer screening, either with a clinical breast exam or a screening mammogram. If the screening test results are normal, she would loop back to follow-up care, where she would get another screening exam at the recommended interval. Breast health education encourages timely and routine screening. Screening and education also includes assessing an individual's risk, providing an opportunity for doctor and patient to discuss risk factors, how risk factors work together, reduction of risk factors, and which screening options are best for the individual woman.

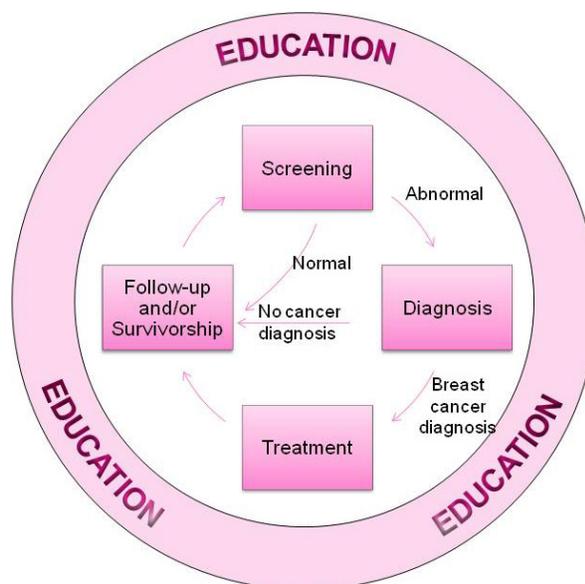


Figure 3.1. Breast Cancer Continuum of Care (CoC)

If a screening exam resulted in abnormal results, diagnostic testing follows to determine the nature of the abnormality, which can include diagnostic mammogram, breast ultrasound, or biopsy. If the tests were negative for breast cancer (or benign), she would go to follow-up and return for screening at the recommended interval based on her individual risk factors. Education plays a role in communicating the importance of diagnostic testing for abnormalities, keeping follow-up appointments and understanding what it all means. Education can empower a woman and help manage anxiety and fear.

If diagnostics determine the cells are malignant, a breast cancer is diagnosed and the woman would proceed to treatment. Treatment can include chemotherapy, radiation, surgery, and other individual treatments. Education provides the patient with an understanding of treatment options, side effects, and questions to ask providers so she can make the best decision for herself.

Treatment can last weeks, months, years, or a lifetime depending on the individual patient. While the CoC model shows that follow-up and survivorship occur at different intervals, they can be concurrent. Follow-up and survivorship may include: navigating insurance issues, locating financial assistance, and symptom management issues such as pain, fatigue, sexual issues, bone health, etc. Education may address topics including making healthy lifestyle choices, long term effects of treatment, managing side effects, the importance of follow-up appointments, communicating with providers, and appropriate screening intervals.

Delays in the continuum often lead to poorer outcomes. Additionally, women may fall out of the continuum of care when they cannot access the care they need. Barriers can include lack of transportation, language barriers, fear, lack of information or misconceptions, as well as systemic issues--long waits for appointments and inconvenient clinic hours. Education, supportive services, and navigation can help reduce barriers and assist a woman in her progression through the Continuum of Care.

Continuum of Care in Michigan Populations in Need

The populations in need in Michigan face distinct and unique barriers depending upon the resources in each area. Though Komen Michigan is one merged entity, each community has its own character in its provision of breast health services to Women of Color as well as those who dwell in underserved rural areas. As such, Komen Michigan pays attention to the Black/African-American, Hispanic/Latino, and rural populations as being similar in their need for service, but differently-served by virtue of their geographic location. To understand these regional differences, the Affiliate elected to examine counties in each of the service areas where the target populations have larger concentrations in combination with poor health indicators.

Resources and access are two major concerns faced by Komen Michigan's three target populations. The Mid-Michigan service area, for example, has providers and community centers to meet the majority of the needs required to move through the CoC. The HSA, however, revealed gaps in care which could prevent women from receiving initial screenings or moving through the CoC in a time-appropriate manner in Mid-Michigan.

The Mid-Michigan service area is comprised of several urban areas with universities surrounded by both suburban and rural areas. According to data provided to the Affiliate by the Michigan Public Health Institute, there is only one rural clinic serving the population of Mid-Michigan. However, the Health System Analysis revealed four mobile mammography units. Regardless, most residents must travel to urban areas, such as Lansing, Owosso, or Ann Arbor to receive care. Furthermore, it emphasizes the need to increase knowledge and engage in evidence-based persuasive appeals to increase the likelihood a woman will travel for a clinical breast exam or screening mammography or minimize the barriers to receiving service close to home. Transportation to receive services is a common concern among underserved women as a whole. If patients do not have the means to travel, the Affiliate, providers, and health departments should focus on increasing access in rural areas to reduce barriers for women.

The Southwest service area, similarly, has unique challenges for outlying communities, such as Berrien County—located in the left-southernmost corner of Michigan. Screening and diagnostics are provided at three Lakeland Health Center locations. Further services can be accessed at the Lakeland Health Marie Yeager Cancer Center located in the city of St. Joseph. Patients of this center can receive navigation through the entire continuum of care, including access to survivorship programs such as the Chemosabies support group. While these offerings are robust, the location—along the lakeshore of Lake Michigan—may be difficult to access for women lacking transportation or financial resources. In Van Buren County, offerings are similarly limited. Bronson Lakeview Hospital, located in the city of Paw Paw, is the sole provider of cancer care—including mammography and surgery. Patients requiring chemotherapy must travel to providers in neighboring counties.

In West Michigan, resources are clustered in and around the urban centers. Kent County in particular has the “Medical Mile” in Grand Rapids. Grand Rapids metro area is home to three hospitals – Mercy Health St. Mary’s, Spectrum Health , and Metro Health – and one rehabilitation center, Mary Free Bed. Spectrum’s Lemmon-Holton Cancer Pavillion and St. Mary’s Lacks Cancer Center provide comprehensive cancer services including navigation. Similarly, in partnership with University of Michigan, Metro Health also offers comprehensive cancer care. In Ottawa County, Spectrum Heath Zeeland Hospital in Zeeland provides local screening, diagnostic services and Holland Hospital in Holland provides comprehensive cancer care. In Muskegon County, Mercy Health Muskegon’s campuses provide screening and diagnostics with the Main Campus being the sole provider of treatment services. Rural counties of Montcalm and Newaygo have few local screening and diagnostic resources and treatment often requires travel. Outlying areas away from these urban centers have limited access to the existing resources with little to no resources existing beyond those which provide CBE’s, impacting how populations in need experience the CoC.

Blacks/African-Americans in Berrien, Jackson, and Muskegon Counties

Berrien County has just a few breast health service providers (Figure 3.2). Those who qualify for BCCNP services can get a clinical breast exam at one of the three Berrien County clinics in the cities of Benton Harbor, Niles, and Three Oaks, but must travel to Lakeland hospital’s satellite locations in St. Joseph, Watervliet, or Niles for screening mammography, diagnostics,

and treatment. Berrien County Cancer Services helps local residents with patient navigation and home visits for those that qualify. They also refer for survivor support services.

The Department of Health and Human Services, Health Resources and Services Administration (HRSA) designated parts of Jackson County as medically underserved. The county has a higher percentile of the population living in poverty compared to both the Michigan and the Affiliate's service area averages. Within Jackson County, there are four screening resources—through Columbia Medical Center or the Allegiance Health System. There are two diagnostic resources and one treatment resource in Jackson County, provided through Allegiance Health system. Additionally, there are two resources for survivorship support—through Columbia and Allegiance. The area has a number of screening services supplied, including a mobile mammography unit, but resources become scarcer as patients move through the CoC. In any low-income population, access to transportation is an issue. This service area has two distinct mobile health units to meet the screening need, but follow up care can require multiple visits to brick and mortar facilities. Qualitative data collection will explore where Komen can fill the gaps in care for this underserved population.

In Muskegon County, Blacks/African-Americans have access to Clinical Breast Exams (CBEs) through several community health centers. Within Muskegon County, there are four screening mammography resources—through Mercy Health System and Radiology Muskegon, three diagnostic resources—through Mercy Health, one resource for receiving treatment—through Mercy Health, and three resources for survivorship support. Three of Mercy Health's campuses offer mammography in Muskegon County including Mercy Campus, Hackley Campus, and Lakes Village. A private radiology center in Muskegon (Radiology Muskegon) also provides mammograms, but the majority of populations in need access mammograms within the Mercy Health system. No mobile mammography units are stationed in Muskegon County to serve populations away from the urban centers. The network of BCCCNP providers in Muskegon offer some educational opportunities, but there is room for more opportunities to encourage screening.

While it is obvious that breast health resources exist within the counties serving the Black/African-American populations of interest, there are few resources for those needing diagnostic mammography and even fewer resources for those needing treatment for breast cancer. As explored in the quantitative data analysis, Black/African-American women are diagnosed with breast cancer at more advanced stages and are more likely to die from the disease than White women. This disparity in timely progression through the CoC will be an area to examine in the qualitative data collection and analysis.

Blacks/African Americans in Jackson, Muskegon and Berrien Counties

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

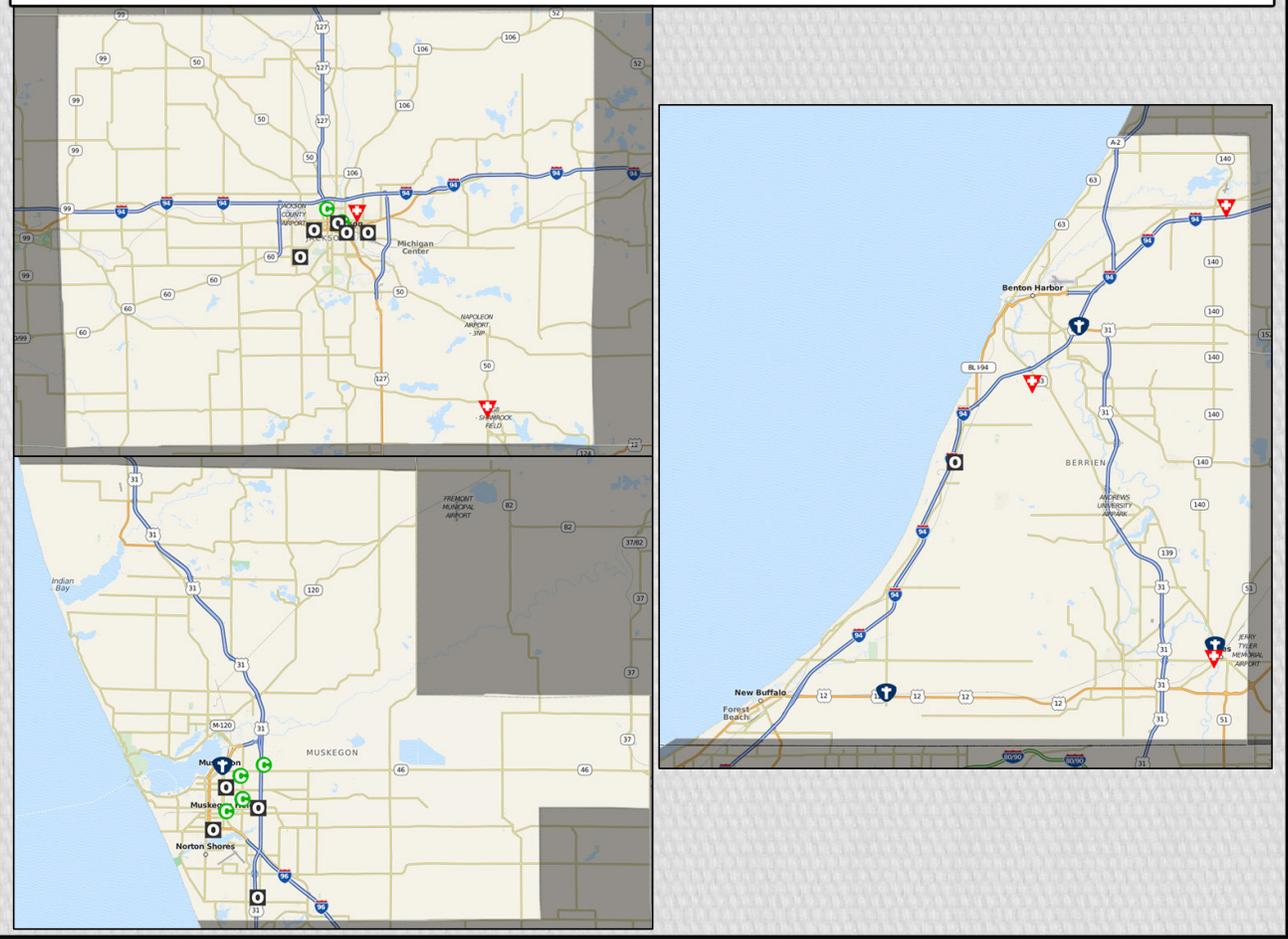


Figure 3.2. Breast cancer services available in Jackson, Muskegon and Berrien Counties

Hispanic/Latinos in Kent, Ottawa and Van Buren Counties

Hispanic/Latinos in Kent County have access to multiple screening options (Figure 3.3). Kent County alone has two dozen screening facilities, including eight community health centers that offer free and low-cost screening options. Diagnostics and treatment centers are clustered in the city of Grand Rapids in Kent County with all three major hospitals providing services. Additionally, there are several survivor support services. Examining these resources further, most provide programming in English only and often rely on translators to communicate with Spanish-speaking patients. While some have bilingual women's health staff members, more will be needed to serve a growing Spanish-speaking population.

In Ottawa County, screening and diagnostic services are available in Holland (Holland Hospital), Zeeland (Zeeland Hospital), and Grand Haven (North Ottawa Community Hospital), while treatment is available only at Holland Hospital and private provider Lakeshore Area Radiation. One low-cost clinic has bilingual staff/physicians, and translation services are available at local providers. There are few formalized partnerships or programs designed for outreach, education, and provision of services for Hispanic/Latinos. Further, there are few programs or partnerships that focus on serving the migrant community's breast health needs.

Van Buren County--within the southwest region of Komen Michigan--Hispanic/Latinos have several options to receive services. Large regional hospitals populate the area, including: Borgess-Pipp, Bronson Lakeview, Lakeland Community Hospital, and South Haven Health System. Additionally, the Van Buren Health Department performs clinical breast exams and makes referrals for screening/diagnostic services should those be needed. Bronson and South Haven provide screening and diagnostic services, but treatment options are limited. Most treatment plans would require travel to neighboring counties or across state lines to South Bend, Indiana.

Hispanic/Latinos in Kent, Ottawa, and Van Buren have resources available in the CoC. However, the connection between education and helping women enter and progress through the CoC appears to be an issue in need of further exploration for qualitative data collection and analysis. The educational opportunities available may not be targeted to reach the Hispanic/Latino populations with specific consideration to language barriers. Furthermore, cultural differences related to health care and fear of "the system" may impede Hispanic/Latino's access to other resources in the CoC. These issues relating to how Hispanic/Latinos access and progress through the CoC will be explored further in the qualitative data section.

Hispanic/Latinos in Kent, Ottawa and Van Buren Counties



Hospital



Community Health Center



Other



Free Clinic



Department of Health

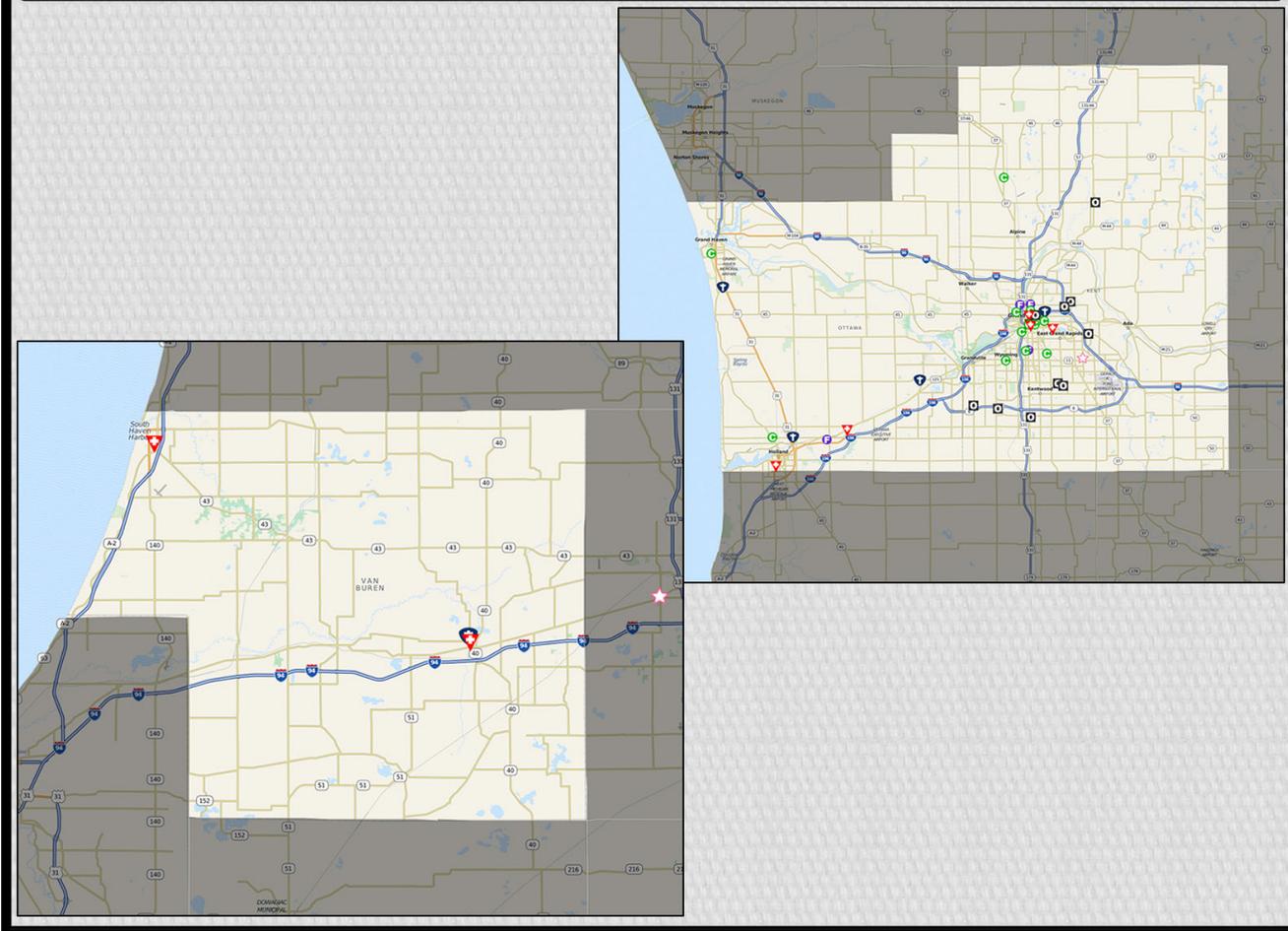


Figure 3.3. Breast cancer services available in Kent, Ottawa and Van Buren Counties

Rural low-income individuals in Cass, Livingston, and Montcalm Counties

Due to location, rural-area residents are at a disadvantage for service (Figure 3.4). While it seems that no place in Michigan is too far from resources, some rural residents are located in veritable health service deserts, made more isolated by low-income, race/ethnicity, and transportation barriers. These interlocking factors have a multiple-jeopardy effect on residents of these outlying areas. Specifically, in Komen Michigan's service area, Cass, Livingston, and Montcalm Counties which have been identified as areas of need in terms of breast health services.

Situated on the border of Indiana, Cass County residents are geographical outliers in a state where resources seem plentiful, especially around urban areas. The main hospital in the area is Borgess Lee Memorial Hospital, which is located in the city of Dowagiac. This hospital offers diagnostic/screening mammograms, however, patients will be referred to west Michigan Cancer Center in Kalamazoo or cancer centers in South Bend, Indiana for treatment and support – often a 100+ mile round trip. Beyond this primary resource, residents must travel to other counties in order to access breast health services.

Rural individuals in Livingston County have similarly limited resources for breast health care. Livingston County has three resources for clinical breast exams—Planned Parenthood, St. Joseph Mercy, and U of M Health Center. Both University of Michigan Health Center and St. Joseph Mercy offer diagnostic services including mammograms and ultrasound, though only St. Joseph Mercy is able to offer advanced services such as biopsy and breast MRI. Treatment options are limited to St. Joseph Mercy in the city of Brighton, forcing patients to travel from all four corners of the county to access care or opt to travel outside of the county to medical centers in Ann Arbor or Detroit for advanced services.

In Montcalm County, there are satellite locations of Grand Rapids-based Spectrum Health located in Lakeview (Kelsey Hospital), Freemont (Gerber Memorial Hospital), and Greenville (United Hospital), and a satellite location of Lansing-based Sparrow Hospital in Carson City. Gerber, United, and Carson City provide screening mammography services. Spectrum Kelsey relies on weekly visits from a mobile mammography bus to provide screening mammograms. For diagnostics and treatment, individuals must travel to Spectrum United in Greenville or a hospital in Grand Rapids to the South or Big Rapids to the North. There are limited resources for education and survivorship support. Limited resources are a weakness of the health system available to rural and low-income individuals.

The rural nature of these counties, coupled with the distance to major hospitals, result in long trips for individuals needing to access all of the services in the Continuum of Care. For example, residents in Kessington, located at the southernmost border of Cass County, have a 40-minute commute one way to the city of Kalamazoo for services. Residents in northern Livingston County have at least an hour round-trip to obtain services in Brighton. For those in northwestern Montcalm County, travel time to Greenville and Grand Rapids each average about an hour and twenty minutes round-trip. In northeastern Montcalm County, travel time to Greenville is an hour and twenty minutes round-trip and travel to Grand Rapids is two and a half

hours round-trip. Clearly, transportation to these vital resources is a huge barrier to women who need breast health services and will be explored further in the qualitative data analysis section.

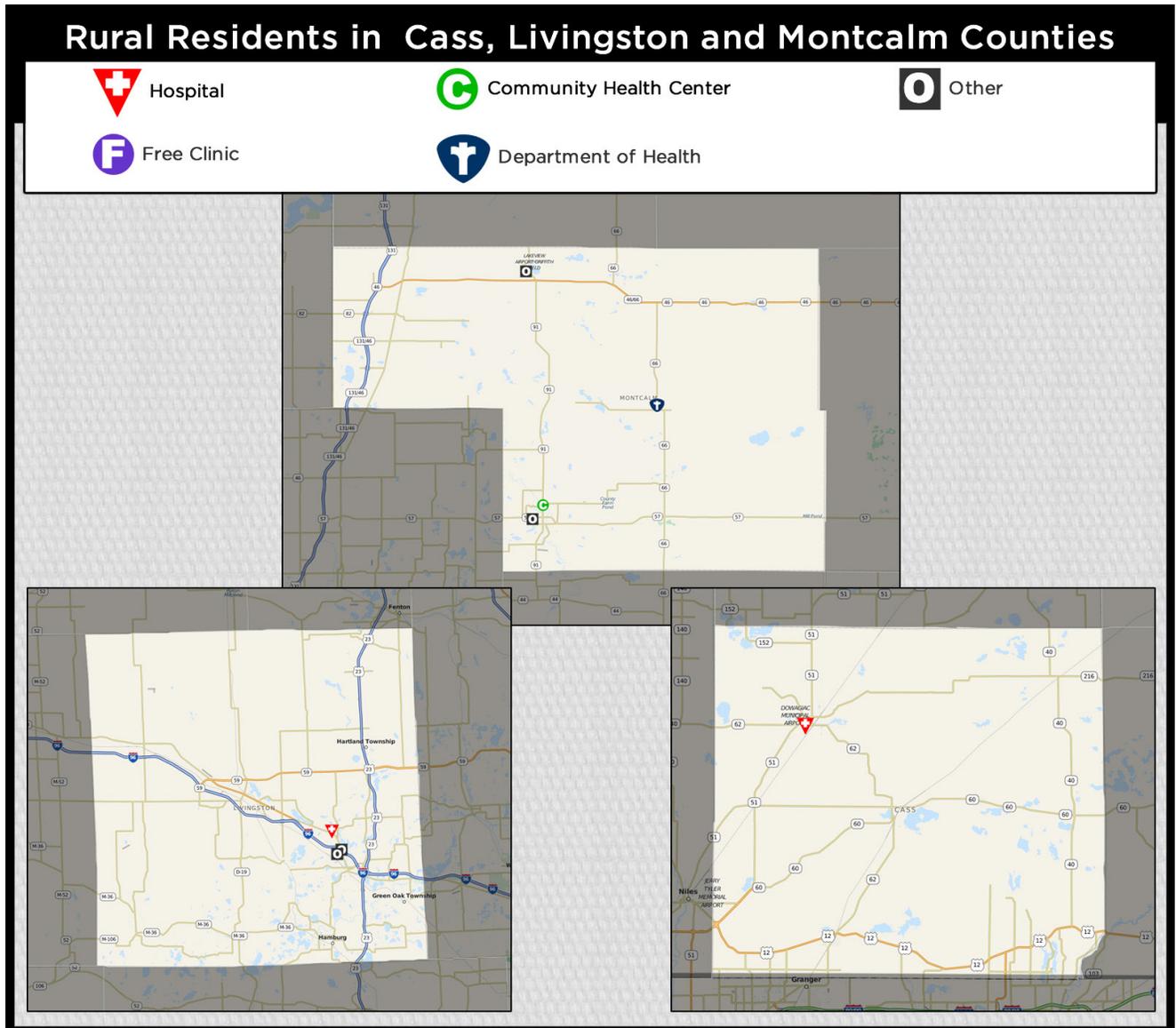


Figure 3.4. Breast cancer services available in Cass, Livingston and Montcalm Counties

Key Mission Partnerships

The Mid-Michigan service area's location near the capitol (Lansing) provides great access to key mission partners. These include the Michigan Department of Community Health, Ingham County Health Department, Livingston County Health Department, the Michigan Institute of Public Health, Michigan State University, and the University of Michigan. Along with their Comprehensive Cancer Center, the University of Michigan also has an accredited school of Public Health.

Komen Michigan has established relationships with other community organizations to partner to improve the breast health of the community. Some partnerships that span the full 20-county service area include: the Breast and Cervical Cancer Control and Navigation Program's (BCCCNP) providers and outside partners network, the Michigan Cancer Consortium (MCC), the Migrant Resource Council (MRC), Michigan Migrant Legal Assistance Program (MMLAP), the Michigan Public Health Institute (MPHI), and the Michigan Health Information Network (MiHIN). Additionally, Komen Michigan partners with support organizations to help support survivors and reduce barrier to accessing treatment including Gilda's Club/Cancer Support Communities, American Red Cross transportation initiative, and the American Cancer Society (ACS). Many of these collaborations impact more than one target population.

Komen Michigan has also formed regional partnerships to connect with organizations serving the three service areas. In the Mid-Michigan service area, Komen Michigan partner with the Capitol Area Health Alliance (CAHA) and local faith-based organizations. In the Southwest Michigan service area, Komen Michigan seeks to expand the partnership with Strong Women of Faith to expand the education and outreach efforts. In West Michigan, key partners for education and outreach include the Grand Rapids African-American Health Institute (GRAAHI), the Hispanic Center of West Michigan (HCWM), and the West Michigan Asian American Association (WMAAA).

Komen Michigan plans to develop similar partnerships with organizations focused on serving the communities of interest in the target counties. The Affiliate seeks to develop a partnership with breast health providers such as Clinica Santa Maria, which serves a large part of the Hispanic/Latino community in Kent County, and Intercare, which serves the Hispanic/Latino community in Ottawa County, and is looking to form a partnership in Van Buren County. In the Southwest service area, the Affiliate partnered with Strong Women of Faith for events and look to strengthen that relationship in the future. Additionally, Komen Michigan offers the Pink in the Pews program, a faith-based education program that reaches Blacks/African-Americans and Hispanic/Latinos in the churches they attend weekly.

Connecting with rural low-income individuals is an area the Affiliate is looking to improve in the next four years. In Montcalm County, Komen Michigan plans to partner with the Freemont Community Foundation to identify community organizations that serve the target population and work to build relationships with those organizations. Komen Michigan seeks to form partnerships with organizations serving rural individuals in Livingston and Cass Counties in the future. Additionally, libraries remain a community meeting place in many rural communities and the Affiliate plans to build partnerships with local libraries to create educational opportunities.

Komen Michigan seeks to build relationships with rural service providers to better understand how to serve the breast health needs of the community and assist individuals to receive the care they need.

The Affiliate's partnership with community organizations provides an opportunity to direct individuals to the services they need as well as outreach and educate on the importance of breast health. Additionally, the relationship with service providers helps reduce barriers to care. For instance, ACS's transportation program helps reduce transportation barriers and the partnership with BCCCNP helps reduce cost barriers and provide navigation services to help women make and keep their appointments.

In the future, Komen Michigan intends to expand and strengthen existing partnerships while establishing new partnerships. Specifically, Komen Michigan will work to establish trust and presence in the Hispanic/Latino, Black/African-American, and rural communities by partnering with established and respected organizations that already serve this population. For Hispanic/Latinos and Blacks/African-Americans, Komen Michigan will build relationships and form new key mission partnerships with church congregations and organizations serving these populations. To reach the rural population Komen Michigan will form a partnership with organizations serving rural individuals and other rural health service providers. These partnerships allow Komen Michigan to leverage resources and more efficiently address gaps in breast health needs in the community in the populations most in need.

Public Policy Overview

Michigan public policy impacts the breast health resources available. Michigan opted to use the federal Marketplace Exchange for health insurance purchasing under the Affordable Care Act. Michigan has expanded Medicaid and has a strong Breast and Cervical Cancer Control and Navigation Program (BCCCNP). The Michigan Cancer Consortium (MCC) has set goals in relation to breast health and engages coalition members to work toward achieving those goals. The implementation of the Affordable Care Act (ACA) has impacted the health system and has resulted in more Michiganders with access to health care. The Affiliate's advocacy efforts continue to support improving breast health in the community.

Breast and Cervical Cancer Control Program

Michigan participates in the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) and the program is known locally as the Breast and Cervical Control and Navigation Program (BCCCNP). Michigan's BCCCNP provides breast and cervical screening and diagnostic services for uninsured women with qualifying household incomes. BCCCNP can provide diagnostic and navigation services for insured women who qualify who face a high deductible as well. Additionally, women under 40 with symptoms can also qualify for services. BCCCNP's expanded service coverage has reduced the gaps in breast health service provision in Michigan.

BCCCNP is primarily funded by Centers for Disease Control funding provided to the state. Some state funds are also contributed to the program, mostly focused on serving women under

40 years old. Additionally, following years of lobbying from Komen Affiliates, the Michigan Legislature passed a bill to create “Pink Plates” with a portion of license plate registration and renewal revenue going to support BCCCNP.

Individuals enroll in BCCCNP using a toll free phone number or online. The toll free number directs women to their local County program coordinators. Most of the West Michigan service area is served by the Kent County Health Department’s Women’s Health Network (WHN) for BCCCNP services. Women calling the WHN number will similarly be directed to their local resources if they are outside the area served by WHN. WHN also has bilingual staff to serve Spanish speakers. Montcalm and Newaygo Counties in West Michigan are served by District Health Department #10. The Southwest service area is served by the Kalamazoo County BCCCNP service coordinator. In Mid-Michigan the area is covered by the Mid-Michigan Health Department, Ingham County BCCCNP administrator, Shiawassee Health Department, and the Barry Eaton Health Department. The BCCCNP service areas and qualifications in Michigan are constantly undergoing revision, so calling the toll free number is the best place for women to start enrollment.

During BCCCNP enrollment, if an individual would potentially qualify for Michigan’s expanded Medicaid, the Healthy Michigan Plan (HMP), they will immediately be referred to a navigator to determine if they qualify and to be assisted in enrolling in the program. If an individual is eligible, they will be provided website and telephone enrollment information, or they can speak with a bilingual outreach specialist to assist them in enrolling during the call. Once enrolled in HMP, the individual will have full coverage health insurance starting from the first of the month of enrollment. The individual will still be scheduled for an appointment under BCCCNP. However, because appointment wait time averages 60 days, the individual will likely have HMP insurance by the time they come in for their appointment.

Individuals are seen at local Health Department, as well as other hospital and community health providers that participate in BCCCNP. Each facility is allocated a portion of the caseload, which is closely monitored to assure compliance with regulations.

Susan G. Komen Michigan has a close working relationship with BCCCNP and the local Coordinating Agencies. Komen Michigan sits on the external committee for some of the local coordinating agencies for BCCCNP, which provides important BCCCNP program updates including qualification updates and caseload levels. The Kent County BCCCNP coordinator and the Komen Michigan Executive Director have made media appearances together to discuss the breast health resources in the community.

Additionally, all Komen Michigan grantees who provide screening and diagnostic services must partner with BCCCNP to refer women who qualify. Komen Michigan is a “gap filling” organization, meaning it seeks to serve those who would otherwise not qualify for services. When a woman calls the Komen Michigan offices for assistance, staff uses a flow chart to help determine where to direct the caller. Those who qualify for BCCCNP or HMP are directed to their local BCCCNP coordinator for services and/or enrollment assistance/navigation. For those who don’t qualify for services under BCCCNP, they are directed to local grantee programs for

assistance. Komen Michigan will continue to work closely with BCCCNP providers and grantees to maintain an accurate understanding of the resources in the area.

State Comprehensive Cancer Control Coalition

The Michigan Cancer Consortium (MCC) is a statewide, inclusive, broad-based partnership of public and private organizations that provides a forum for collaboration (i.e., communication, coordination, and the sharing of resources) to reduce the human and economic burden of cancer among the citizens of Michigan.

The MCC works to achieve the Consortium's research-based, results-oriented goals. The Michigan Cancer Consortium has set the following goal and objectives for breast cancer in Michigan:

Goal: Promote early detection of cancer using modalities that have been shown to reduce mortality.

Objective 15: Increase proportion of females aged 50-74 who received a breast cancer screening (mammogram) in the past 2 years from 81.0 percent to 89.1 percent.

Strategies include: Implement patient reminder systems; utilize one-on-one, small group, and small media patient education; implement provider reminder and recall systems' utilize provider assessment and feedback; reduce structural barriers.

Objective 16: Reduce the mortality rate from female breast cancer from 22.1 deaths per 100,000 females to 20.7 deaths per 100,000 females.

Strategies include: Family history information: collection, documentation, and referrals for genetic counseling for hereditary cancers; provide patient navigation services: diagnostic, treatment, clinical trials, and follow-up care.

Through the dedicated, collaborative efforts of the stakeholder organizations that comprise the Consortium, Michigan cancer organizations are taking steps forward in reducing the very real burden that cancer places on Michiganders.

As a Consortium member organization Komen Michigan actively engages with fellow member organizations to focus on the breast cancer goals of the coalition. Komen Michigan works to accomplish measureable cancer prevention and control activities and also provides annual reports on progress and accomplishments. Representatives attend meetings on a quarterly basis, attend the annual meeting, and often present posters outlining a successful program or project from the previous year. Additionally, the Executive Director of the Affiliate serves on the Membership Committee focused on engaging additionally organizations and members. The Affiliate plans to continue active participation in the Cancer Consortium and providing support to the breast cancer specific task force.

Affordable Care Act

Michigan's health care landscape is changing with the implementation of the Affordable Care Act (ACA). Michigan's Republican Governor led the charge to expand the State's Medicaid program. Expanded Medicaid in Michigan is known as the Healthy Michigan Plan (HMP). Komen Michigan supported the passage of expanded Medicaid through letters to legislators and social media campaigns to ensure more low-income individuals would have access to breast cancer screenings.

Enrollment in HMP has exceeded expectations. As of July 10, 2014, approximately 70.0 percent of eligible individuals, a total of 323,022 Michiganders, had enrolled in the program (State of Michigan, 2014). The first-year goal of enrolling 322,000 Michiganders was surpassed after less than four months of enrollment. HMP provides comprehensive health care coverage, including screening mammograms and coverage throughout the Continuum of Care.

According to a Gallup poll, the uninsured percentage peaked in the United States in the third quarter of 2013 at 18.0 percent (Gallup, 2014). Since ACA implementation, the uninsured percentage for US adults has dropped to 13.4 percent in April 2014. The Urban Institute's Health Policy Center's mid-year Health Reform Monitoring Survey noted that in Medicaid expansion states like Michigan, the uninsured percentage is closer to 10.1 percent (Urban Institute, 2014). Affordable Care Act implementation has reduced the number of uninsured in Michigan. Exact numbers are not available for Michigan.

Notably, the uninsured percentage among Blacks/African-Americans dropped 7.1 percent to 13.8 percent, a greater drop than any other demographic group (Gallup, 2014). The uninsured percentages dropped 5.5 percent to 25.2 percent for low-income Americans with a household income less than \$36,000. Hispanic/Latinos uninsured percentage dropped 5.5 percent since the end of 2013, but still remains the highest among demographic groups. Further, uninsured individuals who are undocumented immigrants are ineligible for subsidies under ACA and are prohibited from purchasing coverage through the ACA marketplaces. Thus, undocumented immigrants in Michigan are likely to remain uninsured. Some programs, such as Michigan's BCCCNP program may serve undocumented immigrants who meet qualifications, but there are no resources for them to purchase full-service insurance coverage.

ACA implementation has impacted the qualifications for Michigan's BCCCNP program. The services provided by BCCCNP are changing. Many more women are enrolling in health care coverage, which provides screening services as a preventative service, through the ACA marketplaces and HMP. Thus, the demand for BCCCNP screening services is decreasing. For women without insurance, including undocumented immigrants, BCCCNP will continue providing free and low-cost mammograms. For women who are under-insured, meaning they have coverage but are unable to afford the co-pays, co-insurance, or deductibles, BCCCNP will increase provision of diagnostic services. Even women who were not initially screened through the BCCCNP program can access BCCCNP resources for diagnostic assistance and navigation. As a result in this shift from screening towards diagnostic services, some BCCCNP provider sites may drop out of the program due to low utilization of screening and inability to

provide diagnostic services. These changes have also resulted in BCCCNP redrawing service areas to cluster around diagnostic resources.

ACA implementation has also affected health care providers. With an influx of newly insured individuals, some providers are struggling to keep pace with new patients seeking services. According to the Health Resources and Services Administration, many counties in the service area are Health Professional Shortage Areas and particularly lack Primary Care Providers for the low-income populations in those areas (Health Resources and Services Administration, 2014). Increased demand for services will only intensify these shortages.

Providers are also concerned about Medicaid reimbursement rates for services. It is unknown whether rates will increase, decrease, or remain flat as rates have for Medicare. Lower reimbursement rates result in slimmer profit margins for providers. Additionally, providers may need to increase prices and/or billing staff, which results in additional costs and increased fees. However, with more patients having some level of health coverage, providers expect to have less uncompensated care and less charity care. The ACA's impact on providers and service costs will be watched by the Affiliate to monitor affordability of services and potential gaps and barriers for insured women.

Changes in the health care landscape in Michigan have impacted the Affiliate. Komen Michigan is a "gap filling" organization that focuses on identifying needs that are not being addressed by other resources in the community. With more people having access to screening as a preventative care service, the Affiliate is seeing less demand for free and low-cost mammograms. There are still populations who need assistance accessing and paying for mammograms, but the demand has been less than in years past. For example, high risk women under age 40 may face challenges or insurance denials when attempting to access screening mammograms or MRIs. Additionally, more underinsured women are seeking assistance paying for deductibles, co-insurance, and co-payments for diagnostic services and treatment.

The Affiliate recognizes a need for greater outreach to populations of need to provide education and assistance accessing care resources and insurance options. Further, while opportunities for screening have increased, supportive services like transportation and child care are needed by many individuals to access services. As needs continue to shift and change, the Affiliate will continue to monitor the gaps to ensure women can access quality breast health resources and work to reduce the barriers to utilizing services.

Affiliate Public Policy Efforts

Public policy impacts the breast health of the community and Komen Michigan actively works to make sure policymakers understand the importance of breast health. Komen Michigan collaborates with the Detroit Race for the Cure on state and national public policy activities. When important bills and legislation are being considered, the Affiliates draft a joint letter to be signed by all the Komen Affiliate Executive Directors serving Michiganders. The Detroit Race and Komen Michigan also work together to schedule recess meetings with national legislators to inform them on important issues and conduct Lobby Days with state legislators. Komen

Michigan actively reaches out to local Representatives and Senators serving the Komen Michigan service area to provide information on breast health related bills, set in-person meetings, explain the services Komen Michigan provides so they can assist constituents, and to invite them to key Komen events like the Race for the Cure series.

Additionally, Komen Michigan provides testimony, both written and oral, regarding important bills under consideration. Since 2014, Komen Michigan has provided support of bills to require oral chemotherapy parity with traditional IV chemotherapy, as is the law in more than 40 other states. The 2016 version of the bill is awaiting a vote out of Senate committee. When appropriate, Komen Michigan works to build coalitions of interested organizations and individuals to provide a stronger, more unified voice in favor of quality breast health in Michigan. The Affiliate plans to maintain public policy efforts in the future utilizing the Komen Public Policy Priorities.

Health Systems and Public Policy Analysis Findings

Based on review of health system resources and public policy findings, Susan G. Komen Michigan has identified the following needs and areas of focus:

Target Communities

Blacks/African-Americans in Berrien, Jackson, and Muskegon Counties have access to CoC resources, but Blacks/African-Americans timely progression through the CoC appears to be impeded and will be studied in the qualitative section. In Berrien, Jackson and Muskegon Counties, diagnostics and treatments in particular, are only available at a single provider. For those who need reconstructive surgery, or other advanced care, the only option often is travelling great distances for care. Barriers to care can lead to delays along the CoC which may contribute to later stage diagnosis and poorer outcomes. When examining the needs of this population in the qualitative data section, cultural barriers to breast health should be examined as well as needs related to supportive services. Navigation throughout the CoC and education on the importance of breast health is another area of need that should be strengthened.

Hispanic/Latinos in Kent, Ottawa, and Van Buren Counties have access to the full continuum of care. However, those in Ottawa County and Van Buren County have more limited resources available than those in the urban center of Grand Rapids in Kent County. Further, although services may be available, cultural and language barriers may impede access to care. Additionally, based on the experiences of Komen Michigan's community partner Michigan Migrant Legal Aid Program, many migrant farm workers face transportation and logistical challenges. Undocumented immigrants are likely to be uninsured and have greater challenges accessing and paying for care. One area that should be explored in the qualitative data section is the cultural competence and reputation of providers in the Hispanic/Latino community. While hospitals are required to provide translation services, bilingual providers are able to more clearly and directly communicate with Spanish-speaking patients.

Rural low-income individuals in Cass, Livingston, and Montcalm Counties face a shortage of available resources. Local resources include satellites of major health systems that provide

screening, and some diagnostic and treatment services, however many patients have to travel long distances for advanced services like surgery, reconstruction, and sometimes treatment. Some outlying areas of the counties rely on mammography unit visits on a regular basis rather than having standalone facilities, which provides much less flexible scheduling. Generally, the isolated nature of the rural population results in greater need for supportive services like transportation and navigation and these are areas to be explored in the qualitative section. Additionally, education opportunities are limited and should be expanded to encourage higher screening percentages.

Additionally, there is a gap in coverage based on Michigan public policy. Although more women are insured, breast health care is not necessarily affordable for low-income women. There is a gap for women under age 40 with a breast health concern who have insurance, but may not be able to afford the deductible, co-pay, or co-insurance for diagnostic services and treatment. Low-income women over the age of 40 can access diagnostic services through BCCCNP, but women under age 40 are not always eligible. Accessing appropriate screening services may also be challenging for high-risk women under age 40 who may face insurance denials. Further, some women may make a bit too much to qualify for BCCCNP services, but still face a cost barrier to accessing breast health services. Although BCCCNP can now provide navigation services for all women they serve, including the under-insured, many women who fall outside BCCCNP guidelines could benefit from navigation services to help them make and keep their appointments.

Key Partnerships

Key partnerships in the communities of need include expanding collaboration with cultural organizations. For example, key partners in connecting with the Black/African-American community include the Grand Rapids African-American Health Institute, which has programs designed to help motivated women improve their health. The Affiliate is working to expand this collaboration to include breast health specific curriculum for their programs and develop similar partnerships in Muskegon, Jackson, and Berrien Counties. Additionally, Komen Michigan provides a spiritually focused breast health education program called “Pink in the Pews” that has been successful in years past. By partnering with church congregations, the Affiliate is able to reach Blacks/African-Americans more successfully.

Key partners in connecting with the Hispanic/Latino community include the Hispanic Center of West Michigan, Migrant Resource Council, Hispanic American Council, Cristo Rey Community Center, and Michigan Migrant Legal Assistance Project. Additionally, key partnerships for services and navigation include the Breast and Cervical Cancer Control and Navigation Program, and grantee navigation programs. Additionally, the Affiliate plans to collaborate with Intercare in Holland, Clinica Santa Maria, and other providers already serving the migrant community in Kent, Ottawa, and Van Buren Counties. The Affiliate also expanded the “Pink in the Pews” program in 2016 to include materials focused on providing culturally competent breast health information to the Hispanic/Latino community.

To connect with rural low-income populations, Komen Michigan will develop a partnership with rural community organizations and community foundations. Additionally, the Affiliate will reach

out to libraries as they tend to be a community gathering place in rural communities and a potential partner for education and outreach. Additionally, the Affiliate will seek to develop partnerships with the breast health care providers in the area who serve rural populations.

Additionally, Komen Michigan will continue to work closely with service providers like BCCCNP, community health centers, free clinics, and hospital charity care programs to identify potential resources for underinsured women under the age of 40 who cannot afford diagnostic services, high risk women under age 40, and women who are low-income but do not qualify for BCCCNP services.

Each of these partnerships will provide strength to the Affiliate by leveraging the respect of the partner organizations with the populations Komen Michigan seeks to serve. These partnerships allow the Affiliate to gain the trust and respect of target populations.

Affordable Care Act

The implementation of the Affordable Care Act has changed the shape of the health care landscape in Michigan. More individuals have access to health care and breast health preventative services than before through the marketplaces and expanded Medicaid, known as the Healthy Michigan Plan. However, there is a correlated increasing need for assistance paying for diagnostic services for those who have insurance but have trouble affording co-payments, co-insurance, and deductibles. Similarly, the influx of new patients increases the need for primary care providers, which are in shortage in part of the service area. Further, some individuals are still unable to afford health insurance coverage and others, namely undocumented immigrants, are excluded from the system. Additionally, the ACA has impacted the qualifications for services in the state BCCCNP program. As community resources shift, Komen Michigan will continue to monitor the changes to identify gaps in coverage and address them appropriately.

Public Policy

The Affiliate will continue to advocate for public policy in support of better breast health in Michigan. Susan G. Komen Michigan will continue to work with the Detroit Race for the Cure and other community organizations to collaborate on letters, testimony, and meetings in support of breast health legislation. By educating legislators and supporting key breast health legislation in line with the Komen Public Policy Priorities, Komen Michigan will continue to closely monitor gaps in coverage. Additionally, by working with partners interested in supporting breast health policy, the Affiliate will expand its collaborative efforts and have a greater impact through the Michigan Cancer Consortium and the BCCCNP external providers' coalitions.

Qualitative Data: Ensuring Community Input

Qualitative Data Sources and Methodology Overview

Methodology

Susan G. Komen Michigan elected to base further assessment on the following question: To what extent do sociodemographic factors such as race, ethnicity, and geographic location impact the experience and access of service for survivors or the underserved? Central to this question are the issues of access, available resources, cultural differences, community knowledge and the understanding of the gaps that exist in each of these communities. To further frame this question, the Affiliate utilized data from the Quantitative Data Report to select communities of interest within Komen Michigan's 20-county footprint. In the examination of this data, it becomes obvious that the State of Michigan has three populations of women which experience distinct disparities when it comes to receiving breast health services: Blacks/African-Americans, Hispanic/Latinas, and rural-area residents. For each population of interest, three communities of interest were identified based on information related to Healthy People 2020 as well as census data and current breast cancer death rates within those communities. The counties of Berrien, Muskegon, and Jackson were selected to focus on social determinants that impact the Black/African-American community. To gain more insight into barriers and cultural differences which affect the Hispanic and Latina community, Van Buren, Kent, and Ottawa counties have been identified for further focus. Finally, to understand the unique issues which impact the underserved rural areas, the Affiliate has identified the counties of: Cass, Montcalm, and Livingston.

The primary assessment goal was to examine access from a continuum of care perspective by collecting information from health care providers, survivors, and women over 30 who may or may not have sought breast health services. The Affiliate utilized a number of qualitative methods including key informant interviews, focus groups with surveys, and document review.

To connect with health care providers, Key Informant interviews were conducted by phone or in-person. This particular method was chosen as a convenient way to connect to busy providers, such as BCCCNP navigators for multiple counties. All interviews were conducted by the same interviewer, Nicole Milliman, maintaining consistency of the data collection. While the option to perform the interview over the phone or in person was given to all informants, most elected to speak over the phone. The strength of this method was in the ability for informants to be in an environment of their choosing and comfort level while also affording them a certain level of "anonymity" in speaking over the phone. To collect information, an excel spreadsheet was created to allow for ease in parsing collected data as well as simplicity of entering data into fields. Separate tabs were created for each interview. While interviewee's service area (county or counties) were identified at the beginning of the interview (and noted in the spreadsheet), a master list was created to ensure data integrity across counties. Questions were chosen to mirror the potential experiences of providers and patients in an effort to triangulate data. Some questions included prompts, which were only used in the event of vague answers or if the response needed further clarification.

Key questions asked of providers included:

1. Are there certain types of patients that may have difficulty accessing services at [your organization]? (Prompt for: racial/ethnic/language groups, geographic outliers, cultural groups)
2. Where are women in [your county] most likely to get their breast health information?
3. Does [your organization] assist with transportation?
4. Where do you refer women for diagnostics? Treatment?
5. What barriers exist within the health system for women accessing breast health services?
6. What does a quality breast care program look like to you?

Connecting directly with survivors and underserved women was challenging. The Affiliate elected to conduct focus groups in collaboration with community groups, such as a survivor support group and the local Hispanic/Latino community center. Questions were designed to collect information from the experiences of Black/African-American, Hispanic/Latina, and rural/underserved women regarding access to health care services in general and breast health services specifically. Questions regarding general health concerns included:

1. Where do you get your health information?
2. What do you think of the health system here?
3. Are [Blacks/African-Americans/Latinas/rural residents] treated differently by health care providers?
4. Do you trust what your health care provider tells you?
5. What advice would you give your health care provider?

The general questions were selected to gain an understanding of the level of engagement with the health care community and to understand the individuals' own stake in their health outcomes.

Focus groups were asked additional questions specifically related to breast health to ascertain their level of engagement with breast health services including their knowledge of risk, level of access, and desire to be served. These questions included:

1. What is your experience with breast screening? (including clinical breast exam/mammography)
2. If you have a yearly screening (CBE or Mammogram), why do you?
3. If you do not have a yearly screening, why don't you?
4. Does anyone in the room identify as a breast cancer survivor?

Information was collected from focus groups in several ways. First, participants were given a consent form which contained a short demographic survey. These surveys collected age, race, ethnicity, religion, and asked whether the participant identified as a breast cancer survivor. Second, focus groups were recorded using a laptop program. Third, notes were taken during the focus group in view of the recording program to indicate specific timeframes of interest. This process was specifically important to the Hispanic/Latina focus group as the primary researcher was not fully bilingual and utilized the assistance of a bilingual staff member from the Affiliate. Additionally, since this particular focus group was conducted in Spanish, the session was

translated and transcribed by a local language lab. The recordings/transcriptions were then reviewed for emerging themes and important quotes.

Document review was utilized as an additional method of data collection. Community health needs assessments were utilized to provide understanding as to each community's own unique risk and behavioral factors. Additionally, peer-reviewed documents regarding the experiences, disparities, and barriers for populations of interest within the State of Michigan are included as support to conclusions gathered from focus groups and key informant interviews.

Sampling

The Affiliate conducted twelve key informant interviews per community of interest, 36 interviews in all. Key informants were identified for each area with some interviewees providing services for more than one population of interest. Those informants were asked questions relating to the experiences of each population. Key informants spanned the entirety of the continuum of care from oncology social workers, to BCCCNP coordinators, navigators, nurses, and program directors representing organizations across the continuum. Informants were chosen based on their unique perspectives and connection to the population of interest within the community.

Focus groups were conducted in two counties. In Berrien County the Affiliate partnered with a Black/African-American faith-based women's group. In Kent County, the Affiliate partnered with the local Hispanic/Latino community center. The group in Berrien had 22 participants while the group in Kent had 20—every single woman who showed up to the group was eligible to participate based on demographic characteristics (age and race/ethnicity).

Documents reviewed consisted of 25 individual documents culled from Western Michigan University's database of peer-reviewed articles. 21 of the 25 documents reviewed are pieces written between 2009-2015, with the remaining four articles written between 2002 and 2005. The four chronological outliers were chosen for inclusion based on the unique data presented: two articles discuss specific populations' health concerns, one article is a study of the statistical significance between travel distance and breast cancer treatment decisions by Michigan women, and the fourth is an article regarding psychosocial care for survivors—giving efficacy to information provided in several key informant interviews.

Ethics

Given the sensitivity of the subject of health care coupled with relative understandings and vulnerable populations, ethical considerations were taken very seriously. Consistency was key to the Affiliate's Community Profile process as one person carried out protocols described herein. This ensured that the same information was collected and more importantly, disbursed to key informants and focus group participants.

Consent forms were sent to key informants prior to phone interviews and discussed with key informants at the onset of the call. Informants were thanked for their assistance and reminded that their information was to be kept confidential. Interviewee consent forms included a space to indicate understanding of confidentiality—that all information would be confidential and no identifying information would be used in the final report. Interviewees were also given the option

to allow the Affiliate to thank them in the Acknowledgement section of the document, without indicating their individual level of participation. Finally, interviewees were given the opportunity to elect to receive a copy of the approved final Community Profile. Prior to conducting the phone or in-person interviews, key informants received a briefing as to the purpose of the Community Profile and how their information was to be used. Additionally, each interviewee was informed that at the 30-minute point in the conversation the interviewer would pause the conversation to allow the informant the opportunity to end the interview or to continue based on the time they had in their schedule. An average interview was concluded in 45-55 minutes with two outliers: one interview was conducted in 20 minutes as the interviewee was very succinct in her answers and another interview (conducted in-person) took close to five hours due to her incredible depth of knowledge about a number of populations of interest. The valuable time of the informants was consciously considered throughout the interview process and respected per the wishes of each individual.

Consent was handled with the utmost of consideration for the vulnerable populations providing their insight. A shorter version of the consent form at an appropriate reading level was handed out to participants, indicating that they are not required to participate in the research, that any information collected would be confidential, and that they had the right to withdraw consent at any time. Participants were given the same three options that the key informants were given: acknowledgement that their information would be kept confidential, indication of their desire to be thanked via the acknowledgement section of the final document, and the option to receive a copy once the process is complete and approved. All of these options were explained at the beginning of the focus group with the additional information regarding the recording of the session. The computer being used to record the session was shown to the group, with the understanding that the recording was only audio and no video. Participants were informed that the recording was only to be used to make notes and pull specific quotes and pieces of information.

Confidentiality of data is maintained through consistency—with only one person conducting interviews and collecting information from focus groups. Additional measures include destruction of recordings and demographic data sheets once the Community Profile process is complete, redaction of names and organization info from key informant interviews, and use of non-identifying descriptors within the narratives regarding data collected at focus groups.

Qualitative Data Overview

For the purpose of this study, qualitative data was collected utilizing several collection instruments. An excel template was created for key informant interview data collection because of its practicality and ease of use. Data is easily parsed and formatting is uniform. Two key informants elected to have the questions sent to them: one non-native English speaker wished to spend more time with the questions, and the other wanted to be more prepared. General notes were taken during the interviews; however, specific quotes were also noted to add texture to information being presented.

Limited notes were taken during the focus group sessions to maintain engagement with participants. When notes were taken during the session, a timestamp was indicated as a reminder to return to that specific instance to gather thematic information. General notes were taken based on the recording with specific quotes pulled to add texture. The demographic surveys were distributed to ensure the group met the expectation/need of the Affiliate and to ensure a representative population. Recording the focus group sessions ensured a greater reliability of data as this method allowed the facilitator to engage with participants more fully and provided for better data collection.

Themes within the information obtained through interview, focus group, and document review were identified via repeated appearance within these conversations or texts. Many themes were consistent with common assumptions, such as transportation being a barrier to health care access. Themes will be used herein to discuss findings and frame information within the communities of interest.

A common thread among all counties is the increased need for transportation and more affordable/income-based health care options. Providers and patients within the Black/African-American communities of interest agreed that more education is needed, though interestingly focus group participants indicated that education should be more outreach based to bring providers to women, whereas some providers desired a more “reach-out” method to bring women in to the clinics/hospitals. Within the Hispanic/Latino communities of interest (Ottawa, Kent, and Van Buren Counties), informants and focus group participants alike indicated a need for bilingual, culturally competent services. Key informants indicated that women within the rural communities of Cass, Montcalm, and Livingston have a tendency toward isolation. One informant in Montcalm County indicated that there are women who are afraid to go to large cities because they believe they’re dangerous—“we have to find a way to go to them.”

Barriers were also discussed with all of the key informants as well as the focus group participants. By far, transportation was most commonly mentioned need across all communities. Among providers there was a sense that the populations they intend to serve lack knowledge about health and wellness, the insurance system, and generally “what’s out there” in terms of available services. Conversely, among focus group participants, there were some obvious cultural barriers. One Berrien County focus group participant told the story of a friend: “she didn’t believe in mammograms. She said, ‘no one is going under my dress but my husband.’ She’s dead now.” Black/African-American and Hispanic/Latina focus groups indicated lack of insurance as a concern, with one Kent County focus group participant citing “lack of documents” as a barrier to accessing health care and insurance.

Among county-specific documents, obesity was the most common health risk behavior with smoking and binge drinking being close behind (Borgess-Lee Memorial Hospital, 2013; Bronson Hospital, 2013; Chmelar and Birkelbach, 2014; Hill and Brooks, 2012; Muskegon Community Health Project, 2012; St. Joseph Mercy Livingston Hospital, 2012). Much of the findings from these documents confirm findings from groups and interviews. “Community residents cite a multitude of community issues that impact overall health. Those cited most often are largely economic, such as affordable health insurance, lack of jobs/employment and affordable health

programs and services” (Bronson Hospital, 2013, pg. 84). Microeconomic issues will be discussed within individual population groups as economic factors impacts each community uniquely.

Qualitative Data Findings

Blacks/African-Americans

Breast cancer death rates among Black/African-American women are startling. “Black/African-American women are more likely to die from [breast cancer]. While the overall incidence of breast cancer is higher in White women after 45 years of age, incidence of breast cancer in Black/African-American women under 45 years of age is higher.” (Phillips and Cohen, 2011, p. 239). For this reason, the Affiliate has chosen three counties of interest for their Black/African-American populations: Berrien, Jackson, and Muskegon. Berrien, located in Southwest Michigan, and Muskegon (West Michigan) have larger populations of Black/African-American women than other counties in the Affiliate. Within Berrien County, Black/African-Americans are three times more likely to be unemployed than whites, providing a look into one of the many social determinants examined through both quantitative and qualitative data. Poverty, another social determinant, is experienced by 37.4 percent of Black/African-Americans in Muskegon County. Similarly, Jackson County Black/African-Americans are less likely to have health insurance compared to the entirety of the Affiliate. These three factors—poverty, unemployment, and lack of health insurance—contribute and intensify barriers to breast health.

Quintessential to this community profile study is an understanding of barriers and how they can impact breast health. In their 2014 Community Health Needs Assessment Report, CareLink identified contributing factors to health problems in Jackson County as being: “Lack of health insurance, difficulty accessing affordable health services, poor communication between health care providers and patients about health risks, inaccurate personal view of health risks, and lack of social and emotional support” (pg. 3). This was echoed by a Jackson County key informant who indicated that while “systemic” barriers exist for Black/African-American women, self-care is one way of working on health at home, especially when it comes to “smoking, being overweight [...] and ignoring warning signs.” A community health needs assessment by Allegiance Health indicated that “Expense of healthy options, easy access to unhealthy options, unhealthy environment, concerns for safety, lack of time, lack of access to services such as transportation, lack of role models/parenting skills, lack of risk education, and lack of obvious consequences for unhealthy behavior” accounted for barriers to general health and contributed to risk factors for health problems later on (2012, pg. 14). It is clear that many of these systemic issues become interlocking factors that diminish a woman’s ability to access care. Coupled with these issues, access to transportation was mentioned by nearly every key informant across all service areas and communities of interest. One informant recounted the story of a program participant who lived less than five blocks from a clinic but due to mobility issues, she had to take the bus. Unfortunately, the bus took more than 45 minutes to get to the clinic and with young children accompanying her, making her appointment just wasn’t a viable option.

Similar themes regarding barriers for Black/African-American women emerged in Muskegon County. Key stakeholders in the Muskegon Community Health Needs Assessment identified

unemployment, poverty, and lack of insurance as the most crucial of health barriers for adults in the county with obesity close behind (Muskegon Community Health Project, 2012, pg. 31). The same study also found that Muskegon ranked last of Michigan's 82 counties for its high rates of smoking, binge drinking and obesity (2012, pg. 15). A key informant working at a family practice in Muskegon cited health education as a missing component in Muskegon's health system, "it is hard to get education out there because we are so desensitized to information."

Distrust of medical health systems may be a barrier to Black/African-American women accessing services. "Based on the definition of cultural mistrust, medical mistrust may be defined as a tendency to distrust medical systems and personnel believed to represent the dominant culture" (Thompson et al, 2004, p. 210). Focus group participants in Berrien County had mixed reviews of their experiences with breast health-related doctor visits. One participant shared her regrets for having had a mastectomy, "when you talk to a surgeon, their first inclination is to cut. When a doctor tells you that you need surgery, get a second opinion." To combat some of the distrust of these systems, several key informants from Jackson and Berrien discussed methods of creating a "homelike" environment in their organizations. An organization in Mid-Michigan calls their program participants their "neighbors," allowing them to immediately feel part of a supportive collective. Psychosocial care, that is care for a person's social wellbeing, is an emerging trend in cancer care and addresses some of the more common symptoms of distrust.

Systems distrust is a concern which potentially stems from personal experiences of institutional racism within the health care system. One participant recounted her experience of a breast exam with a new doctor, "the doctor seemed afraid to touch me, as if the Black was going to come off on him." The experience of racism and even the perception of potential racism incites several responses, according to the group. The patient could become angry; "and I become the stereotype of the aggressive Black woman." On the provider side, a couple of key informants indicated that they viewed Black/African-American women as "lacking immediacy" in their desire to receive care. While there was no indication that these health care professionals treated patients differently based on race, it was clear that this perception is one that can be harmful to Black/African-American women who may "lack immediacy" due to wanting to consider options and might be unfairly pressured to make a decision based on emotion and not information.

A positive theme of faith and spiritual support emerged from both the focus group as well as document review. According to a 2011 study by Phillips and Cohen, "Strong faith [is] central to living with a potential threat or actual diagnosis of breast cancer" (pg. 245). While questions of faith were not originally part of the focus group agenda, the topic was introduced by several participants. The group was then asked, "What role does faith play in your medical decisions?" One participant said she asked all of her doctors whether they are Christian, "I need to know you believe in the same God as me." Key informants had a slightly different understanding of the role of faith in the lives of the Black/African-American women they serve, "African-American women tend to think that God wants them to have the cancer." While this kind of response was an outlier in terms of the breadth of key informant interviews, it certainly represents the kind of cultural misunderstanding that may lead Black/African-American women away from accessing care. Other key informants indicated the increased need for partnering with predominantly

Black/African-American churches, with several informants mentioning “parish nurses” or Black/African-American “lay health advisor programs” within houses of worship—bringing two important pieces of a woman’s life under the same roof in a trusted environment. Still, one informant warned of the dangers in exclusively reaching out to Black/African-American women in a church setting, “It is a myth that the only way to reach Black/African-American women is through church. When we do that, we ignore a lot of women who don’t go to church.” Community-based community health worker programs can provide a secular link to breast health.

In examining the data, it becomes obvious that socioeconomic factors create disparities within the health care system for Black/African-American women seeking breast health services. “Adequate access to screening, diagnosis and treatment were found to be associated with socio-economic status (SES), both at the individual and area level” (Akinyemiju et al, 2013, pg. 1). Black/African-American women are underserved due to factors outside of individual control and are dying from breast cancer because of it. “On average in the US, 78.0 percent of Black/African-American women survive five years after a diagnosis of breast cancer, compared with 90.0 percent of White women” (Meliker et al, 2009, pg. 2212). While the disparities seem endless, there is hope in the presence of innovative social care practices including the use of parish nurses throughout the Lakeland Health System, wider use of BCCNP Navigators, and the integration of “case management” in health care settings which predominantly serve low income populations.

Hispanic/Latinos

Hispanics and Latinos face unique social and cultural challenges when navigating the health care landscape. Additional barriers impact temporary residents like migrant farm workers or those without documentation. Health care workers within Kent, Van Buren, and Ottawa Counties have had to find new ways of reaching out to this difficult-to-reach population that is characterized by key informants as having a deeply seated fear of “the system.” In these counties, the population of Hispanic/Latino residents is higher than in other parts of Michigan. Coupled with socioeconomic and health behavior risk factors, these communities boast higher rates of late-stage incidences—Ottawa and Kent will not be able to meet the HP2020 target for late-stage incidence rate.

One central theme that emerged from both key informants as well as focus group participants was the link between resources and access. One impassioned Ottawa County informant said:

"We struggle with women in this community not having insurance or being undocumented. They can't get treated in Holland because [local health system in neighboring county] has a charity program. When you are someone who doesn't have resources, it is a tremendous hardship to get to Grand Rapids twice per week for infusions. It is a huge barrier for patients—they should be able to get their care in this community."

In Kent County, cost is a substantial barrier to receiving services among women with 17.0 percent of the population forgoing a doctor visit and 34.0 percent of Hispanics/Latinos unlikely to

receive services due to cost (Chmelar and Birkelbach, 2014, pg. 78). This is echoed by an Ottawa County key informant who found a way to reach out, "Hispanics have a hard time [accessing services]. The best way that we have reached them is through Spanish radio." It is clear through interviews that the Hispanic/Latina population, while difficult to reach, is not impossible—especially if providers go through direct channels with the use of advertisements and materials in Spanish, and the use of bilingual staff.

Health literacy, including insurance navigation, was another common theme among documents reviewed and key informants. Upon speaking with a key informant from Van Buren, she identified a general lack of health information being directed into the Hispanic/Latino (specifically Spanish-speaking) community, "one woman in particular came in and had a large visible mass. As a White woman with all of the programs directed at us and education, I thought 'how can you look at your breasts and not know something is wrong?'" An Ottawa County informant coupled health literacy with the lack of understanding of just how often American health care system rules and definitions change. "Women don't know who to believe when it comes to changing health care conceptions which leads to a lot of confusion as to what women should do." As mammography guidelines change, those who are most often impacted are women who are not "in the know," especially women who do not speak or read English. "Migrant women over the age of 35 were less likely to have ever received a mammogram (55.4 percent) compared with the general population (84.8 percent). Of women 18 and older, migrant women (61.3 percent) were also much less likely to have ever received a clinical breast exam" (Millard, 2002, pg. 8).

Key informants, focus group participants and documents reviewed offered a multitude of solutions to access problems in the Hispanic/Latino community. Key informants in the Hill and Brooks study indicated that Van Buren County needs more collaboration between health care providers and services to link those who need them (2012, pg. 96). Several informants across Komen Michigan's footprint indicated that they utilize "language line" to translate for appointments and prefer to not use family members as interpreters as the communication of medical information could be misinterpreted or be a violation of HIPAA. At one key informant's practice, a "Language Coordinator" is used to ensure that when a non-English-speaking patient makes an appointment, a trained person will be available to translate, taking the burden off of a family member who is there for support, and also allowing the patient to ask personal questions and have discussions with medical staff. Other solutions include mobile health care, which is especially important when attempting to serve migrant populations (Hill and Brooks, 2012, pg. 132). According to one key informant who serves both Kent and Ottawa County, "what is aggravating in the health care community is that one size does not fit all—it is different serving a woman at a migrant camp than it is at a clinic." This is especially important when identifying best practices to accessing difficult-to-access communities. Going to where a woman lives, works, or worships is considered to be a radical practice when it comes to institutionalized forms of medical care, but it is a best practice when seeking positive health outcomes. Partnerships with community health worker programs can help bridge the gap in health care.

Rural

Women located in rural communities in Michigan are more likely to be medically underserved, regardless of race. This is not only in accessing screening services, but in determining treatment procedures as well. In a study by Meden and colleagues of access to health care facilities in more remote parts of Michigan, it was found that “patients with stage I or II breast cancer who lived at greater distances from a radiation oncology facility were more likely to undergo mastectomy” (Meden et al, 2002, pg. 111). This is due, in part, to the oft-dangerous winter weather driving conditions and the lack of ability to afford the trip each week for breast conserving therapies such as radiation. This makes access to services a multi-dimensional issue that transcends obvious socioeconomic factors. For this reason, the Affiliate has identified rural communities of Cass, Livingston, and Montcalm Counties as communities of interest in examining access to breast health services.

Montcalm County, the northernmost county in Komen Michigan’s footprint, “has a lower proportion of adult residents receiving mammograms [...] for the recommended age groups considered to be at higher risk” (Healthy Montcalm Initiative, 2011, pg. 7). More than 20.0 percent of adult Montcalm residents are without health insurance and “16.7 percent of Montcalm County adults reported that they delayed seeking health care [...] primarily due to cost” (Healthy Montcalm Initiative, 2011, pg. 5). Montcalm County is the only county within the Affiliate’s service area to see an increase (1.9 percent) in breast cancer-related deaths. One key informant identified transience as being a primary concern among rural-area dwellers: “Transient people and rural populations are a challenge because they don’t have the same public transportation that a city would have. This transience may be partially due to a high non-migrant unemployment percentage. People are on fixed or small incomes and having a vehicle or paying for gas is a challenge. People who are rural tend to move around a lot.” Transportation challenges faced by rural residents are different from those faced by urban residents.

Cass County is similarly rural with “About 60.0 percent [...] farm land, ranking it 15th out of Michigan’s 83 counties” (Borgess-Lee Memorial Hospital, 2013, pg. 1). Poor indicators of health including a 10.7 percent diabetes rate and an incredibly high patient to physician rate of 8401:1, compared to the state rate of 1,119:1” make the county a community of interest for this study. (Borgess-Lee Memorial Hospital, 2013, pg. 4). Impoverished residents tend to utilize emergency room services as their primary means of connecting with a doctor, meaning that access to primary care is a crucial concern.

Livingston County reported higher proportions of late-stage diagnoses than the service area as a whole, and is unlikely to meet target rates by 2020. According to a community health needs assessment performed by St. Joseph Mercy Livingston Hospital, Obesity is a number one health concern in Livingston County with 44.0 percent of residents identifying as overweight and an additional 20.0 percent identifying as obese (St. Joseph Mercy Livingston Hospital, 2012, pg. 9). Coupled with an unemployment percentage of 7.0 percent, the social indicators of health for Livingston County are poor though the average household income is over \$70,000.

In rural communities, barriers include a lack of services within an reasonable driving distance or lack of transportation to those services. “Lack of availability of health care resources has been associated with poorer outcomes in many aspects of breast cancer including screening, diagnostic follow-up, stage of presentation, treatment and survival” (Akinyemiju et al, 2013, pg. 1). This means that simply because of their location, rural women are more likely to present with later-stage breast cancers than perhaps urban White women.

Similar to both the Black/African-American and Hispanic/Latina populations, a lack of health care literacy (including the understanding of medical insurance) and cost play a big role in how rural communities access services. A Montcalm County key informant indicated, “Deductibles and copays are difficult to navigate. People don't want anything that they have to pay out of pocket for. Patients will drop their insurance and pay the penalty (for not having insurance) so that they can pay the medical bills that arise regardless of having insurance.”

One surprising finding is the experience of fear that rural women have when it comes to leaving their city or county of residence. A Montcalm key informant said, “It is hard to leave that county because of fear of “big city” with crime, safety concerns, and difficulty navigating the traffic of a larger city and transportation issues.” This was echoed by another informant in Livingston who indicated that the complexity of health care campuses increased the fear of some women who presented to receive services, “Large campuses are confusing, and it takes additional time and [...] it can be really stressful for a patient. They can be running late and already not feeling so well.” This fear and the complexity of the health care campus and the health care system itself can be a deterrent for women who reside in rural communities.

The tone of interviews with key informants for rural areas differed greatly from those in other areas. There was a general sense that rural women often aren't empowered to seek care. A Cass County key informant indicated, “If a woman really wants to get services, she can. There are many times when we hear about a situation or diagnosis where “if she would have only gone in sooner.” While another informant spoke of women needing to be “their own best health advocates.” Perhaps this is an indicator that outreach avenues within these communities may be missing the target, or perhaps those activities are absent. A Cass County informant recounted the remark of a survivor in a breast cancer support group, “these women feel forgotten” by health outreach efforts.

Conclusions

There are multiple factors which inhibit Black/African-American, Hispanic/Latina, and rural women's receipt of critical breast health services. Women are inundated with information and it may not even be presented in a way that is culturally appropriate. One very astute observation by a BCCCNP Navigator was, “you can put 10 women in a room, give them all the same info, all the same images, but not all of them will get their mammograms because at the end of the day, it is a woman's choice.” At the same time, perhaps that very idea – putting the same images in front of 10 different women—is the reason for the disconnect between women and the services they need to remain healthy. There is no one-size-fits-all approach, but it is Komen Michigan's objective to utilize the information obtained from these key informants, focus group participants,

and documents reviewed to inform priorities and objectives for service delivery approaches, system change, and improvement in the continuum of care to truly end breast cancer forever.

Limitations of the Qualitative Data

As of the time of initial publication of this Community Profile, two focus groups have been performed. This does not represent all populations of interest and is a limitation as to the understanding of experiences of the underserved. However, the Affiliate intends to continue efforts to reach out to populations in communities that have not hosted a focus group as we continue to update this Community Profile annually.

While all key informant interviews were performed by Nicole Milliman, she was unable to conduct the Hispanic/Latina focus group as she is not a Spanish speaker. Angie Morales, Komen Michigan's Outreach Coordinator, conducted the group. While the same questions were asked of this group as the other focus group, translation may change context of question and answers as it has to be filtered through a different person.

As the data collection methods were designed, it was the initial inclination to create a format by which demographic data could be collected from focus group participants. A similar effort was not made to examine demographics of key informants other than questions of title and length of time within position/organization. Collecting racial and ethnic data from informants would have allowed the Affiliate the opportunity to locate additional informants within the cultural groups of interest.

Mission Action Plan

Breast Health and Breast Cancer Findings of the Target Communities

Komen Michigan selected three populations of interest based on data obtained through quantitative measures via Healthy People 2020 and a health systems analysis of the Affiliate service area. With a specific focus on health disparities, the Affiliate elected to examine Black/African American, Hispanic/Latina, and rural/underserved populations. Communities of interest to represent these populations were selected with special consideration for their higher-than-average breast cancer death rates, higher than average poverty and unemployment levels, concentrated population of minority groups, and/or distance from hospitals/clinics.

Consideration was also given to social determinants of health, including economic stability, education, health and health care, neighborhood and built environment, and social and community context. Reduced access to social and physical environments that promote good health exacerbates disparities in breast health care.

Kent, Ottawa, and Van Buren Counties were selected as communities of interest for further examination because of their higher concentrations of Hispanics/Latinas. Nearly 10 percent of the population of Van Buren County and Kent County and eight percent of Ottawa County identify as Hispanic/Latina-- an average of six percent more than other counties in the Affiliate service area. A Health Systems Analysis (HSA) found that while Hispanics/Latinas have access to the full continuum of care in all three counties, resources for culturally-informed care (including translation resources) are limited in the less-populous counties of Ottawa and Van Buren. Migrant farm workers often face language barriers, may lack documentation, and due to their transience, do not have the opportunity to familiarize with community resources.

Residents of rural areas of Michigan experience similar disparities in receiving breast health care and are the third population of interest. For rural residents of Montcalm, Cass, and Livingston, shortages of transportation and available resources in these areas limit the ability of residents to receive care. Livingston County, for example, has only three resources for clinical breast exams, having only two of those able to provide advanced services (including treatment). Unfortunately, all but one service provider is located in the City of Brighton near the southern border of the county, which is a hindrance to those residing on the fringes of the county. Notably, Montcalm County has the highest incidence of breast cancer death among all of the 20 counties in the Affiliate's territory with over 29 deaths per 100,000 individuals and *rising*. The isolated nature of these rural populations results in greater need for transportation and navigation services, including community-based navigation.

Blacks/African-Americans were identified as a population of interest with three counties chosen for further study as communities of interest. Blacks/African-Americans in Berrien, Jackson, and Muskegon Counties are more likely to reside near urban centers, and therefore are in closer proximity to health care resources. Unfortunately, their progression through the continuum of care may be impeded by barriers which can include cultural myths surrounding cancer, lack of insurance/ability to pay, and transportation to resources. These barriers may contribute to the higher late-stage breast cancer diagnoses among Black/African-American women in the communities of interest. Higher socioeconomic disparities, such as unemployment, can also

contribute to the inability to receive care. In Muskegon County, nearly one of every three (31percent) Blacks/African-Americans is unemployed. Similarly, nearly one in five (17 percent) Blacks/African-Americans is unemployed in Berrien County.

Once populations of interest were identified and representative communities of interest were selected using quantitative data and health systems analysis, the Affiliate undertook qualitative data collection and analysis through interviews, focus groups, and document review to understand specific needs in these communities. The Affiliate constructed questions to better inform the Mission Action Plan. Questions focused on the experiences and needs of the communities of interest and included:

- To what extent do sociodemographic factors such as race, ethnicity, and geographic location impact the experience and access of service for survivors and the underserved?
- What barriers impact progression through the continuum of care?
- How do sociodemographic characteristics relate to social determinants of health in relation to breast care services?

The primary goal of this study was to examine access from a continuum of care perspective, making note of disparities among women over 30 who are Black/African-American, Hispanic/Latina, or residents of the rural counties selected. Health care professionals were selected as key informants for their connection to members of the selected populations. Focus groups were used to connect directly with members of the populations of interest. Document review was used to provide community background and deeper understanding to the qualitative findings.

Much of the conversation with both key informants and focus group participants centered on barriers to accessing services. Several themes emerged, including those that were identified in the quantitative phase such as lack of transportation or financial barriers. Other issues, such as institutional racism, cultural misunderstandings, and lack of trust in the health care system arose through conversations with focus groups. Several members from both the Black/African-American and Hispanic/Latina focus groups related that their personal systems distrust came from interpersonal interactions with providers that they identified as differential treatment due to their race/ethnicity. Though both groups looked to medical practitioners as “experts,” the provider’s interpersonal skills were a determinant of whether a woman would go back for care or recommend that provider to a friend in need. In rural communities, key informant interviews identified barriers including confusion or frustration with complex medical systems and insurance requirements, fear of large cities, and transportation, which is a nuanced problem requiring different solutions than in urban areas.

The qualitative data collection and analysis examined the impact of social determinants of health on care what barriers and sociodemographic factors impact progression through the continuum of care. Key issues of access, culturally competent navigation, and survivor support emerged.

Mission Action Plan

It is evident through examination of the health systems analysis, quantitative and qualitative data that disparities exist based on race, ethnicity, and geographical location which contribute to social determinants of health. Utilizing the information obtained through this study, the Affiliate recognizes that the following needs are present:

- Black/African-American women are less likely overall to be diagnosed with breast cancer though more likely to be diagnosed with breast cancer at a late-stage *and* more likely to die from the disease;
- Hispanics/Latinas may experience difficulty accessing health care services due to language, cost, and/or documentation barriers;
- Blacks/African-Americans and Hispanics/Latinas report higher levels of medical mistrust which makes them less likely to seek medical care including preventative services;
- Women in rural areas are less likely to leave their area for services due to lack of reliable transportation or fear of larger cities. Furthermore, rural breast cancer survivors are more likely to die of breast cancer;
- Breast cancer survivors across the Komen Michigan service area lack access to survivor support programs that include wellness and lifestyle interventions, particularly services for rural residents and programs that are linguistically inclusive and culturally competent.

Utilizing this information as a lens, the Affiliate analyzed common themes to identify Mission priorities. First, across all communities of interest, the Affiliate recognizes a need for screening and diagnostic programs to fill the gaps in existing programs. Second, culturally competent navigation and education programs will help address the specific needs of the population to be served, including reducing fear and dispelling myths. Third, there is a need for survivor support programs that incorporate lifestyle interventions like exercise and nutrition. The Affiliate has proposed several priorities to address these needs across all communities it serves: Improved access, culturally appropriate community navigation, and survivorship programs.

Need Statement: In rural communities, the access to services is limited due to geographic distance and lack of reliable transportation. Black/African-American women experience access issues due to lack of reliable transportation as well, though problems and solutions require different approaches in urban versus rural settings. Hispanic/Latinas have a unique difficulty accessing services due to language barriers and some—particularly migrant farm workers—may lack legal documentation (ID cards, birth certificates, etc.). Because of its commonality among populations, “Improved Access” was chosen to represent the necessity of connecting all women to services, including those populations that fall through gaps in insurance and other programs such as high-risk women with high cost surveillance programs, and women under 40 who may face insurance denials.

Priority: Improve access to the breast health continuum of care for Black/African-American, Hispanic/Latina, high-risk women, women under 40, and women residing in rural areas.

Objectives:

1. The Affiliate will encourage FY2016-FY2019 grantees to thoughtfully consider how to reduce barriers as part of their program design such as including transportation, transportation partnerships, child care options, alternative hours, or mobile mammography as part of their cancer care programs to ensure that underserved women can obtain needed services.
2. The Affiliate will act as a community connector from FY2016 to FY2019 by answering calls and emails from women seeking no/low cost breast health services and connecting them with service providers.
3. The Affiliate will ensure grantee programs connect those who qualify to existing programs like Breast and Cervical Cancer Control and Navigation Program and Healthy Michigan Plan from FY2016 to FY2019 as long as those programs exist.

Need Statement: Navigation has become a necessary component of successful health care programs, even BCCCP recently added navigation as a component—becoming BCCCNP. Navigation can be a key tool to address needs from initially entering the continuum of care to timely progressing through the continuum. Navigation programs can address some of the barriers and needs identified. Community-based navigation—focused on education, dispelling myths, and reducing barriers to screening—can help connect underserved women to the preventative services they need. Community navigation often utilizes Community Health Workers that reflect the populations they serve and approach health in a culturally competent way. Once a woman enters the continuum of care, health institutions often have navigators to help schedule follow up care and treatment; however, few have bilingual navigation staff and most rely on translation services.

Priority: Support Culturally Appropriate Community Navigation

Objectives:

1. From FY 2016 – FY 2019, the Affiliate will support strong community education, outreach, and community navigation programs focused on dispelling myths, reducing fears, and providing support services related to breast cancer, including navigation and barrier-reduction programs (e.g. co-pays, deductibles, transportation, child care etc.) to connect clients to screening services.
2. The Affiliate will increase outreach program services, specifically focused on connecting with the faith community through Pink in the Pews. In FY2017, the program will expand to include a Hispanic/Latina initiative in addition to the existing Black/African-American program.
3. The Affiliate will partner with organizations and community groups in rural counties of Cass, Livingston, and Montcalm to exchange information regarding services and support.

Need Statement: Accessing important survivor-specific programs is key to a high quality of life after a breast cancer diagnosis; however, there are barriers to accessing services. First, there are few survivor-related resources located in each county, with many of them only serving a city-wide population. Second, transportation is a barrier for programs that serve a wider community. Third, most of these programs do not have language support services—meaning many Hispanic/Latinas may be left out of participating in these vital resources.

Priority: Increase access, use, and, availability of survivorship programs

Objectives:

1. The Affiliate will create a resource list of existing programs for health care providers and survivors to be included in its online resources guide starting in FY2016 to be updated yearly.
2. In FY2016, the Affiliate will continue to support the formation and continuation of Spanish language support groups including Latinas Unidas and create a model to share with other community organizations.
3. Grant applications from FY2016 to FY2019 will be reviewed with specific and careful consideration given to survivorship programs which focus on social and emotional wellbeing, wellness programs, and lifestyle intervention strategies.

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