

susan g. komen.  **COMMUNITY**
PROFILE REPORT 2015



SUSAN G. KOMEN®
COLUMBUS

Table of Contents

Table of Contents	2
Acknowledgments	3
Executive Summary	5
Introduction to the Community Profile Report	5
Quantitative Data: Measuring Breast Cancer Impact in Local Communities.....	6
Health System and Public Policy Analysis	8
Qualitative Data: Ensuring Community Input	10
Mission Action Plan	11
Introduction	15
Affiliate History	15
Affiliate Organizational Structure.....	18
Affiliate Service Area	19
Purpose of the Community Profile Report.....	21
Quantitative Data: Measuring Breast Cancer Impact in Local Communities	22
Quantitative Data Report.....	22
Additional Quantitative Data Exploration.....	40
Selection of Target Communities	42
Health Systems and Public Policy Analysis	50
Health Systems Analysis Data Sources	50
Health Systems Overview	50
Public Policy Overview.....	61
Health Systems and Public Policy Analysis Findings.....	68
Qualitative Data: Ensuring Community Input	70
Qualitative Data Sources and Methodology Overview.....	70
Qualitative Data Overview.....	72
Qualitative Data Findings	76
Mission Action Plan	84
Breast Health and Breast Cancer Findings of the Target Communities.....	84
Mission Action Plan	85
References	89

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® Columbus would like to extend its deepest gratitude to the Board of Directors and the following individuals who participated on the 2015 Community Profile Team:

Patricia Schmitt, MA, CRC

Board Certified Rehabilitation Counselor, Health Educator and Consultant
Self-employed

Yvonne Burry, MA

Board of Directors, Grants Chair, Susan G. Komen Columbus
Advocate in Science, Susan G. Komen

Kimberly Glover, MPH

Qualitative Data Intern
The Ohio State University, College of Public Health

Cydney Hoffman, MPH

Qualitative Data Intern
The Ohio State University, College of Public Health

Cathy Phillips, RN, OCN

Director
Columbus Cancer Clinic

Kathleen Trace, MHA, BSN, RN

Director, Area Health Education Center and Community Health Programs
Ohio University Heritage College of Osteopathic Medicine

Pauline Russ, PT

OhioHealth System Program Director
OhioHealth

Michael Uscio

Program Manager, Cancer Survivorship Services
Mount Carmel Health System

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

- Adam Bartley, Komen Columbus Quantitative Data Intern
- All of key informant interview and focus group participants
- Belpre Senior Center
- Belpre Women's Club
- Caitlin Waite, Komen Columbus Education and Outreach Intern

- Courtney Midkiff, Meigs County Health Department
- Dawn Ingles, Ohio Department of Health, Breast and Cervical Cancer Program
- Electra D. Paskett, Ph.D, The Ohio State University
- Emmanuel Lutheran Church
- Epworth United Methodist Church
- Erik Schmidt and Michelle Hurley, The Columbus Radio Group
- Komen Columbus Survivorship Steering Committee
- Licking County Library
- Martha Riggs, Genesis Cancer Center and Genesis Healthcare System
- Norma Torres, Meigs County Cancer Initiative
- Ohio Department of Health, Ohio Breast and Cervical Cancer Project
- Ohio Department of Health, Ohio Cancer Incidence Surveillance System
- Ruth Roddy, Madison County Hospital
- Sarah Johns, Komen Columbus Health Systems Analysis Intern
- Susan G. Komen Headquarters Community Profile Team

Report Prepared by:

Susan G. Komen® Columbus

929 Eastwind Drive, Suite 211

Westerville, Ohio 43081

614-297-8155

www.komencolumbus.org

Contact: Julie McMahon, Director of Mission, MPH

Executive Summary

Introduction to the Community Profile Report

Susan G. Komen® Columbus serves a 30 county service area in central and southeastern Ohio. The service area consists of a large White, rural and Appalachian population, a mixture of several suburban areas and a major Metropolitan area, Columbus, which has a more diverse population. Komen Columbus' signature event, the annual Race for the Cure®, together with special events, third party fundraisers and major donors have collectively raised and invested \$24.8 million in community programs and research since it was founded in 1993. It is the only breast cancer organization in central and southeastern Ohio combating the area's high late stage diagnosis and death rates with a combination of research and live-saving local programs to address barriers in the community. Affiliate operates efficiently and cost-effectively, focusing on making a measurable impact and moving the needle to improve poor breast cancer outcomes.

Komen Columbus funds research while also investigating and implementing evidence-based methods to make sure that research brings quality of life and survival outcomes to the Affiliate's entire service area. As of July 2015, 751 community partnerships had provided 681,289 services. The impact of this work is most clearly demonstrated by the fact that more than 579 breast cancers were diagnosed by this community work in only the last decade.

Komen Columbus is a community leader in building and advocating programming that educates women in breast self-awareness, links them to screening, and provides financial and navigational support through diagnosis, treatment and survivorship as needed. The Affiliate conducts the only assessment of breast health needs of its kind in the service area, offering not only the mechanisms to direct funding to the most impactful areas, but the expertise to identify where funding is needed and for what issues. In addition to work with community partners to deliver evidence based programming, the Affiliate educates volunteers and the community through its Breast Cancer 101 series. To address breast cancer disparities, the Affiliate has a team of Komen Ambassadors, trained education volunteers who share lifesaving breast health messages with the community by attending health fairs and community events. The Affiliate is also active in several statewide coalitions as a breast health and breast cancer leader and expert in advocacy for women and patients. The Affiliate advocates for and works with the Ohio Breast and Cervical Cancer Program and works collaboratively with Greater Cincinnati, Northeast Ohio, Northwest Ohio and other Komen Affiliates across the country as needed to maximize information sharing and impact.

The Community Profile Report assesses quantitative, health systems, policy and qualitative data to identify areas of need in the Komen Columbus service area. The collected data are used to develop a plan to address those needs, using evidence-based or best practice approaches whenever possible. The plan will incorporate all aspects of the Affiliate, including development and mission. Action items in the resulting Mission Action Plan will include grantmaking, programming and advocacy priorities.

The Community Profile demonstrates what is important to the community and what things the community would like their local businesses to focus on when investing in the community. This information on community needs and values can inform Affiliate partnerships, sponsor and donor relationships.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

Overall, breast cancer incidence in the service area and State of Ohio is similar to the rest of the U.S (32nd highest incidence rate), but death rates and late-stage incidence rates are higher than the rest of the US (5th highest death rate, 22nd highest late-stage incidence rate). Self-reported mammography use among women 50-74 years of age in the area is similar of the rest of the country (25th highest screening proportion). Based on the Healthy People 2020 breast cancer targets, Ohio is predicted to need ten years to reach the death rate target and 13 years or longer to reach the late-stage incidence target, making it a high priority state in the US.

Though breast cancer incidence rates and trends in the Komen Columbus service area were similar to that observed in the US and the rest of Ohio as a whole, the breast cancer death rate in the Komen Columbus service area was higher than that observed in the US as a whole and the death rate trend was not available for comparison with the US as a whole. The death rate of the Affiliate service area was not significantly different than that observed for the State of Ohio. For the Affiliate service area as a whole, the death rate was higher among Black/African-Americans than Whites. 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.

The breast cancer late-stage incidence rate in the Komen Columbus service area was slightly higher 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 Affiliate service area were not significantly different than that observed for the State of Ohio. For the Affiliate service area as a whole, the late-stage incidence rate was higher among Blacks/African-Americans than Whites and lower among APIs than Whites. Late-stage incidence reflects both the overall breast cancer incidence rate in the population and the mammography screening coverage.

The breast cancer screening proportion in the Komen Columbus service area was not significantly different than that observed in the US as a whole. The screening proportion of the Affiliate service area was not significantly different than the State of Ohio. For the Affiliate service area as a whole, the screening proportion was not significantly different among Blacks/African-Americans than Whites. The screening proportion among Hispanics/Latinas was not significantly different than among Non-Hispanics/Latinas. This data seems to indicate that barriers other than or in addition to screening uptake are contributing to the death rate and late-stage incidence disparities in the service area. Insurance status has long been associated with screening adherence under the assumption that the uninsured would be less likely to get recommended screenings. However, the service area data does not support this assumption, and instead shows that the late-stage diagnoses rates among more highly insured populations in Metropolitan and Suburban areas remain comparable to those of the counties in Appalachia or Rural with higher proportions of uninsured residents. On the aggregate level, this may indicate that insured women are not utilizing their preventive benefits, and progress could be

made at relative low expense by motivating insured women to screen, as well as focusing on uninsured women.

The Affiliate determined that using regional frames for analysis will guide the development of culturally competent programming. The service area was broken into three regions, Metropolitan, Suburban and Rural-Appalachian. Priority communities were identified within each region of the service area. The priority communities are made up of the highest priority or high priority counties in each of the three regions of the service area. These counties were identified as highest or high priority due to projected failure to meet Healthy People 2020 targets for death rates and late-stage diagnosis rates.

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 20.6 per 100,000 women).
- Reducing the number of breast cancers that are found at a late-stage (Target: 41.0 cases per 100,000 women). Death rate and late-stage diagnosis data and trends are used to calculate whether an area will meet the HP2020 target.

For more detail on the three regions of the service area and the rationale behind the selection of the target communities within each, refer to the Quantitative Section of the Community Profile. The target communities are:

- Metropolitan Target Community: Franklin County
- Suburban Target Community: Clark, Licking and Madison Counties
- Rural or Appalachian Target Community: Guernsey, Hocking, Noble, Marion, Meigs, Monroe, Morgan, Muskingum, Perry, Vinton and Washington Counties

Franklin County was selected as a target community due to its large female population and because it is the county with the highest number of breast cancer cases, highest number of breast cancer deaths, and the highest number of late-stage diagnoses. Given the breast cancer death disparity in the Black/African-American population, Black/African-American women are a special population within this county (the county's population is the largest at 23.0 percent). The Suburban target community (Clark, Licking and Madison Counties) accounts for the second highest number of cases, deaths and late-stage diagnoses. These counties were selected based on their predicted time to achieve death and late-stage diagnosis Healthy People 2020 goals. The Rural-Appalachian target community counties (Guernsey, Hocking, Noble, Marion, Meigs, Monroe, Morgan, Muskingum, Perry, Vinton and Washington Counties) were selected due to their predicted failure to achieve Healthy People 2020 death and late-stage diagnosis goals. The Rural-Appalachian target community is characterized by low-income, lower educational attainment, mistrust of health care providers and fatalistic attitudes towards cancer. Proximity to health care facilities varies in this region- six of the counties have hospitals and six counties are medically underserved.

Though these counties were selected for further exploration in the qualitative and health systems portions of the community profile and results of that work may not be applied to the rest

of the counties in a region, the mission action plan did not limit action or focus to the counties listed above, but will instead focus on the regions each target community is a part of.

Health System and Public Policy Analysis

The Breast Cancer Continuum of Care (CoC) is a model that shows how a woman typically moves through the health care system for breast care. A woman would ideally move through the CoC quickly and seamlessly, receiving timely, quality care in order to have the best outcomes. Education can play an important role throughout the entire CoC. There are often delays in moving from one point of the continuum to another – at the point of follow-up of abnormal screening exam results, starting treatment, and completing treatment – that can all contribute to poorer outcomes. There are also many reasons why a woman does not enter or continue in the breast cancer CoC. These barriers can include things such as lack of transportation, system issues including long waits for appointments and inconvenient clinic hours, language barriers, fear, and lack of information - or the wrong information (myths and misconceptions). Education can address some of these barriers and help a woman progress through the CoC more quickly.

An analysis of the health system assets available in each Komen Columbus target community was conducted. This work gives insight into the strengths and weaknesses of the CoC within each target community. A few themes carry throughout all target communities. Mobile mammography units are only housed in Franklin County, though they are utilized throughout the service area. With the exception of Franklin County, despite the number of resources available, resources are almost always concentrated in one or two cities per county. The availability of patient navigation varies greatly between target communities. Beyond the question of where patient navigation is located, there is also a question of the quality and comprehensiveness of those services. Areas that lacked hospitals were experiencing increasing late-stage diagnosis rates, and experiencing slower improvements in death rates, when compared to areas with hospitals, suggesting areas without hospitals as a potential focus.

Rural-Appalachian counties have fewer specialists and access screening and diagnostics mostly through clinics and health departments. Often, these services are of lower quality. Treatment, reconstruction, survivorship and palliative services are available at hubs where hospitals are located, which means transportation and patient navigation to quality resources is necessary. Suburban counties have slightly better access to quality CoC services, though for survivorship, palliative and reconstruction needs, may also need to travel. The Metropolitan area serves as a large hub to all other areas of the service area, where many comprehensive and high quality services are available. However, education about these resources may be lacking and this area may face different, urban transportation barriers.

Whether or not patient navigation is available in each target community, its quality is unknown, and should be investigated further. As most resources throughout the service areas' counties tend to be concentrated, transportation also remains a critical piece of the CoC.

Several potential partners may be important to addressing these gaps. Hospitals' Community Health Needs Assessments demonstrate that the target communities share concern about

breast cancer in their communities. These hospitals will be important partners as the central providers in those areas. Redefining the role of local health departments (LHDs) in the Affiliate's grant programming is important, and new relationships must be created with several LHDs in the target communities.

The actual quality of cancer care presents an aspect of Komen's mission that has been largely unaddressed through current health care reform, and may vary greatly even in areas with plenty of resources. More information was gathered through qualitative data regarding the dissemination of research and quality of the care which so many have gained access to recently. For example, survivorship care plans, patient navigation and the personalization of treatments are all excellent tools that increase quality of care, but may not be of equal quality or available to much of the service area, even when a hospital or other resource is present.

The effects of the Affordable Care Act's insurance mandate and preventive care coverage first began to be seen in the 2014-2015 grant year. During this year, most grantees saw previous eligible clients enroll in Medicaid or exchange plans, and gain preventive care coverage. Though the need for screening coverage still exists, the specific gaps for who is in need of that coverage are more clear, specific and limited. Meanwhile, more need has been observed for follow-up costs, which are often subject to deductibles or out of pocket limits, and present the next financial barrier in the continuum of care. This need is not limited to uninsured women, but instead includes women with insurance, and even low to middle incomes. Similarly, patient navigation models, at the community and clinical level, are an opportunity to increase adherence to recommended screening and follow-up by addressing non-traditional barriers to the continuum of care.

Komen Columbus participated in advocacy for Medicaid expansion, which was successfully achieved in the fall of 2013, through work with several coalitions and leveraging the Komen Advocacy Alliance (KAA) e-alerts in the area to write legislators. Over 100,000 of the estimated 175,000 uninsured in the service area gained insurance coverage through Medicaid expansion. Many more individuals obtained insurance through the insurance marketplace. Expanded coverage under Medicaid and access to the state insurance marketplace may have implications for BCCP in the future. The proposed FY16 budget eliminated access to the BCCP Medicaid Treatment program for women between 138-200 percent FPL. Statewide advocacy collaboration between the Ohio Affiliates convinced state leaders of the need to modernize the way BCCP funds are used in Ohio. The program was successfully defended and reintroduced into the budget due to these efforts. Future advocacy efforts will focus on modernizing BCCP to expand its use to underinsured women, to cover out of pocket and diagnostic costs, as well as more case management and patient navigation. BCCP remains a crucial safety net program, especially as a transitional resource in between employer based insurance coverage, and as a gateway into medical homes and Medicaid enrollment for eligible women. Several legislators have been interested in proposing legislation to modernize the program. The Affiliate can maximize impact and efficiency by updating grantmaking eligibility and referral criteria to carefully match BCCP's eligibility gaps.

In summary, implications of the Affordable Care Act, while still being surfacing, have shifted much of the need for focus on financial barriers from screening to diagnostic and follow-up costs. Partnerships with health departments, federally qualified health centers and hospitals

can be enhanced with coalition building and more seamless navigation. As the number of insured grows, adjustments in grantmaking eligibility criteria and programming priorities will shift to focus on new gaps and barriers. The financial barriers previously addressed (i.e. free or low cost mammography) may not be as prevalent as insurance coverage includes no cost sharing for preventive care. Instead, new financial barriers are emerging, like out of pocket or deductible costs for follow-up diagnostics after abnormal screening results. Educational barriers about how to use newly obtained insurance coverage may exist, as well as how to navigate through the system and improve the quality of care experienced equally by all patients to reduce breast cancer death disparities. This points to maintaining a focus on screening, but building emphasis on later parts of the continuum of care, including out of pocket costs and patient navigation.

Qualitative Data: Ensuring Community Input

After assessing the quantitative, health systems and policy data, several breast health factors were identified for further qualitative investigation through focus groups and key informant interviews including: attitudes and beliefs, knowledge, utilization, access, transportation to each step of continuum, cost and other barriers, and knowledge of resources including patient navigation. Certain implications of data collection methods limit capability of the findings to represent each target community accurately.

In Metropolitan and Suburban communities, fear of diagnosis, misconceptions about pain or discomfort of screening, and a lack of education about resources, risk or recommendations emerged as the top barriers to care. These concerns were followed by costs and insurance issues, and general access issues like child care, convenience, and the struggle of many women to prioritize their health over competing family needs. Transportation was not nearly as concerning in these areas as it was in Rural-Appalachian areas, where it was the top barrier. After transportation, time and convenience, fear and education emerged as important.

Media, newspaper, TV and internet were used throughout all areas, but more available in Suburban and Metropolitan communities. The Rural-Appalachian community relies more heavily on health departments for health care information.

There are extensive misconceptions about risk and breast cancer in the Rural-Appalachian area. Similar beliefs were reported in the Suburban community, though are not held as deeply or as widely. Understanding of family history and genetic factors varies widely. Participants in all communities were aware of the relationship between family history and genetic factors and breast cancer risk. There was a general understanding that a family history may mean increased risk of breast cancer. However, there was confusion over what constitutes a family history and how the BRCA gene affects risk.

Respondents from all areas have a mixture of experiences with providers. Though most report positive experiences with providers and recommendations, some women did not feel like their provider communicated with them effectively about their care. More information was requested about lifestyle changes after diagnosis such as exercise patterns and dieting recommendations. Almost no women in any area received survivorship care plans, and a few did not feel informed about their reconstruction options.

Among Metropolitan respondents, concerns about trust centered on the time spent with a patient by a provider, costs and fear, more than distrust of the actual provider. In the Suburban areas, many women have the impression that they can access better facilities and care in Columbus, but generally, respondents reported trusting their providers and the health care system. In the Rural-Appalachian area, word of mouth plays a critical role, and one negative experience with a provider leads to distrust within the whole system.

Experiences with patient navigators (PNs) varied from extremely positive to non-existent. Most women in all three communities had never heard of a PN, including survivors. Further investigation of patient navigation in the service area showed wide-ranging definitions, uses, descriptions and training for navigators.

Qualitative data affirmed the findings of the health systems analysis, which identified gaps in follow-up care, patient navigation, survivorship services and transportation in Suburban and Rural-Appalachian communities. Those in the Metropolitan area enjoy a wider variety of services, which are more easily accessible. Those in Suburban and Rural-Appalachian communities must travel farther to screening, though that distance and difficulty varies widely, and lack the variety of options offered in Columbus. Mobile mammography was generally seen as a critical tool in each community, though reasons varied. Health departments play an additional critical role in the Rural-Appalachian counties as a source of information and clearinghouse for resources than in other areas. Providers are relied on less directly than in other areas, and awareness of Komen grant funding opportunities and services offered is poor.

Mission Action Plan

Problem statements were drawn directly from the findings and major themes of the preceding data sections. Priorities and possible action steps were identified through discussions and suggestions from a mission action planning team, made up of key stakeholders, providers and other content experts, who provided input and feedback. Staff used those suggestions to develop objectives that were measurable, time-bound and specific.

Problem Statement: The Metropolitan, Suburban, and Rural-Appalachian target communities experience informational, financial, logistical and physical barriers to entering the continuum of care through recommended screening which contributes to higher than average breast cancer late-stage diagnosis and death rates. Qualitative and health systems analysis revealed these communities experience communication and access barriers to accessing, adhering to and receiving high quality care in a timely manner.

Priority: Increase the number of women entering the continuum of care through recommended screening by increasing breast self-awareness, understanding of personal risk, inherited risk, and reduce fears and myths surrounding screening and breast cancer, motivating and utilizing available resources, including utilizing existing insurance.

Objective 1: By September 2016, an educational webinar will be conducted with at least three community partners in the Suburban community and three community partners in the Metropolitan community.

Objective 2: On an annual basis (FY16 –FY19), Affiliate website will be updated with local resources for the Suburban, Metropolitan and Rural-Appalachian Regions, including local community health programs and screening resources.

Objective 3: By September 2015, promote local resources by disseminating link to website directory to at least 30 community partners and stakeholders in Suburban, Metropolitan and Rural-Appalachian Regions, repeating on an annual basis (FY16 – FY19).

Objective 4: By September 2019, provide support to local health plans in improving the screening rate among the Managed Care Plan members in Ohio by supporting partnerships with funded Komen Columbus programs, providing disparity awareness information, and training in support navigating non-compliant plan members to screening and follow-up.

Objective 5: By October 2016, add at least one evidence-based model component to include in the Worship in Pink program in Rural-Appalachian and Metropolitan communities.

1. Increase participation of Metropolitan faith-based organizations in the Worship in Pink program by five percent in FY2016, specifically addressing the Black/African-American population (baseline is 27 organizations in FY2015). Grow participation an additional two organizations in FY2017. Increase participation an additional two organizations in FY2018. Increase participation an additional two organizations in FY2019.
2. Expand participation in the Worship in Pink program from a baseline of five in FY2015 to ten participating organizations in Suburban community in FY2016. Grow by additional two organizations in FY2017. Grow participation an additional two organizations in FY2018. Grow participation an additional two organizations in FY2019.

Priority: Increase availability of mobile mammography in Suburban and Rural-Appalachian communities.

Objective 1: By 2017, hold a stakeholder meeting with six mobile mammography providers and partner organizations in Rural-Appalachian counties to discuss issues related to mobile mammography, including referrals, sites, target populations and partners, follow-up and availability of mobile units.

Objective 2: By FY2017, Community Grant RFA will include mobile mammography as a funding priority for the Rural-Appalachian community.

Priority: Improve the quality and capacity of clinical and lay patient navigation in all target communities to assess and address informational, educational, financial, logistical and other barriers to screening or follow-up care

Objective 1: In FY16 and FY17, deliver at least one online patient navigator training each year through Walgreens grant to reach at least 25 of patient navigators.

Objective 2: From FY2016 to FY2019, Community Grant RFA will include evidence-based education approaches that will dispel fears and measurably increase education and breast self-awareness with appropriate partners as a funding priority for programs occurring in the Metropolitan, Suburban and Rural-Appalachian regions.

Objective 3: From FY2016 to FY2019, Community Grant RFA will include evidence-based approaches to increase utilization of insurance benefits among non-compliant, insured population in Suburban, Metropolitan and Rural-Appalachian counties as a funding priority.

Objective 4: In FY2016, create RFA that reduces the financial barriers to screening, diagnostics and follow-up care in Suburban, Metropolitan and Rural-Appalachian counties (may include co-pays, out of pocket costs, genetic testing costs, transportation and more). Evaluate and revise RFA based on new evidence-based models, and previous years' grant outcomes through FY2019.

Objective 5: In FY2016, create RFA that reduces the physical and logistical barriers to screening, diagnostics and follow-up care in Suburban, Metropolitan and Rural-Appalachian counties (may include transportation vouchers, extended hours of availability, mobile mammography at workplaces and in communities lacking screening access). Evaluate and revise RFA based on new evidence-based models, and previous years' grant outcomes through FY2019.

Objective 6: FY2016 to FY2019, Community Grant RFA includes evidence-based patient navigation targeting vulnerable populations at the point of an abnormal screening result as a funding priority for programs in Rural-Appalachian and Suburban Regions.

Objective 7: Create a network for communication between patient navigators (meetings, listserv) to enable promotion of resources to patient navigators by FY2017.

Objective 8: Promote the use of available self-advocacy materials (i.e. Questions to Ask the Doctor series) to providers, patients and navigators through at least 10 social media posts, one letter to oncology offices partners by FY2017, and again in FY2019, and communication with navigators funded through Community Grant programs.

Objective 9: Improve capacity and quality of patient navigation through new strategic, philanthropic partnerships to support at least one pilot project by September 2018

Priority: Increase awareness of metastatic breast cancer resources and improve sensitivity to and support of metastatic breast cancer patients.

Objective 1: Disseminate the Metastatic Breast Cancer Toolkit to at least 30 community partners, hospitals and patient navigators in all target communities by FY2016.

Objective 2: Meet with or communicate with at least 30 provider community partners to promote available educational resources for metastatic breast cancer patients (fact sheets) by FY2017.

Priority: Increase awareness of and reduce the disparity in breast cancer mortality among local African American women.

Objective 1: Conduct quality assessment of resources in Metropolitan target community by June 2018.

Objective 2: Incorporate polices that improve overall social determinants of health into FY2018 RFA and other strategic mission partnerships and advocacy work.

Objective 3: Provide at least ten trainings (providers, health plans, policymakers, community) about breast cancer disparities and local solutions by June 2018.

Objective 4: Identify and implement at least two innovative partnerships to address disparities by July 2018.

Problem Statement: Health Systems Analysis revealed threats to the funding of the Breast and Cervical Cancer program. Advocacy work to adapt to ongoing health care reform and to protect BCCP are necessary.

Priority: Through advocacy, support the budget for and partner with the Ohio Breast and Cervical Cancer Program to ensure the continuum of care for its clients.

Objective 1: Coordinate with the other state affiliates through monthly meetings to support funding in the FY2016-2017 and FY2017-2018 state budgets.

Objective 2: Promote the state income tax check-off donation option in February and March of FY2017 so that enough donations are received to keep the check-off on the ballot for the following year.

Objective 3: Meet with BCCP quarterly to address any coverage gaps for BCCP clients due to changing eligibility.

Objective 4: Incorporate partnerships with BCCP and knowledge of unmet need into RFA by FY2017, to be used through 2019.

Objective 5: Promote the state income tax check-off donation option in December- March each year to increase BCCP funding.

Objective 6: Coordinate with the other state affiliates through monthly meetings to support increased funding in the FY2019-2020 state budget from FY2017-2018 levels.

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

Introduction

Affiliate History

Susan G. Komen® Columbus was founded in 1993 by three dedicated volunteers who were moved by a speech given by Nancy G. Brinker. Founding members Yvonne Simon-Perotti, Ellen Hardyman, and Mike Collins worked tirelessly to organize the first Komen Columbus Race for the Cure®, held on September 18, 1993. The first Race brought 749 people to the heart of the capital city and raised \$54,000. Columbus was one of the first dozen cities to hold a Race for the Cure in the United States. Today, there are more than 114 affiliates throughout the country and across the world which hold Race events.

The second Race in May 1993 drew nearly 1,800 participants, by 2002 it raised its first million dollars, and as of 2015, is the largest Race for the Cure in the country. The Race was voted by the community as the Best Charity Event in Columbus Monthly and Columbus CEO magazine for several years in a row. In 2015, the Affiliate will launch a second race, the Athens Race for the Cure.

In addition to the Race, the Affiliate has several other events and initiatives, including, but not limited to:

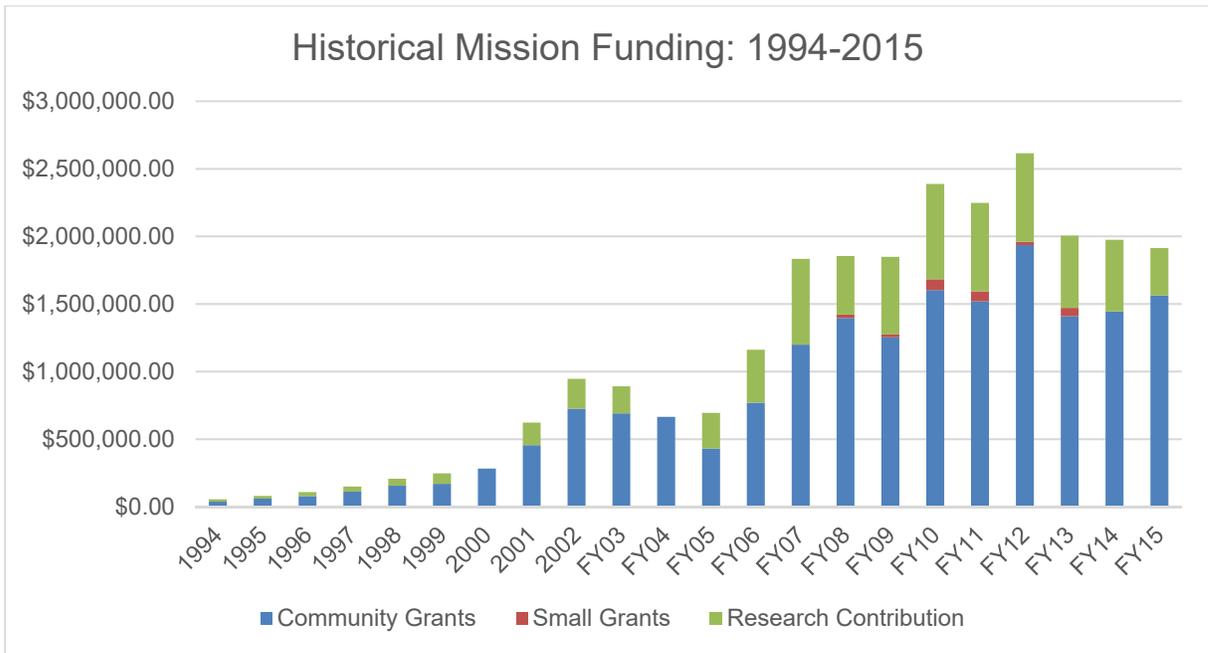
- Currently in its second year, Spare Nothing for the Cure is a fun, family-focused bowling event and has raised nearly \$5000.
- In 2014, 74 schools from 24 of the Affiliate's 30 counties registered to hold a Volley for the Cure event and as of the end of the year, \$89,000 was raised. Programs range from middle school through high school, providing an incredible outlet for engaging a younger generation.
- Each year Komen Columbus partners with dozens of community organizations interested in supporting the work of the Affiliate. The type of fundraisers range from a percentage of sales during one evening at a local restaurant to a portion of proceeds from an exercise class or sale of a specific item at a store. Komen Columbus proactively seeks out these partnerships, but also is often approached by the organization.
- The Susan G. Komen Columbus e-newsletter which delivers programming, events and educational information to more than 35,000 subscribers each month.
- The "Thriving" e-newsletter, a survivor-specific, monthly newsletter, containing survivorship and healthy lifestyle information and networking opportunities for breast cancer survivors.

Komen Columbus has proven its effectiveness at managing change, evolving throughout the years and operating efficiently. Much of the Affiliate's success is attributable to the leadership of Katie Carter, who has been the executive director at the Affiliate for the past 14 years. Under her leadership, the Affiliate's service area grew from 18 to 30 counties and Ohio became a "pink state" with all 88 counties covered by an Ohio Komen Affiliate. Katie is a leader within the Komen network and was instrumental in increasing collaboration between Ohio Affiliates, and the other Affiliates in the East Central Region. In 2011, the Affiliate was awarded the Philanthropic Spirit Award given by the Columbus Cancer Clinic, and in 2013 was chosen by Susan G. Komen Headquarters as the Affiliate of the Year.

Besides the federal government, Susan G. Komen is the largest funder of breast cancer research in the world. Komen Columbus contributes to this research investment with 25 percent of every dollar raised, totaling a contribution of \$6.6 million to the more than \$847 million Komen has funded since 1982. Komen's investment in the best research across the globe is evident in Ohio. Since 1999, Komen has funded a total of 44 research grants to 40 scientists and clinicians and three breast cancer scientists-in-training.

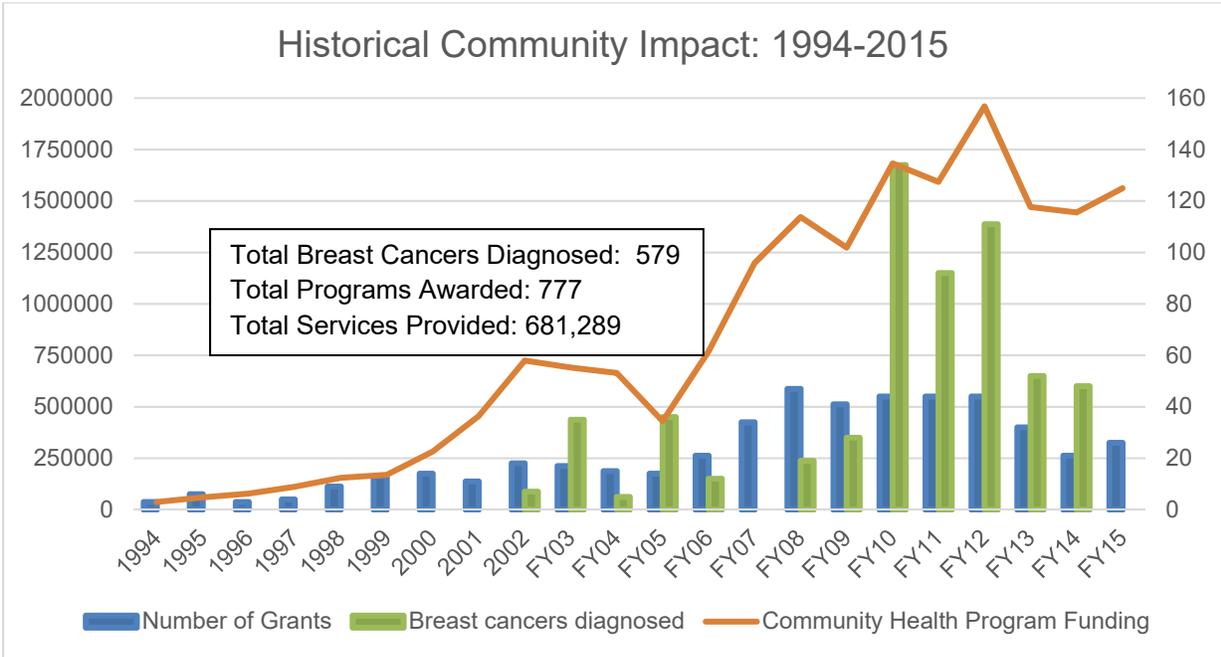
While working diligently to find the cures for breast cancer, the Affiliate is committed to care for the women and men coping with the disease today. The remaining 75 percent of every dollar is focused on making that research available to local women through the community partnerships. True to being part of the largest grassroots breast cancer movement in the world, the Affiliate works with local community partners that fill gaps in services, remove barriers to resources and serve vulnerable populations in Central and Southeastern Ohio, making quality treatment available to everyone. Since 1993, the Affiliate has invested \$18.2 million in these community health partnerships through its Community Health program. Innovative programs have included educational outreach programs for underserved populations including Black/African-American women, Hispanic/Latina women and Amish and Mennonite women. Partnerships with all major health systems in central Ohio and many hospitals and mobile mammography throughout Southeastern Ohio are strategically placed to bring access to as many of the women in the service area as possible. Figure 1.1 demonstrates the innovative grantmaking model that balances research and community programming. Together with research investments, Komen Columbus' \$18.2 million investment in empowering people, ensuring quality care for all and \$6.6 million investment in energizing science totals more than \$24.8 million (Figure 1.1).

As of July 2015, 751 community partnerships have provided 681,289 services. The impact of this work is most clearly demonstrated by the fact that more than 579 breast cancers were diagnosed by this community work in only the last decade (Figure 1.2).



Years marked by "FY" indicate a fiscal year beginning April of the named year and ending March of the following year (i.e. FY2014 is April 2014-March 2015). Number of grants does not include small grants or scholarships. Research contribution for FY15 is partial.

Figure 1.1. Historical Mission Funding: 1994-2015



Data incomplete from 1994-FY2003. Years marked by "FY" indicate a fiscal year beginning April of the named year and ending March of the following year (i.e. FY2014 is April 2014-March 2015).

Figure 1.2. Historical Grants Impact: 1994-2015

In addition to work with community partners, the Affiliate educates volunteers and the community through its Breast Cancer 101 series. To address breast cancer disparities, the Affiliate has a team of Komen Ambassadors, trained education volunteers who share lifesaving breast health messages with the community by attending health fairs and community events.

As a breast health and breast cancer leader and expert in the community, the Affiliate is a member of the Ohio Partners for Cancer Control and its State Cancer Control Plan, and a member of the Ohio Chronic Disease Workgroup. The Affiliate advocates for and works with the Ohio Breast and Cervical Cancer Program, and together with community partners is active in educating women in breast self-awareness, linking them to screening, and providing financial and navigational support through diagnosis, treatment and survivorship as needed. The Affiliate conducts the only assessment of breast health needs of its kind in the service area, offering not only the mechanisms to direct funding to the most impactful areas, but the expertise to identify where funding is needed and for what issues. Komen Columbus works collaboratively with Greater Cincinnati, Northeast Ohio, Northwest Ohio and other Komen Affiliates across the country as needed to maximize information sharing and impact.

Affiliate Organizational Structure

There are currently eight staff and an executive director leading the Affiliate. Five directors (Directors of Finance, Strategic Partnerships, Events, Mission and Communication) report directly to the executive director. The Data Coordinator reports to the Director of Finance, the Events and Volunteer Manager and Corporate Relations Manager each report to the Director of Events. Mission, survivorship steering and the public policy collaborative are led by the director of mission; the director of communication leads the communication committee; the race volunteer committee is led by the director of events and other committees may be created as needed. The executive director is an advisor to the Komen Young Professionals group. The staff organizational chart is shown in Figure 1.3.

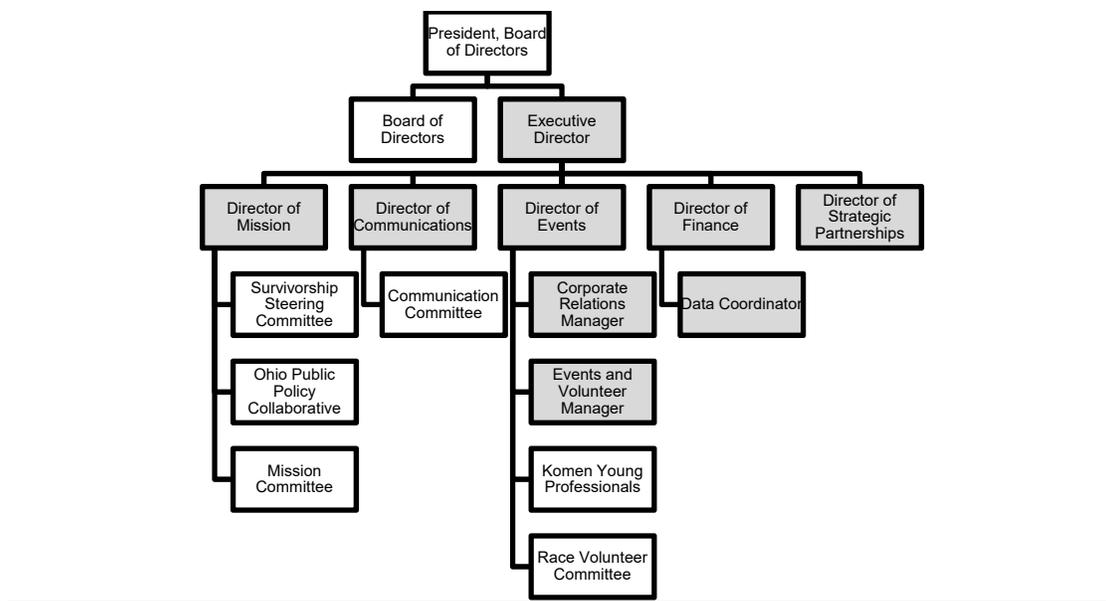


Figure 1.3. Susan G. Komen Columbus Organizational Chart

The Susan G. Komen Columbus Board of Directors consists of 14 members and as a whole the Board guides and directs the affairs of the Affiliate. This Board is a governing body and Board members are solely responsible for addressing the following functions: policy making, strategic planning, financial oversight, board governance, legal issues, stewardship and providing feedback to the president on the annual evaluation of the executive director. The board also represents the Affiliate in a positive manner to the community, organizations, businesses and individuals.

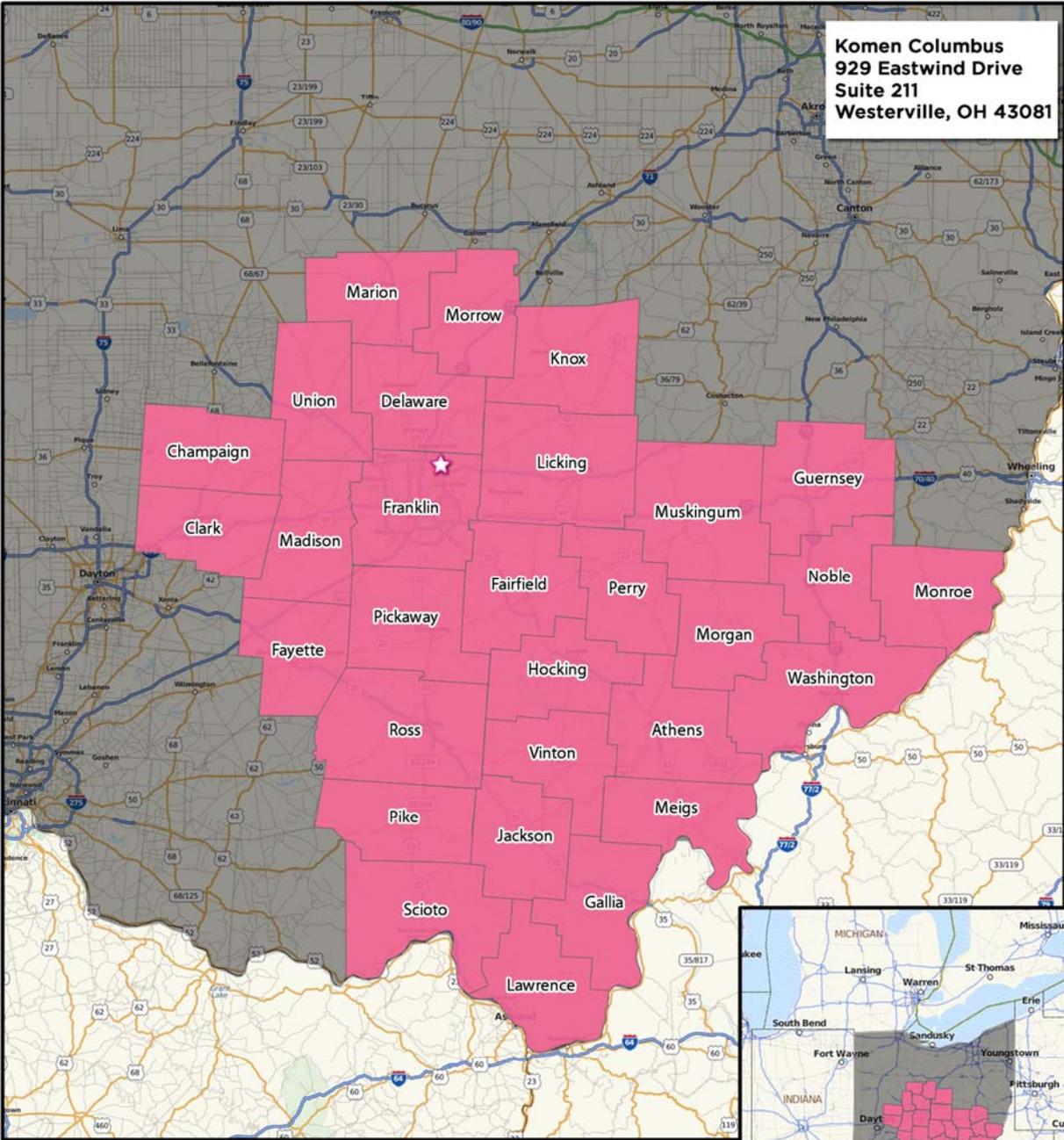
Affiliate Service Area

The Affiliate's 30-county Affiliate service area is located in central and southeastern Ohio, and consists largely of a White and rural population (Figure 1.4). The female population is 85.3 percent White, 11.8 percent Black/African-American, 0.4 percent American Indian and Alaska Native (AIAN), 2.6 percent Asian and Pacific Islander (API) and 2.7 percent Hispanic/Latina. Despite the apparent homogeneity of the service area, it is important to note that areas of diversity and cultural differences do exist and may influence health behaviors and barriers to care. Franklin County has a sizeable Black/African-American population and a larger proportion of other races and ethnicities than other counties, and is home to a third of the female population in the service area. Franklin County is also home to multiple ethnic, racial and social subgroups including the third largest population of Somalis in the world, and an established homosexual community. Franklin County is the seat of the state capital, Columbus, a noteworthy young professional community, with many colleges and a major university and several large hospital systems.

Seventeen counties are classified by the government as Appalachian; a geographic region characterized by isolation, poverty, lower educational attainment and social characteristics that affect health behaviors such as modesty and privacy. A large portion of rural and suburban counties are plagued by low employment, low income, and low education and experience more transportation and financial barriers to health care. Many health systems, a few large universities and many smaller colleges are located throughout this area.

Overall, breast cancer incidence in the service area and State of Ohio is similar to the rest of the US (32nd highest incidence rate), but death rates and late-stage incidence rates are higher than the rest of the US (5th highest death rate, 22nd highest late-stage incidence rate). Self-reported mammography use among women 50-74 years of age in the area is similar of the rest of the country (25th highest screening proportion). Based on the Healthy People 2020 breast cancer targets, Ohio is predicted to need ten years to reach the death rate target and 13 years or longer to reach the late-stage incidence target, making it a high priority state in the US.

KOMEN COLUMBUS SERVICE AREA



Komen Columbus
929 Eastwind Drive
Suite 211
Westerville, OH 43081

 Komen Columbus Office  Service Area

Figure 1.4. Susan G. Komen Columbus service area

Purpose of the Community Profile Report

The purpose of the Community Profile Report is to collect data to identify areas of need in the Komen Columbus service area. Populations, geographies, health systems and all components of the service area are evaluated and used to develop a plan to address those needs. The plan will incorporate all aspects of the Affiliate, including development and mission.

The Profile will be used by the Affiliate first and foremost to identify grantmaking and mission programming priorities. The Community Profile demonstrates what is important to the community and what things the community would like their local businesses to focus on when investing in the community. It will also be used to inform Affiliate capacity building and infrastructure, to develop sellable opportunities that incorporate the mission, to understand potential new strategic corporate partnerships, fundraising and events.

The Profile will be shared in the community through webinars and presentations, print and distribution, the creation of infographics for social media, and press release. It will be shared with corporate and community partners, legislators, health care systems, coalitions, and all staff and volunteers. It will also be shared with all focus group and key informant interview participants.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

Quantitative Data Report

Introduction

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

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

The following is a summary of Komen Columbus' Quantitative Data Report. For a full report please contact the Affiliate.

Breast Cancer Statistics

Incidence rates

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

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

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

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

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

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

Death rates

The breast cancer death rate shows the frequency of death from breast cancer among women living in a given area during a certain time period (Table 2.1). Like incidence rates, death rates may be calculated for all women or for specific groups of women (e.g. 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*	-
Ohio	5,895,383	8,319	120.8	-0.1%	1,820	24.8	-1.9%	2,972	44.0	0.6%
Komen Columbus Service Area	1,442,796	1,895	122.3	-0.1%	412	25.7	NA	689	44.8	1.1%
White	1,239,201	1,708	122.5	0.1%	367	25.1	NA	608	44.1	1.9%
Black/African-American	163,959	155	119.4	-2.1%	43	33.4	NA	71	54.1	-5.1%
American Indian/Alaska Native (AIAN)	5,522	SN	SN	SN	SN	SN	SN	SN	SN	SN
Asian Pacific Islander (API)	34,115	15	63.0	9.7%	SN	SN	SN	4	17.1	7.7%
Non-Hispanic/ Latina	1,409,295	1,887	123.1	-0.1%	411	25.8	NA	687	45.1	1.1%
Hispanic/ Latina	33,501	7	53.3	1.6%	SN	SN	SN	SN	SN	SN
Athens County - OH	32,363	33	116.7	-1.5%	6	18.7	-4.1%	10	35.1	-6.9%
Champaign County - OH	20,247	29	123.3	3.4%	6	23.7	-2.4%	10	43.0	11.7%
Clark County - OH	71,971	114	126.9	2.2%	26	27.1	-1.2%	43	49.7	3.3%
Delaware County - OH	84,110	113	143.2	2.0%	18	23.2	-2.4%	37	45.2	4.7%
Fairfield County - OH	72,571	103	130.4	-5.6%	23	28.6	-0.9%	34	43.0	-7.9%
Fayette County - OH	14,690	17	92.7	-13.6%	5	28.7	NA	4	23.6	-9.1%
Franklin County - OH	585,597	730	128.6	-1.0%	161	27.7	-1.7%	263	45.8	-2.0%
Gallia County - OH	15,711	21	111.3	9.3%	4	23.1	-2.1%	8	47.2	5.9%
Guernsey County - OH	20,615	35	139.3	-4.6%	7	24.6	-0.1%	17	69.3	-7.2%
Hocking County - OH	14,666	20	121.8	17.7%	5	25.1	0.9%	5	32.2	5.4%
Jackson County - OH	16,965	20	98.8	0.5%	5	22.7	-2.5%	9	44.4	6.8%
Knox County - OH	30,816	48	139.2	7.8%	8	23.6	-2.7%	15	44.3	7.5%
Lawrence County - OH	32,256	46	116.2	-2.2%	12	28.1	-0.2%	15	41.4	-4.2%
Licking County - OH	83,659	118	123.6	-0.5%	27	27.9	-0.7%	38	40.5	4.4%
Madison County - OH	19,476	28	123.7	6.4%	7	28.2	-1.8%	13	57.7	11.9%
Marion County - OH	31,627	46	119.0	1.6%	11	25.9	-2.6%	20	53.1	0.7%
Meigs County - OH	12,044	13	86.2	2.1%	SN	SN	SN	3	23.6	13.3%
Monroe County - OH	7,415	9	86.0	3.3%	SN	SN	SN	4	40.3	21.0%
Morgan County - OH	7,582	9	89.7	10.7%	SN	SN	SN	4	40.1	16.0%
Morrow County - OH	17,377	24	122.7	-4.4%	7	33.2	-28.1%	10	53.4	-7.7%
Muskingum County - OH	44,492	57	106.2	-1.0%	15	27.2	-1.6%	24	46.9	6.6%
Noble County - OH	6,195	6	69.8	-1.4%	SN	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	Incidence Rates and Trends			Death Rates and Trends			Late-stage Rates and Trends		
		# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of Deaths (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)
Perry County - OH	17,961	22	106.5	-0.9%	6	28.1	-1.8%	10	49.0	-1.4%
Pickaway County - OH	25,996	34	113.9	3.9%	7	24.7	-3.3%	11	36.7	4.1%
Pike County - OH	14,481	18	108.1	-9.8%	3	18.4	-1.7%	6	36.6	-29.0%
Ross County - OH	36,636	48	109.3	-5.9%	8	17.6	-2.2%	18	41.9	7.4%
Scioto County - OH	40,014	50	102.0	1.2%	11	20.8	-2.0%	22	44.4	-0.1%
Union County - OH	26,678	27	108.4	-1.6%	5	19.3	-4.2%	10	43.0	5.2%
Vinton County - OH	6,769	7	98.8	12.2%	SN	SN	SN	SN	SN	SN
Washington County - OH	31,816	49	118.9	3.5%	11	24.7	-1.5%	17	44.5	14.9%

*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 2005-2009 for incidence and late-stage data and 2006-2010 death data.

Rates are in cases or deaths per 100,000.

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

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

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

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

Incidence rates and trends summary

Overall, the breast cancer incidence rate and trend in the Komen Columbus service area were similar to that observed in the US as a whole. The incidence rate and trend of the Affiliate service area were not significantly different than that observed for the State of Ohio.

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 Affiliate 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 Affiliate service area to report on AIANs so comparisons cannot be made for this racial group. The incidence rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

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

- Delaware County

The incidence rate was significantly lower in the following counties:

- Fayette County
- Meigs County
- Monroe County
- Muskingum County

- Noble County
- Scioto County

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

- Knox County

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

- Pike County

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

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

Death rates and trends summary

Overall, the breast cancer death rate in the Komen Columbus service area was higher than that observed in the US as a whole and the death rate trend was not available for comparison with the US as a whole. The death rate of the Affiliate service area was not significantly different than that observed for the State of Ohio.

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 Affiliate service area as a whole, the death rate was higher among Blacks/African-Americans than Whites. There were not enough data available within the Affiliate service area to report on APIs and AIANs so comparisons cannot be made for these racial groups. Also, there were not enough data available within the Affiliate service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

The death rate was significantly lower in the following county:

- Ross County

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

Late-stage incidence rates and trends summary

Overall, the breast cancer late-stage incidence rate in the Komen Columbus service area was slightly higher 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 Affiliate service area were not significantly different than that observed for the State of Ohio.

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 Affiliate 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 Affiliate service area to report on AIANs so

comparisons cannot be made for this racial group. Also, there were not enough data available within the Affiliate service area to report on Hispanics/Latinas so comparisons cannot be made for this group.

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

- Guernsey County

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

- Fayette County
- Meigs County

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

Mammography Screening

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

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

American Cancer Society	National 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 whom the BRFSS determines should have mammograms (i.e. women age 50 to 74).
- The number of these women who actually had a mammogram during the past two years.

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

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

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

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

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

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
US	174,796	133,399	77.5%	77.2%-77.7%
Ohio	5,046	3,891	77.0%	75.5%-78.4%
Komen Columbus Service Area	1,104	860	77.8%	74.5%-80.8%
White	1,031	795	76.8%	73.4%-79.9%
Black/African-American	50	45	87.1%	69.5%-95.3%
AIAN	SN	SN	SN	SN
API	SN	SN	SN	SN
Hispanic/ Latina	10	7	76.7%	36.8%-94.9%
Non-Hispanic/ Latina	1,086	846	77.6%	74.3%-80.6%
Athens County - OH	45	34	84.2%	63.8%-94.1%
Champaign County - OH	16	12	82.2%	53.3%-94.9%
Clark County - OH	43	35	86.8%	69.7%-94.9%
Delaware County - OH	37	28	81.9%	61.5%-92.8%
Fairfield County - OH	51	42	82.3%	67.1%-91.4%
Fayette County - OH	12	8	36.6%	14.7%-66.0%
Franklin County - OH	246	201	80.7%	74.0%-85.9%
Gallia County - OH	39	24	66.1%	45.2%-82.2%
Guernsey County - OH	27	22	82.0%	58.8%-93.6%
Hocking County - OH	20	17	93.1%	63.7%-99.0%
Jackson County - OH	39	32	73.4%	54.1%-86.6%
Knox County - OH	32	25	77.3%	56.1%-90.1%
Lawrence County - OH	59	44	67.6%	50.9%-80.8%
Licking County - OH	70	53	74.4%	59.3%-85.2%
Madison County - OH	14	10	64.4%	36.0%-85.3%
Marion County - OH	28	22	79.8%	54.4%-92.9%
Meigs County - OH	28	25	91.9%	69.3%-98.3%
Monroe County - OH	13	11	85.0%	57.3%-96.0%
Morgan County - OH	16	10	49.7%	22.7%-76.9%
Morrow County - OH	SN	SN	SN	SN
Muskingum County - OH	68	62	95.4%	83.7%-98.8%
Noble County - OH	10	7	89.9%	54.0%-98.5%
Perry County - OH	17	15	92.2%	63.3%-98.8%
Pickaway County - OH	23	15	57.9%	34.2%-78.5%
Pike County - OH	11	9	87.0%	45.0%-98.2%
Ross County - OH	18	11	61.3%	33.6%-83.3%
Scioto County - OH	21	15	73.0%	44.7%-90.0%
Union County - OH	17	13	77.9%	51.9%-92.0%
Vinton County - OH	14	10	80.6%	53.9%-93.6%
Washington County - OH	63	44	69.8%	55.4%-81.2%

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

Data are for 2012.

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

Breast cancer screening proportions summary

The breast cancer screening proportion in the Komen Columbus service area was not significantly different than that observed in the US as a whole. The screening proportion of the Affiliate service area was not significantly different than the State of Ohio.

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 Affiliate 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 Affiliate service area to report on APIs and AIANs so comparisons cannot be made for these racial groups. The screening proportion among Hispanics/Latinas was not significantly different than among Non-Hispanics/Latinas.

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

- Fayette County

The following county had a screening proportion significantly higher than the Affiliate service area as a whole:

- Muskingum County

The remaining counties had screening proportions that were not significantly different than the Affiliate service area as a whole or did not have enough data available.

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 %
Ohio	84.2 %	13.4 %	0.3 %	2.0 %	97.0 %	3.0 %	50.5 %	36.9 %	16.0 %
Komen Columbus Service Area	85.3 %	11.8 %	0.4 %	2.6 %	97.3 %	2.7 %	47.3 %	33.6 %	13.9 %
Athens County - OH	93.0 %	3.6 %	0.5 %	2.9 %	98.2 %	1.8 %	36.8 %	27.1 %	11.8 %
Champaign County - OH	95.9 %	3.0 %	0.5 %	0.6 %	98.9 %	1.1 %	51.7 %	37.4 %	16.2 %
Clark County - OH	88.8 %	9.9 %	0.4 %	0.9 %	97.5 %	2.5 %	52.6 %	39.6 %	18.2 %
Delaware County - OH	91.1 %	3.9 %	0.2 %	4.8 %	97.8 %	2.2 %	47.1 %	30.1 %	10.8 %
Fairfield County - OH	91.8 %	6.4 %	0.3 %	1.6 %	98.3 %	1.7 %	49.7 %	34.4 %	14.0 %
Fayette County - OH	96.2 %	2.8 %	0.3 %	0.8 %	98.3 %	1.7 %	51.3 %	37.9 %	16.5 %
Franklin County - OH	71.9 %	23.3 %	0.4 %	4.3 %	95.5 %	4.5 %	42.9 %	29.8 %	11.5 %
Gallia County - OH	96.2 %	2.8 %	0.4 %	0.5 %	99.1 %	0.9 %	51.9 %	39.1 %	17.8 %
Guernsey County - OH	97.2 %	2.0 %	0.3 %	0.5 %	99.0 %	1.0 %	53.3 %	39.9 %	17.7 %
Hocking County - OH	98.4 %	0.8 %	0.4 %	0.4 %	99.3 %	0.7 %	52.7 %	38.3 %	16.1 %
Jackson County - OH	98.1 %	1.0 %	0.4 %	0.5 %	99.2 %	0.8 %	50.7 %	37.3 %	16.1 %
Knox County - OH	97.6 %	1.3 %	0.3 %	0.8 %	98.8 %	1.2 %	49.4 %	37.0 %	16.2 %
Lawrence County - OH	96.8 %	2.5 %	0.2 %	0.5 %	99.3 %	0.7 %	52.4 %	38.5 %	17.2 %
Licking County - OH	94.6 %	4.0 %	0.4 %	1.1 %	98.5 %	1.5 %	50.6 %	36.0 %	14.9 %
Madison County - OH	96.4 %	2.5 %	0.3 %	0.8 %	98.6 %	1.4 %	51.3 %	36.3 %	15.5 %
Marion County - OH	95.4 %	3.5 %	0.3 %	0.8 %	97.9 %	2.1 %	52.1 %	38.9 %	17.4 %
Meigs County - OH	98.1 %	1.3 %	0.3 %	0.3 %	99.4 %	0.6 %	53.0 %	39.8 %	17.8 %
Monroe County - OH	98.8 %	0.7 %	0.3 %	0.3 %	99.4 %	0.6 %	57.4 %	44.3 %	20.8 %
Morgan County - OH	94.4 %	4.3 %	1.0 %	0.3 %	99.4 %	0.6 %	54.5 %	41.2 %	19.0 %
Morrow County - OH	98.5 %	0.8 %	0.2 %	0.5 %	98.9 %	1.1 %	51.4 %	37.2 %	15.1 %
Muskingum County - OH	94.4 %	4.7 %	0.4 %	0.5 %	99.2 %	0.8 %	51.5 %	38.2 %	17.5 %
Noble County - OH	98.3 %	0.9 %	0.4 %	0.4 %	99.7 %	0.3 %	53.3 %	39.7 %	18.8 %
Perry County - OH	98.6 %	0.8 %	0.3 %	0.2 %	99.3 %	0.7 %	49.7 %	35.3 %	14.6 %
Pickaway County - OH	98.0 %	1.2 %	0.3 %	0.5 %	99.0 %	1.0 %	50.5 %	36.0 %	15.3 %
Pike County - OH	97.5 %	1.4 %	0.8 %	0.3 %	99.2 %	0.8 %	50.7 %	37.0 %	16.8 %
Ross County - OH	95.0 %	4.0 %	0.4 %	0.6 %	99.1 %	0.9 %	51.9 %	37.7 %	16.2 %
Scioto County - OH	96.8 %	2.0 %	0.7 %	0.5 %	99.0 %	1.0 %	51.4 %	38.4 %	17.8 %
Union County - OH	92.7 %	4.3 %	0.3 %	2.7 %	98.8 %	1.2 %	44.7 %	28.0 %	10.2 %
Vinton County - OH	98.4 %	0.9 %	0.4 %	0.3 %	99.5 %	0.5 %	51.0 %	37.1 %	15.2 %
Washington County - OH	97.6 %	1.4 %	0.2 %	0.8 %	99.2 %	0.8 %	55.6 %	42.4 %	19.5 %

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 %
Ohio	12.2 %	14.8 %	33.1 %	9.3 %	3.9 %	1.3 %	22.1 %	14.8 %	14.0 %
Komen Columbus Service Area	12.3 %	16.0 %	34.0 %	8.8 %	4.7 %	1.6 %	28.6 %	18.8 %	14.2 %
Athens County - OH	12.9 %	31.5 %	43.1 %	11.9 %	3.9 %	1.9 %	43.2 %	18.4 %	16.4 %
Champaign County - OH	12.9 %	15.1 %	32.4 %	10.6 %	1.1 %	0.1 %	70.8 %	0.0 %	14.4 %
Clark County - OH	14.6 %	16.9 %	36.4 %	10.1 %	2.2 %	0.7 %	23.6 %	6.2 %	13.6 %
Delaware County - OH	4.1 %	4.5 %	12.5 %	4.5 %	5.4 %	0.8 %	19.3 %	0.0 %	7.5 %
Fairfield County - OH	8.4 %	11.5 %	27.1 %	7.6 %	2.6 %	1.1 %	34.7 %	0.0 %	11.9 %
Fayette County - OH	19.1 %	18.5 %	43.6 %	12.0 %	1.4 %	0.4 %	47.8 %	100.0 %	16.0 %
Franklin County - OH	10.7 %	17.4 %	32.9 %	8.3 %	9.0 %	3.0 %	1.4 %	13.7 %	15.2 %
Gallia County - OH	18.4 %	20.2 %	43.7 %	9.3 %	0.9 %	0.3 %	81.4 %	0.0 %	14.2 %
Guernsey County - OH	15.5 %	17.1 %	42.9 %	9.7 %	1.0 %	0.5 %	61.4 %	15.8 %	16.6 %
Hocking County - OH	14.4 %	15.7 %	41.7 %	8.9 %	0.7 %	0.3 %	70.8 %	23.7 %	16.5 %
Jackson County - OH	20.7 %	23.2 %	46.7 %	10.8 %	0.6 %	0.5 %	64.6 %	100.0 %	15.5 %
Knox County - OH	11.8 %	13.0 %	33.9 %	8.2 %	1.3 %	1.2 %	55.7 %	0.0 %	14.1 %
Lawrence County - OH	17.3 %	17.4 %	45.7 %	7.4 %	0.4 %	0.0 %	45.9 %	100.0 %	15.8 %
Licking County - OH	11.0 %	11.6 %	29.7 %	7.7 %	1.7 %	0.3 %	35.5 %	0.0 %	13.7 %
Madison County - OH	15.3 %	10.5 %	31.7 %	6.0 %	1.7 %	0.8 %	48.5 %	0.0 %	12.8 %
Marion County - OH	16.0 %	18.5 %	39.1 %	9.4 %	1.3 %	0.5 %	30.3 %	14.0 %	15.7 %
Meigs County - OH	16.8 %	21.3 %	46.9 %	13.9 %	0.2 %	0.1 %	81.3 %	100.0 %	17.2 %
Monroe County - OH	14.1 %	18.1 %	41.0 %	6.1 %	0.4 %	0.2 %	97.7 %	100.0 %	15.2 %
Morgan County - OH	17.1 %	19.5 %	46.8 %	8.5 %	0.3 %	0.1 %	81.5 %	100.0 %	17.9 %
Morrow County - OH	13.7 %	11.9 %	36.4 %	7.4 %	0.8 %	0.4 %	88.8 %	12.9 %	14.6 %
Muskingum County - OH	13.5 %	16.9 %	41.5 %	11.2 %	0.9 %	0.3 %	47.0 %	0.0 %	14.4 %
Noble County - OH	21.0 %	16.3 %	40.8 %	9.7 %	0.2 %	0.4 %	62.5 %	4.5 %	17.0 %
Perry County - OH	16.4 %	17.7 %	41.6 %	11.2 %	0.4 %	0.2 %	75.2 %	56.9 %	15.7 %
Pickaway County - OH	16.4 %	13.1 %	33.0 %	7.6 %	1.0 %	0.0 %	49.9 %	0.0 %	13.5 %
Pike County - OH	22.0 %	22.5 %	49.7 %	19.3 %	0.5 %	0.0 %	74.2 %	100.0 %	16.1 %
Ross County - OH	16.3 %	17.5 %	40.2 %	13.8 %	0.8 %	0.9 %	58.7 %	15.9 %	14.6 %
Scioto County - OH	19.1 %	21.8 %	48.4 %	12.0 %	1.0 %	0.1 %	54.3 %	100.0 %	15.6 %
Union County - OH	8.7 %	6.6 %	21.7 %	5.9 %	2.9 %	0.3 %	50.0 %	0.0 %	10.3 %
Vinton County - OH	24.0 %	20.8 %	50.4 %	11.3 %	0.2 %	1.3 %	100.0 %	100.0 %	16.0 %
Washington County - OH	11.8 %	15.1 %	37.6 %	8.8 %	1.1 %	0.1 %	56.6 %	2.8 %	15.1 %

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

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

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

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

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

Population characteristics summary

Proportionately, the Komen Columbus 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 Affiliate's female population is slightly younger than that of the US as a whole. The Affiliate'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 Affiliate service area. The Affiliate service area has a substantially smaller percentage of people who are foreign born and a substantially smaller percentage of people who are linguistically isolated. There are a substantially larger percentage of people living in rural areas, a slightly smaller percentage of people without health insurance, and a slightly smaller percentage of people living in medically underserved areas.

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

- Franklin County

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

- Monroe County
- Morgan County
- Washington County

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

- Fayette County
- Gallia County
- Jackson County
- Lawrence County
- Noble County
- Pike County
- Scioto County
- Vinton County

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

- Athens County
- Jackson County
- Meigs County
- Pike County
- Scioto County

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

- Athens County
- Fayette County
- Meigs County
- Pike County
- Ross County
- Scioto 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 Columbus 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 Columbus service area with predicted time to achieve the HP2020 breast cancer targets and key population characteristics

County	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Clark County - OH	Highest	13 years or longer	13 years or longer	
Hocking County - OH	Highest	13 years or longer	13 years or longer	Rural
Licking County - OH	Highest	13 years or longer	13 years or longer	Rural
Madison County - OH	Highest	13 years or longer	13 years or longer	Rural
Meigs County - OH	Highest	SN	13 years or longer	Poverty, employment, rural, medically underserved
Monroe County - OH	Highest	SN	13 years or longer	Older, rural, medically underserved
Morgan County - OH	Highest	SN	13 years or longer	Older, rural, medically underserved
Muskingum County - OH	Highest	13 years or longer	13 years or longer	Rural
Perry County - OH	Highest	13 years or longer	13 years or longer	Rural, medically underserved
Washington County - OH	Highest	13 years or longer	13 years or longer	Older, rural
Guernsey County - OH	High	13 years or longer	7 years	Rural
Marion County - OH	High	9 years	13 years or longer	
Champaign County - OH	Medium High	6 years	13 years or longer	Rural
Delaware County - OH	Medium High	5 years	13 years or longer	
Fairfield County - OH	Medium High	13 years or longer	1 year	Rural
Franklin County - OH	Medium High	13 years or longer	6 years	%Black/African-American
Gallia County - OH	Medium High	6 years	13 years or longer	Education, rural
Jackson County - OH	Medium High	4 years	13 years or longer	Education, poverty, rural, medically underserved
Knox County - OH	Medium High	5 years	13 years or longer	Rural
Lawrence County - OH	Medium High	13 years or longer	1 year	Education, rural, medically underserved
Pickaway County - OH	Medium High	6 years	13 years or longer	Rural
Scioto County - OH	Medium High	1 year	13 years or longer	Education, poverty, employment, rural, medically underserved
Ross County - OH	Medium	Currently meets target	13 years or longer	Employment, rural
Union County - OH	Medium	Currently meets target	13 years or longer	Rural
Morrow County - OH	Medium Low	2 years	4 years	Rural
Athens County - OH	Lowest	Currently meets target	Currently meets target	Poverty, employment, rural

County	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Fayette County - OH	Lowest	NA	Currently meets target	Education, employment, rural, medically underserved
Pike County - OH	Lowest	Currently meets target	Currently meets target	Education, poverty, employment, rural, medically underserved
Noble County - OH	Undetermined	SN	SN	Education, rural
Vinton County - OH	Undetermined	SN	SN	Education, rural, medically underserved

NA – data not available. SN – data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

Map of Intervention Priority Areas

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

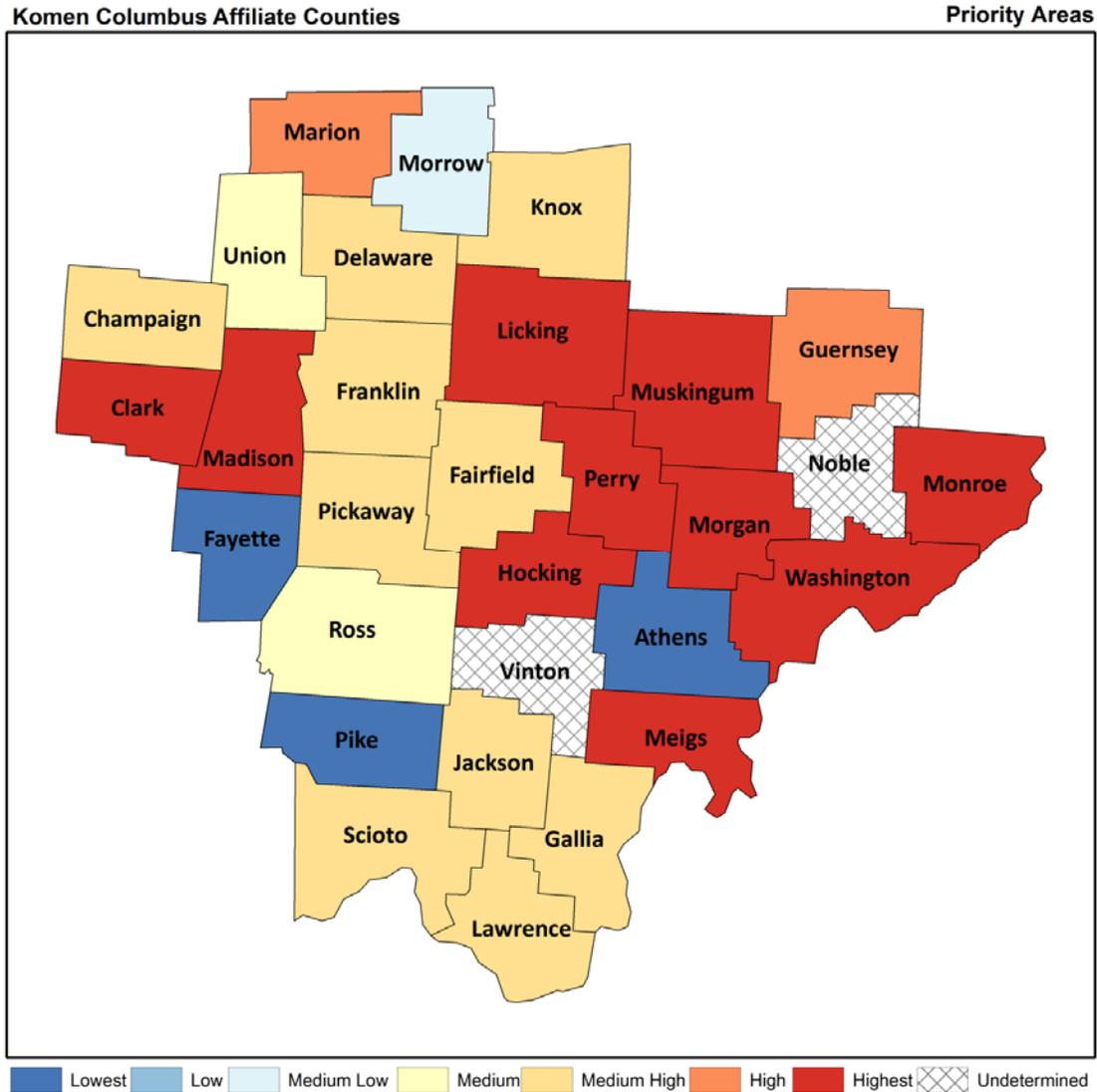


Figure 2.1. Intervention priorities.

Data Limitations

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

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

Quantitative Data Report Conclusions

Highest priority areas

Ten counties in the Komen Columbus service area are in the highest priority category. Seven of the ten, Clark County, Hocking County, Licking County, Madison County, Muskingum County, Perry County and Washington County, are not likely to meet either the death rate or late-stage incidence rate HP2020 targets. Three of the ten, Meigs County, Monroe County and Morgan County, are not likely to meet the late-stage incidence rate HP2020 target.

Meigs County has a high percentage of the population in poverty and high unemployment. Monroe County has an older population. Morgan County has an older population. Washington County has an older population.

High priority areas

Two counties in the Komen Columbus service area are in the high priority category. One of the two, Guernsey County is not likely to meet the death rate HP2020 target. One of the two, Marion County is not likely to meet the late-stage incidence rate HP2020 target.

The late-stage incidence rates in Guernsey County (69.3 per 100,000) are significantly higher than the Affiliate service area as a whole (44.8 per 100,000).

Additional Quantitative Data Exploration

Health disparities affect screening, incidence, death rate and late-stage diagnoses of breast cancer. Health disparities may include, but are not limited to, health differences among populations according to race/ethnicity, ancestry, cultural factors, socioeconomic status, age, sexual orientation, geography, disability or other characteristics. Poverty, education, unemployment, language, cultural barriers and mistrust of the medical field are examples of socioeconomic and cultural factors that have been linked to breast cancer disparities with respect to screening, diagnosis, and treatment (Susan G. Komen, 2014). Even when access is equal, there are biological factors that put Black/African-American women and Hispanic/Latina women at higher risk for triple negative breast cancer or cancer among younger women. Other inequalities may work together to influence factors like being overweight or obese, breastfeeding, alcohol use, and other risk factors that affect breast cancer risk and survival.

For that reason, in addition to the quantitative data above, supplemental data were collected on disparity characteristics in order to describe factors that may be affecting breast health in the Susan G. Komen Columbus service area. An understanding of these disparities and their distribution in the service area will guide targeted and impactful mission programming to reduce negative breast health outcomes.

Ohio Medicaid Assessment Survey

The Ohio Medicaid Assessment Survey (OMAS) provides an assessment of regional health disparities among the Komen Columbus service area, many of which are noted above as related to breast cancer outcomes. Data from the 2012 OMAS were analyzed and findings regarding regional disparities were reported in “Health Disparities among Adults in Ohio” (Ferketich, Wang, & Sahr, 2013) (Table 2.8).

Table 2.8. Regional Health Disparities Linked to Breast Health Outcomes in Ohio

	Uninsured Status ^a		Medicaid Coverage ^a		Cancer ^b	
	<i>Prevalence</i>	<i>90% CI</i>	<i>Prevalence</i>	<i>90% CI</i>	<i>Prevalence</i>	<i>90% CI</i>
<i>Race/Ethnicity</i>						
White	12.4%	(11.8-13.0)	10.5	(9.9-11.0)	11.7	(11.3-12.2)
Black/African-American	22.2%	(20.2-24.2)	24.9	(23.1-26.7)	7.4	(6.4-8.4)
Hispanic/Latina	39.8%	(35.0-44.6)	15.8	(12.7-19.0)	5.2	(3.2-7.1)
Asian	14.3%	(10.1-18.4)	6.1	(3.3-8.8)	1.1	(0.4-1.8)
Other	18.3%	(14.9-21.7)	19.1	(13.1-22.0)	9.9	(7.3-12.6)
<i>%FPL</i>						
Less than 100%	29.8%	(27.6-31.9)	10.9	(8.8-13.0)	10.8	(9.5-12.0)
101-150%	26.8%	(24.2-29.5)	17.0	(15.0-18.9)	11.7	(10.2-13.2)
151-200%	19.2%	(16.7-21.7)	8.6	(7.0-10.2)	12.1	(10.4-13.8)
201-250%	14.5%	(12.3-16.8)	3.2	(2.2-4.2)	10.9	(9.4-12.4)
251-300%	12.1%	(9.9-14.3)	1.7	(1.0-2.3)	10.8	(9.4-12.4)
301-400%	5.2%	(4.0-6.3)	1.8	(1.2-2.5)	9.0	(7.8-10.2)
401% or higher	2.8%	(2.2-3.4)	0.9	(0.6-1.2)	9.2	(8.4-10.0)

	Uninsured Status ^a		Medicaid Coverage ^a		Cancer ^b	
	Prevalence	90% CI	Prevalence	90% CI	Prevalence	90% CI
Region						
Appalachia	16.0%	(14.6-17.5)	14.9	(13.6-16.1)	12.1	(11.0-13.1)
Rural, non-App	14.1%	(12.5-15.7)	10.1	(8.8-11.3)	9.8	(8.8-10.8)
Metropolitan	14.8%	(14.0-15.7)	13.1	(12.4-13.8)	10.6	(10.0-11.1)
Suburban	10.7%	(9.4-12.0)	8.1	(7.0-9.2)	11.2	(10.2-12.3)

^a From Table 1. Uninsured and Medicaid Coverage among Ohio Adults ages 19 and older by race/ethnicity, percent of FPL and county type

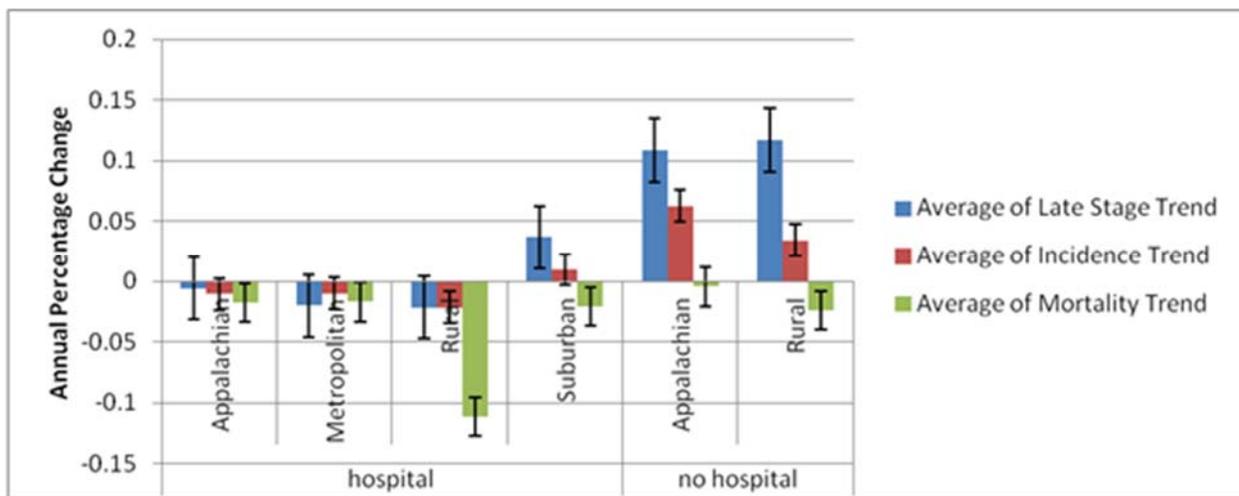
^b From Table 7. Cancer, diabetes and obesity prevalence among Ohio adults ages 19 and older by race/ethnicity, percent of FPL and county type

Data from 2012 Ohio Medicaid Assessment Survey (Ferketich, Wang, & Sahr, 2013)

County types were defined using the standard definitions created by the Ohio Family Health Survey group in 1997, which have been used in all subsequent OMAS and Ohio Family Health Surveys. The survey identifies regional differences among Appalachian, Rural, Metropolitan and Suburban counties and population, which helps to illuminate the specific barriers faced by each area. Characteristics that differ among these regions include insurance coverage, health care utilization, overall health, preventive or risky health behaviors, and chronic disease prevalence, as well as the types of health care facilities and access available. Looking at data through these regional frames will guide the development of culturally competent programming.

Insurance status has long been associated with screening adherence under the assumption that the uninsured would be less likely to get recommended screenings. However, the OMAS data shows that the late-stage diagnoses rates among more highly insured populations in Metropolitan and Suburban areas remain comparable to those of the counties in Appalachia or Rural with higher proportions of uninsured residents. On the aggregate level, this may indicate that insured women in Metropolitan and Suburban areas have similar screening behaviors to uninsured women in other areas, or at least are not utilizing their preventive benefits. The available screening data are limited and doesn't shed much light on this issue.

In Figure 2.2, counties were grouped by their regions and whether they had a hospital.



Data from (Susan G. Komen, 2014)

Figure 2.2. Breast health outcomes among Komen Columbus regions, by county hospital status

Overall, areas that lacked hospitals were experiencing increasing late-stage diagnosis rates, compared to areas with hospitals which had decreasing late-stage rates (Figure 2.2). This was also true for incidence rate trends, which were increasing in areas without hospitals but decreasing in areas with hospitals. Death rates were also decreasing by a larger percentage in areas with hospitals compared to areas without hospitals. All Metropolitan and Suburban counties have hospitals, so this effect was not observed in those regions.

Ohio Cancer Incidence Surveillance System

All Ohio providers of medical care are required, by law, to report to the Ohio Cancer Incidence Surveillance System (OCISS) all cancers diagnosed and/or treated in Ohio, where it is collected and analyzed. Additional age data were available from the 2014 Cancer Facts and Figures Data, which analyzed OCISS data to report that from 2006-2010. This data supplied additional information about the target populations in the service area by providing a perspective on the prevalence of breast cancer among young women and whether the service area differed from national trends. This information is needed in order to properly assess the target population and provide effective education and programming. The report found that 96.0 percent of breast cancer cases in Ohio occurred in women 40 and older, and 98.0 percent of breast cancer deaths occurred in women 40 and older, similar to national trends (Ohio Department of Health, The Ohio State University Comprehensive Cancer Center Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, 2014).

Selection of Target Communities

The highest absolute number of breast cancer cases are in Franklin County, followed by Clark, Delaware, Fairfield and Licking (Table 2.1). Of all the breast cancers diagnosed in the service area, 38.5 percent are in Franklin County, while 23.6 percent of cases are in Clark, Delaware, Fairfield and Licking counties. Delaware has a significantly higher incidence rate compared to the rest of the service area. Incidence in Fayette, Meigs, Monroe, Muskingum, Noble and Scioto are significantly lower. Incidence trends in Fairfield and Pike have decreased significantly between 2006 and 2010 while incidence trends in Knox County has increased significantly during the same period. (Susan G. Komen, 2014)

Though 38.5 percent of cases are diagnosed in Franklin County (40.6 percent of the female population in the service area resides in the county), only 8.8 percent of breast cancer deaths are in that county (Table 1). Ross County has a significantly lower death rate than the rest of the service area. Death rate trends in Athens, Delaware, Franklin, Knox, Marion, Pickaway and Union Counties have decreased significantly between 2006 and 2010, while death rates have not significantly increased in any Komen Columbus service area counties, during that time. Guernsey County has a significantly higher late-stage diagnosis rate than the rest of the service area. (Susan G. Komen, 2014)

As discussed earlier in this document, regional characteristics differ among the counties in the service area. Collectively, the incidence in rural and metropolitan county areas seems to be decreasing while all areas are decreasing in death rate. The metropolitan region is decreasing in late-stage diagnoses. The Appalachian region closely follows the Suburban area trends and

has the lowest incidence, death rate, and late-stage diagnoses rates of all areas. Suburban and Appalachian areas appear to have the lowest screening rates of the four regions.

Because of the varying outcomes and populations in the four regions, it is important that all regions are addressed. The considerations, needs, and barriers in each region may share some commonalities or vary greatly, which will be explored further through qualitative and health systems analysis.

Based on the data presented on the regional differences in the service area (Table 2.9), the service area will be addressed as the three regions described: Metropolitan, Suburban and Rural- Appalachian. This classification will help when conducting the health systems analyses within those communities to better understand the regions as a whole, and identify gaps and needs so that programming offered is best suited to each region. The regions are described below, and serve as the framework for the selection of priority communities within each region.

Table 2.9. Breast health indicators by region

Population Group	Female Population- Annual Average	Incidence Rates and Trends			Death Rates and Trends			Late-stage Rates and Trends			Proportion Screened (Weighted 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%	77.5%
HP2020	.	-	-	-	-	20.6	-	-	41.0	-	
Ohio	5,895,383	8,319	120.8	-0.1%	1,820	24.8	-1.9%	2,972	44	0.6%	77.0%
Komen Columbus Service Area	1,442,796	1,895	122.3	-0.1%	412	25.7	NA	689	44.8	1.1%	77.8%
White	1,239,201	1,708	122.5	0.1%	367	25.1	NA	608	44.1	1.9%	76.8%
Black/African -American / African-American	163,959	155	119.4	-2.1%	43	33.4	NA	71	54.1	-5.1%	87.1%
AIAN	5,522	SN	SN	SN	SN	SN	SN	SN	SN	SN	SN
API	34,115	15	63	9.7%	SN	SN	SN	4	17.1	7.7%	SN
Non-Hispanic/ Latina	1,409,295	1,887	123.1	-0.1%	411	25.8	NA	687	45.1	1.1%	76.7%
Hispanic/ Latina	33,501	7	53.3	1.6%	SN	SN	SN	SN	SN	SN	77.6%
Appalachian/ Rural	472,738	627	108.3	1.3%	130	24.4	-3.4%	231	42.7	2.6%	77.1
Suburban	384,461	537	124.3	1.0%	113	25.6	-2.1%	186	45.1	3.7%	75.1%
Metropolitan	585,597	730	128.6	-1.0%	161	27.7	-1.7%	263	45.8	-2.0%	80.7%

Aggregated data (cumulative numbers and average rates and percentages) from Quantitative Data Report (Susan G. Komen, 2014)

Priority communities were identified within each region of the service area. The priority communities are made up of the highest priority or priority counties in each region. These counties were identified as highest or high priority due to projected failure to meet Healthy People 2020 targets for death rates and late-stage diagnosis rates (Table 2.7). Twelve counties were identified as highest or high priority. Two counties have unidentified priority levels due to missing data. Because of their proximity to high priority counties, and the lack of data, they are included in the priority areas. Finally, Franklin County represents the greatest absolute cancer burden in the service area, and as justified below, is an additional priority county. It is important to note that a further 12 counties were identified by this standard as medium high or medium priority and also are projected to fail to meet one or more Healthy People 2020 targets. This information will be taken into account in the mission action plan when determining the priorities for the Affiliate's grant process, since a total of 26 counties (12 highest or high priority, 2 undetermined priority, 12 medium high or medium priority) are at risk for failure of Healthy People 2020 targets in the service area.

The regions and priority communities within each region are presented in Table 2.10. These county designations are justified by the failure to meet Healthy People 2020 objectives, and/or in the case of key characteristics of each region further justify the breakdown of the service area into regions of focus.

Metropolitan Region

The Metropolitan region includes only one county in the service area, Franklin County. However, this one county holds the majority of the population of the service area. The area is characterized by high Medicaid enrollment and has the largest concentration of Hispanic/Latino and Black/African-American populations in the service area. Looking at similar data to summarize disparities between race/ethnic groups, Hispanic/Latino (39.8 percent, CI 35-44.6) and Black/African-American (22.2 percent, CI 20.2-24.2) groups were the most likely to be uninsured, with Hispanics significantly more likely than any other group to be uninsured. Most uninsured are below 200 percent FPL. Those less than 100 percent or 101-150 percent FPL are more likely than any other group to be uninsured and also more likely than any other group to be covered by Medicaid. Black/African-American populations were the most likely to be covered by Medicaid (24.9 percent), significantly more likely than any other group. (Table 2.8)

Based on all the data available, the largest burden of breast cancer in the service area is among White women (90.0 percent annual cases) (Table 2.1). Black/African-American women experience the second largest breast cancer burden (8.0 percent of annual cases) but, following the national trend of breast death rate disparity, the death rate among Black/African-American women is higher than among White women. Though the majority of late-stage diagnoses in the service area are among White women, the rate is much higher among Black/African-American women. Despite this disparity, the largest absolute number of breast cancer deaths remains among White women with 89.0 percent of the absolute total of breast cancer deaths in the service area. Franklin County has, by far, the largest Black/African-American population (23.0 percent). Given the disparity being experienced within this population, Black/African-American women are a special population within this region.

Metropolitan Target Community: Franklin County

Most of the female population in the service area resides in Franklin County. Similarly, though it is only one county, the Metropolitan region has the highest number of cases, the highest number of deaths due to breast cancer, and the highest number of late-stage diagnoses (Table 2.1). Franklin County is classified as medium priority county in Table 2.7 but will be considered a priority community due to the largest potential for impact through intervention in this area because of the size of the Black/African-American female population that have higher death and late-stage stage diagnosis rates.

Suburban Region

Suburban residents are most likely to be diagnosed with cancer and more likely to be unemployed. However, such residents are less likely to be low-income and more likely to be insured compared to any other area (Table 2.8). The Suburban region includes Clark, Delaware, Fairfield, Licking, Madison, Pickaway and Union counties.

As discussed in the data section of this document, the data does not show differences in screening rates between regions, which might have been expected due to differences in insurance coverage rates between regions. This confuses the issue of whether uninsured women should be the sole target population. In fact, OMAS data shows that low income Ohio women insured by Medicaid report lower levels of unmet need than similar women who are insured by other forms of insurance or are uninsured. However, low income women insured by Medicaid are more likely to have no usual source of care or use the emergency room as a usual source of care (Balisteri & Joyner, 2012). These points demonstrate that further information is needed to define what income levels or insurance status types should be targeted within the regions described in Table 2.10. Based on current information, insured women may not be utilizing screening any more than uninsured women, and therefore other barriers and more diverse education and outreach possibilities should be explored. For this reason, the suburban region, where insurance coverage is more prevalent, must remain an area of focus, since insurance coverage does not equal screening utilization, based on the OMAS data. Insured and middle to higher income women may face different barriers, which will be explored further in the health systems and qualitative sections.

Suburban Target Community: Clark, Licking and Madison Counties

The Suburban counties account for the second highest number of cases, deaths and late-stage diagnoses. These counties are all classified as highest priority based on their predicted time to achieve death and late-stage diagnosis Healthy People 2020 targets (Table 2.7).

Rural Appalachian

The Appalachian region is characterized by poorer health care quality and more unmet health needs compared to Metropolitan areas. Appalachian residents are more likely to be enrolled in Medicaid. The area is more obese in general and has higher smoking prevalence than metropolitan areas. This region includes the following Komen Columbus service area counties: Athens, Champaign, Gallia, Guernsey, Hocking, Jackson, Lawrence, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Scioto, Vinton and Washington. The region is the most likely to be low-income and to have lower educational attainment. It has also traditionally been associated with mistrust of health care providers and fatalistic attitudes towards cancer. Proximity to health care facilities varies in this region, for six of the counties have hospitals and six counties are medically underserved.

Rural areas include Fayette, Knox, Marion and Morrow, which have lower educational attainment populations. The Rural region includes two counties with no hospital and is, in general, sparsely populated.

Because the Rural and Appalachian regions are very similar in both breast health indicators and characteristics associated with health disparities, and because both regions separately represent smaller proportions of the population, the Affiliate will combine them into one region for the remaining discussion. Due to similar barriers in access to care and total population size, the Affiliate will combine Rural and Appalachian counties into one region. However, it should be noted that Appalachian counties and Rural counties may not share identical social and settlement patterns and thus, may face some different challenges.

Rural or Appalachian Target Community: Guernsey, Hocking, Noble, Marion, Meigs, Monroe, Morgan, Muskingum, Perry, Vinton and Washington Counties

These counties are all classified as highest priority based on their predicted time to achieve death and late-stage diagnosis Healthy People 2020 targets (Table 2.7).

Figure 2.2 highlights poorer outcomes in Rural, Appalachian and Suburban counties without hospitals when compared to counties in the same region with hospitals, used as further justification for selection of counties without hospitals within those regions as target counties. OCISS data shows that 96.0 percent of breast cancer cases in Ohio occurred in women 40 and older, and 98.0 percent of breast cancer deaths occurred in women 40 and older, similar to national trends (Ohio Department of Health, The Ohio State University Comprehensive Cancer Center- Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, 2014), further justifying the counties in Rural-Appalachian counties as one in which breast cancer is a concern.

Data from Table 2.1 in the QDR are presented in aggregate at the regional levels described above in Table 2.9. Figure 2.3 is map of Komen Columbus' region and regional communities of interest.

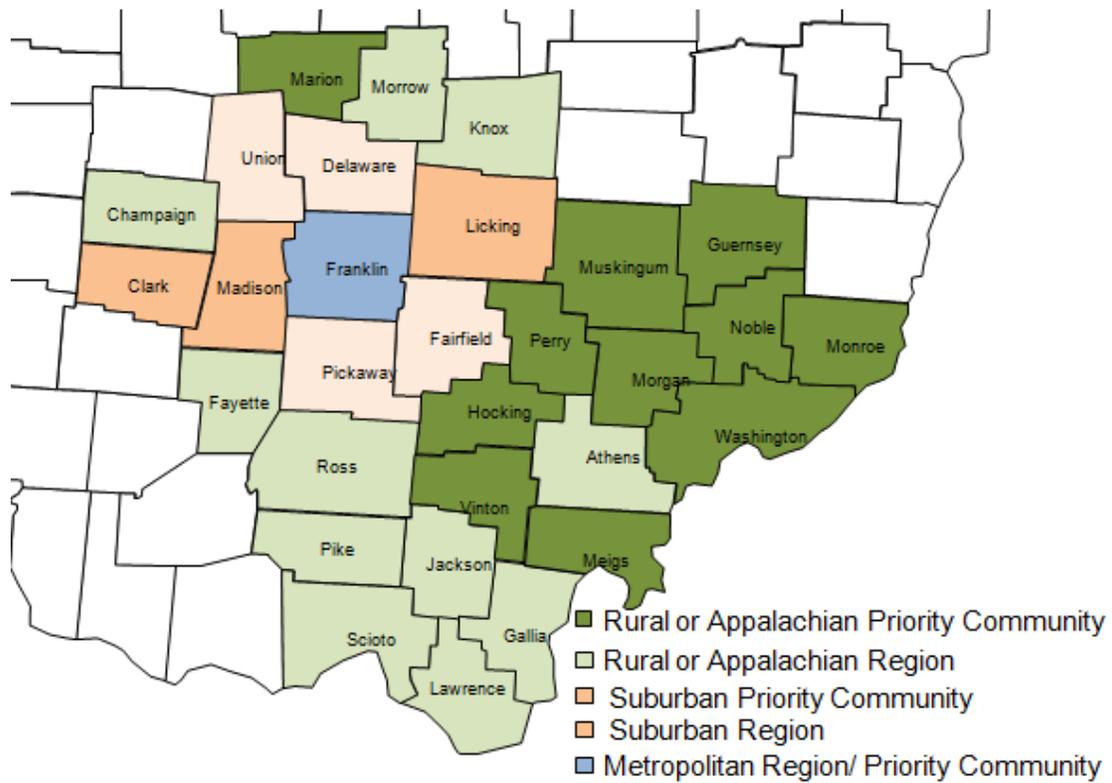


Figure 2.3. Komen Columbus regions and regional priority communities

Table 2.10. Justification of selection of regional priority areas and populations

Region	Justification	Key characteristics	Priority Community	Justification	Areas for culturally competent outreach
Rural-Appalachian	High amounts of uninsured, poorer health care access and quality, less likely to be enrolled in Medicaid, health risks like obesity, smoking, diabetes (assoc with less screening), low income, unemployment	Eight counties lack hospital (Morrow, Champaign, Perry, Vinton, Noble, Hocking, Meigs, Monroe), lack of primary care, Six medically underserved counties (Jackson, Monroe, Morgan, Meigs, Perry, Lawrence), highest prevalence of disabled population in service area, poverty, aging population, education and unemployment	Marion, Perry, Muskingum, Guernsey, Morgan, Noble, Monroe, Washington, Hocking, Vinton, Meigs	Failure to meet Healthy People 2020 objectives in late stage diagnosis or death rate or both	Data shows evidence of screening disparity among people with disabilities , a population with high prevalence in several counties in this region
Suburban	High amounts of uninsured, high cancer diagnoses, unemployment	All counties have a hospital, area has higher prevalence of insured populations than other regions, but still may be not adhering to recommended screening	Clark, Madison, Licking	Failure to meet Healthy People 2020 objectives in late stage diagnosis or death rate or both	
Metropolitan	Population makes largest potential for impact, presence of minority groups in higher rates	Largest Black/African-American and Hispanic/Latina populations	Franklin	Absolute cancer burden, including number of cases, deaths and late-stage diagnoses, is highest in service area	Data shows evidence of death rate disparity among Black/African-American population and the majority live in Franklin County;

Areas for culturally competent outreach

Within each region and target community, there are special populations that may require specific kinds of outreach or culturally competent education (Table 2.10). Special populations are included in Table 2.10. Adults living with a disability make up a priority population for culturally competent outreach. More specifically, prevalence of disability is high among two known at-risk breast cancer populations: aging populations and the Black/African-American population.

Disabled populations are experiencing screening disparity and co-morbidities. National partnerships, between Susan G. Komen and the American Association on Health and Disability, and local partnerships, with the Ohio Disability and Health Program, have highlighted people with disabilities (PWD) as a population suffering from health disparities, which include breast cancer screenings. The Disability and Health in Ohio Public Needs Assessment summarizes BRFSS and OMAS data to describe disparities for PWD in Ohio (Ohio Disability and Health Program, 2013). The report finds adults with disabilities are more likely to be in poor health,

abstain from exercise, and engage in smoking. This population suffers from more chronic health conditions (especially obesity) compared to people without disabilities in Ohio (Ohio Disability and Health Program, 2013).

The report states that fewer PWD over 40 reported having a mammogram in the past 2 years (67.3 percent) compared to women without disabilities (76.0 percent). Many PWD report that health care providers focus on their disability and fail to deal with other primary care issues and preventive wellness. According to this report, disability prevalence increases with age, along with breast cancer risk. Additionally, 73.0 percent of disabled adults in Ohio are over 45 years of age, which is similar to average age in the at-risk target population for breast cancer screening. Thus, the disabled adult population may benefit from culturally competent outreach.

The report also estimates an elevated prevalence of disability among Black/African-American adults, who already experience high rates of breast cancer and substantial health disparities (26.7 percent disability prevalence among Black/African-American adults compared to 17.1 percent among White adults) (2012 Ohio Medicaid Assessment Survey). Additionally, a death rate disparity is present among the Black/African-American population in the local service area as well as nationally. The majority of the Black/African-American population in the service area resides in Franklin County, so this population is also identified as one that may benefit from culturally competent outreach efforts within the Metropolitan region. Because the disabled population includes a large percentage of the Black/African-American adult population and the aging population, two known high-risk breast cancer populations, it is in need of culturally competent outreach and attention to access barriers.

The Appalachian region has the highest estimates of adult disability prevalence (21.4 percent) when compared with Metropolitan (18.7 percent), Suburban (14.3 percent) and other Rural regions of Ohio (16.4 percent) (2012 Ohio Medicaid Assessment Survey). Twelve of the 14 counties with the highest disability prevalence in Ohio are in the Komen Columbus service area (Clark, Fayette, Pike, Scioto, Jackson, Lawrence, Gallia, Meigs, Washington). Therefore, this population is listed as one of interest for culturally competent work in those 12 counties.

Remaining Questions

The Health Systems Analysis (HSA) will explore resources in the Rural Appalachian priority area, the Suburban priority area, and the Metropolitan priority area through asset mapping. It will also explore what resources are available for Black/African-American s and people with disabilities. Specifically, the HSA and subsequent sections of this report will investigate the needs of survivors living in the Rural-Appalachian region and the barriers that affect their care. The Affiliate will investigate differences between areas with and without hospitals, and area with and without access for PWD in the Rural Appalachian region. Most importantly, the HSA will provide an understanding of the distribution of resources within each priority area, so the best approach for grantmaking and program planning can be developed. Specifically, a spoke and wheel approach to making resources available at central locations will be considered, offering the opportunity to promote and increase access to these central locations through targeted grantmaking. It will be important to know which counties are the best locations for screening versus outreach versus transportation programs in order to minimize duplication of services and maximize impact and efficiency.

Health Systems and Public Policy Analysis

Health Systems Analysis Data Sources

Susan G. Komen Columbus conducted extensive investigation to identify breast health services located in the three target communities. A list was compiled of all potential health resources in each target community using the resources in Table 3.1.

Table 3.1. Resources for Health Systems Analysis

Continuum of Care Health System Resource Sources		Quality of Care Certification/Accreditation Sources
<i>Resource Type</i>	<i>Source</i>	<i>Source</i>
Mammography Centers	Food and Drug Administration Certified Mammography Facilities	American College of Surgeons Commission on Cancer
Hospitals	Medicare registered hospitals	American College of Radiology Centers of Excellence
Local Health Departments	National Association of County and City Health Officials	American College of Surgeons National Accreditation Program for Breast Centers (NAPBC)
Community Health Centers	Health Resources and Services Administration	National Cancer Institute Designated Cancer Centers
Free Clinics	National Association of Free and Charitable Clinics	

Source web links listed in Works Cited.

Online search engines were used to identify any additional community health centers, free clinics, hospitals, accredited breast care centers and local health departments and to verify updated contact information for each resource. Behavioral and mental health programs that were comprehensive in nature and may serve those affected by breast cancer were included as resources, as were Hospice and home care programs. The findings from this exhaustive search were compiled in an excel spreadsheet that was organized by target community. Using the diagram of the Continuum of Care (CoC), the findings for each target community were reviewed for potential gaps in services, and other barriers to access, in particular, geography.

Health Systems Overview

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

While a woman may enter the continuum at any point, ideally, a woman would enter the CoC by getting screened for breast cancer – with a clinical breast exam or a screening mammogram. If the screening test results are normal, she would loop back into follow-up care, where she would get another screening exam at the recommended interval. Education plays a role in both providing education to encourage women to get screened and reinforcing the need to continue to get screened routinely thereafter.

If a screening exam resulted in abnormal results, diagnostic tests would be needed, possibly several, to determine if the abnormal finding is in fact breast cancer. These tests might include a diagnostic mammogram, breast ultrasound or biopsy. If the tests were negative (or benign) and breast cancer was not found, she would go into the follow-up loop, and return for screening at the recommended interval. The recommended intervals may range from three to six months for some women to 12 months for most women. Education plays a role in communicating the importance of proactively getting test results, keeping follow-up appointments and understanding what it all means. Education can empower a woman and help manage anxiety and fear.

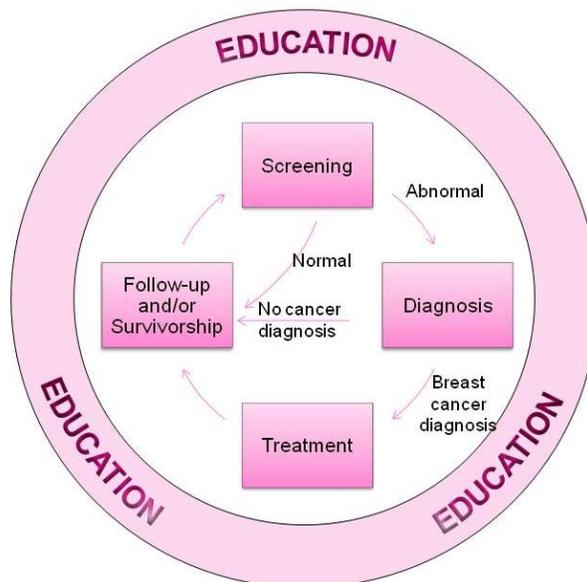


Figure 3.1. Breast Cancer Continuum of Care (CoC)

If breast cancer is diagnosed, she would proceed to treatment. Education can cover such topics as treatment options, how a pathology reports determines the best options for treatment, understanding side effects and how to manage them, and helping to formulate questions a woman may have for her providers. This piece of CoC is especially important as treatment continues to become more personalized.

For some breast cancer patients, treatment may last a few months and for others, it may last years. While the CoC model shows that follow-up and survivorship come after treatment ends, they actually may occur at the same time. Follow-up and survivorship may include things like navigating insurance issues, locating financial assistance, symptom management, such as pain, fatigue, sexual issues, bone health, etc. Education may address topics such as making healthy lifestyle choices, long-term effects of treatment, managing side effects, the importance of follow-up appointments and communication with their providers. Most women will return to screening at a recommended interval after treatment ends, or for some, during treatment (such as those taking long-term hormone therapy).

There are often delays in moving from one point of the continuum to another – at the point of follow-up of abnormal screening exam results, starting treatment, and completing treatment – that can all contribute to poorer outcomes. There are also many reasons why a woman does not enter or continue in the breast cancer CoC. These barriers can include things such as lack of transportation, system issues including long waits for appointments and inconvenient clinic hours, language barriers, fear, and lack of information - or the wrong information (myths and misconceptions). Education can address some of these barriers and help a woman progress through the CoC more quickly.

An analysis of the health system assets available in each Komen Columbus target community was conducted. This work gives insight into the strengths and weaknesses of the CoC within each target community. A few themes carry throughout all target communities. Mobile mammography units are only housed in Franklin County, though they are utilized throughout the service area. With the exception of Franklin County, despite the number of resources available, resources are almost always concentrated in one or two cities per county. The availability of patient navigation varies greatly between target communities. Beyond the question of where patient navigation is located, there is also a question of the quality and comprehensiveness of those services.

National projections for nursing and primary care shortages include Ohio and the service area. Nine Appalachian counties and Franklin County are Health Professional Shortage Areas. (Health Policy Institute of Ohio, 2012) The American Society of Clinical Oncology's report, "State of Cancer Care in America 2014", notes that the vast majority of oncology care providers are concentrated in certain regions, particularly in urban areas. Nationally, only three percent of providers are based in rural areas, where 20 percent of Americans live. The Komen Columbus service area includes 22 rural counties.

Rural-Appalachian Target Community

The Rural-Appalachian target community includes six counties without a hospital that offers treatment services (Perry, Hocking, Morgan, Monroe, Vinton and Noble) (Figure 3.2). Six counties are medically underserved and Guernsey, Meigs, Monroe, Morgan, Muskingum, Noble, Perry and Vinton are economically distressed. There are a few screening options, and have some diagnostic services available, but these services are usually concentrated in one town of the county. Free clinics and health departments are the main points of access in these communities, where quality may not be high due to the absence of accredited facilities. Treatment or reconstructions options are not widely available.

Counties without hospitals rely on hubs within the larger group of counties where accredited facilities are available with higher quality screening and diagnosis, and specialty services. For northern counties, the hubs are Zanesville in Muskingum County and Cambridge in Guernsey County, where larger, accredited hospitals are located. For the southern counties, these hubs are in Marietta in Washington County and Gallia County, which is outside the target community. This means education about available services and quality, transportation and navigation are critical in these areas. Health departments represent important partners in this effort, as they can operate as outreach arms that navigate women appropriately to the hubs. Mobile mammography is sometimes offered in these areas, but by units that are from hospitals in Franklin County. The availability of mobile mammography in the hubs of this community could make a large impact. The availability of genetic counseling and testing services is almost entirely unavailable in this area, or often testing may be done by physicians without appropriate involvement of a genetics counselor according to best practices.

Marion County is located away from the rest of this target community but shares the same kinds of access issues. The rural county has a few quality screening and diagnostic sites, but patients may need to travel to Columbus for treatment, reconstruction or palliative care options.

The Affiliate has worked with Perry, Meigs, Vinton and Hocking County Health Departments. Partnerships could be improved with Cambridge-Guernsey, Zanesville-Muskingum, Noble, Morgan, Monroe, Washington, Marion County and City of Marietta Health Departments. The Affiliate could also strengthen its relationship with the Appalachian Community Cancer Network. There may also be an opportunity to work with local faith or civic organizations.

Within all of these counties, patient navigation is extremely rare, as are reconstruction and survivorship support options. Information about the services provided by these resources is difficult to find, and could be addressed with patient navigation. Patient navigation can also assist women who may experience transportation and other barriers while they must utilize many different providers for the various services they need.

Rural-Appalachian Counties



Hospital



Community Health Center



Other



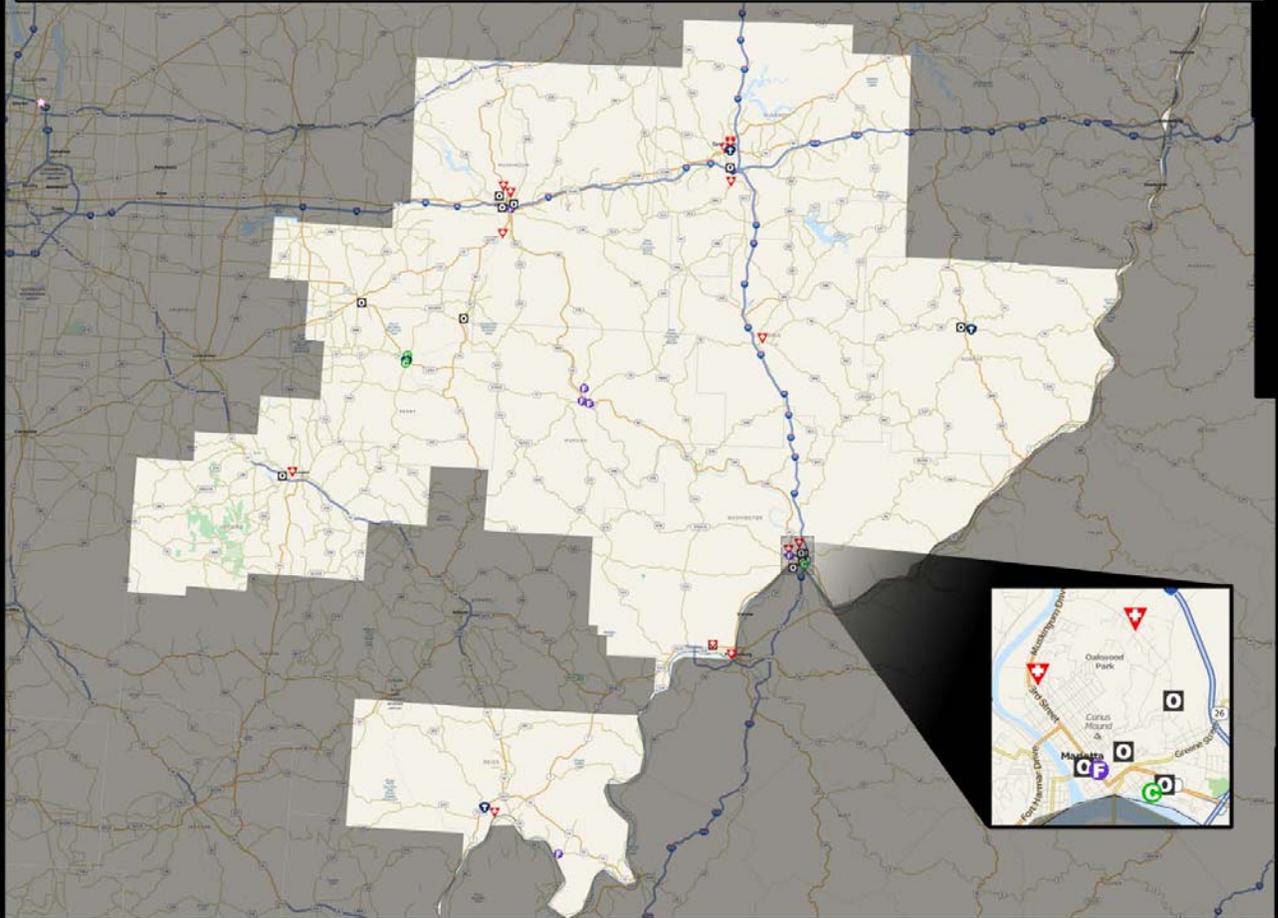
Free Clinic



Department of Health



Affiliate Office



Statistics

Total Locations in Region: 53

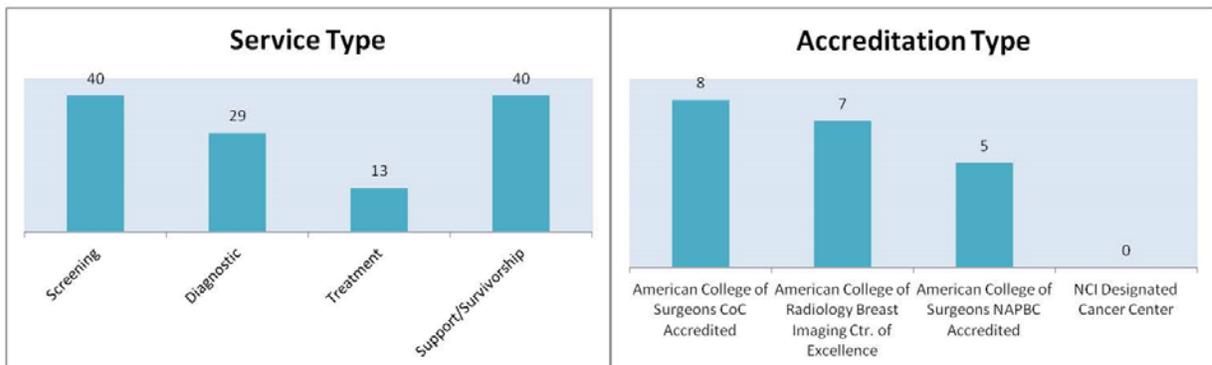


Figure 3.2. Breast cancer services available in Rural-Appalachian Target Community

Suburban Target Community

The Suburban area also lacks a locally-run mobile mammography unit. Clark, Delaware and Licking counties each have several screening and treatment options and at least one treatment and reconstruction option at accredited facilities that offer nearly comprehensive services (Figure 3.3). Free clinics also offer some screening and diagnostic services. Madison County has only one resource for all of these services- the local hospital. There are a few quality surgical options throughout this area, but almost no patient navigation services are available. Travel would be necessary for most survivorship services, including palliative care. The availability of genetic counseling and testing services is almost entirely unavailable in this area, or often testing may be done by physicians without appropriate involvement of a genetics counselor according to best practices. However, travel to Columbus for these services may be less burdensome than in the Rural-Appalachian area.

The Affiliate has worked with the Licking County Health Department in the past, but could build partnerships with Clark County Combined Health District, Delaware General Health District and Madison County- London City Health Department. Partnerships are needed with the hospitals in each of these four counties to support patient navigation. There may also be an opportunity to work with local faith or civic organizations.

Suburban Counties



Hospital



Community Health Center



Other



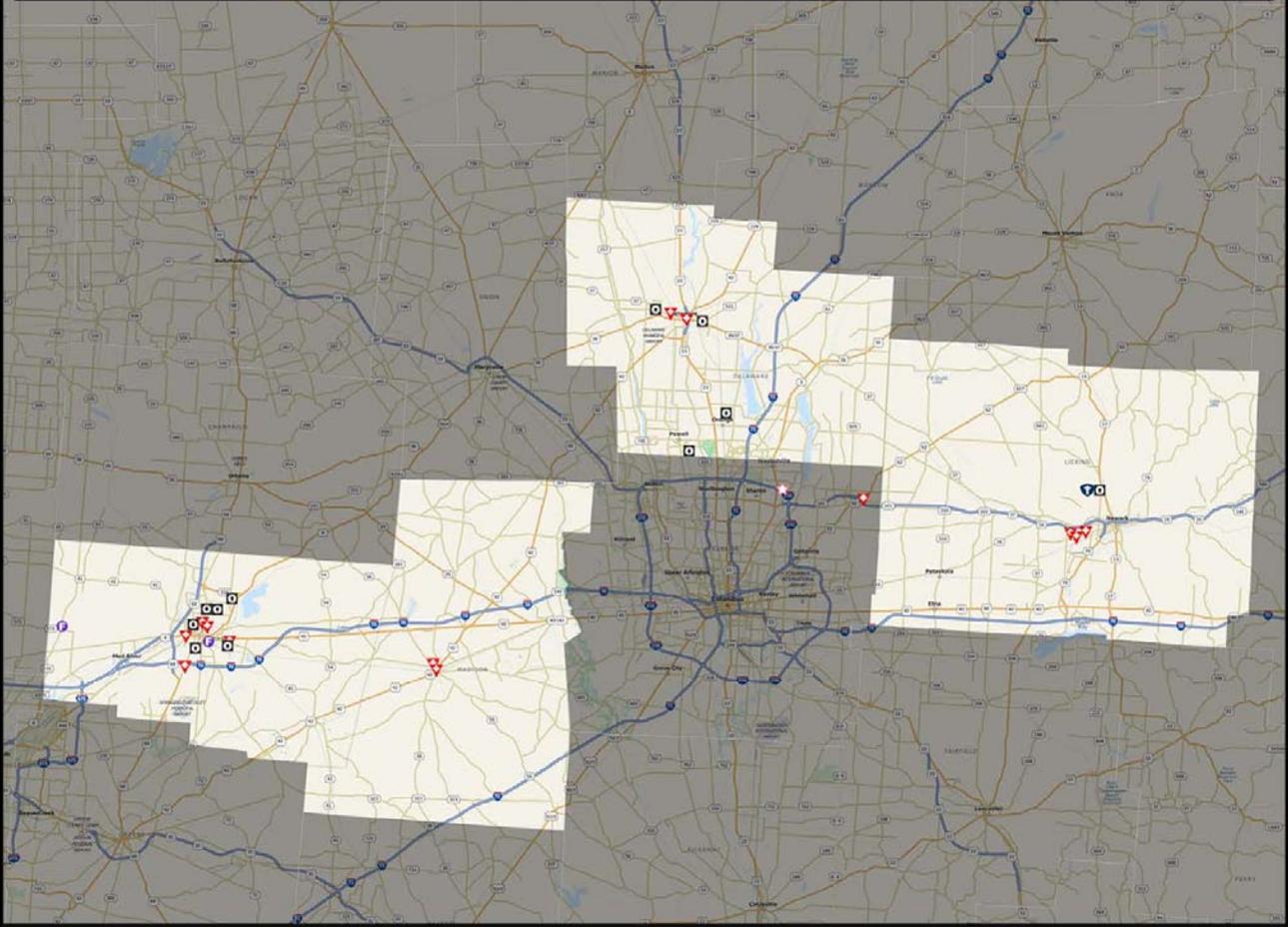
Free Clinic



Department of Health



Affiliate Office



Statistics

Total Locations in Region: 27

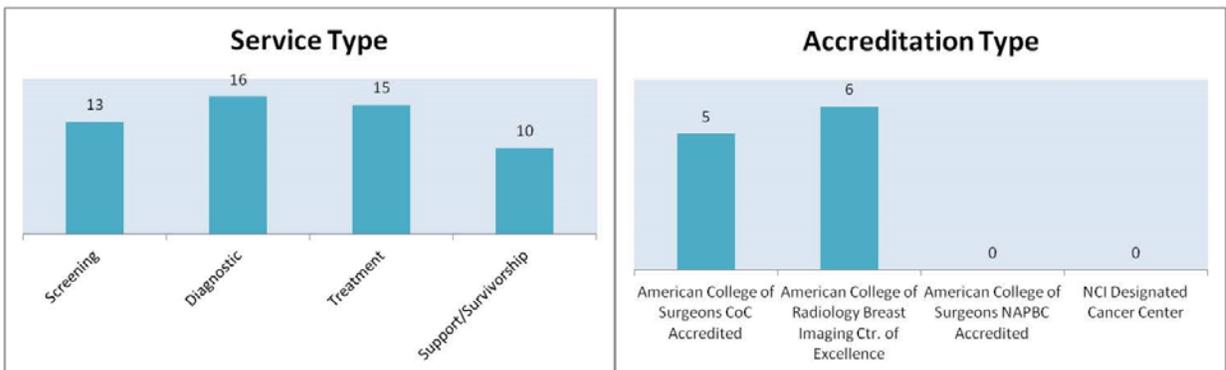


Figure 3.3. Breast cancer services available in Suburban Target Community

Metropolitan Target Community

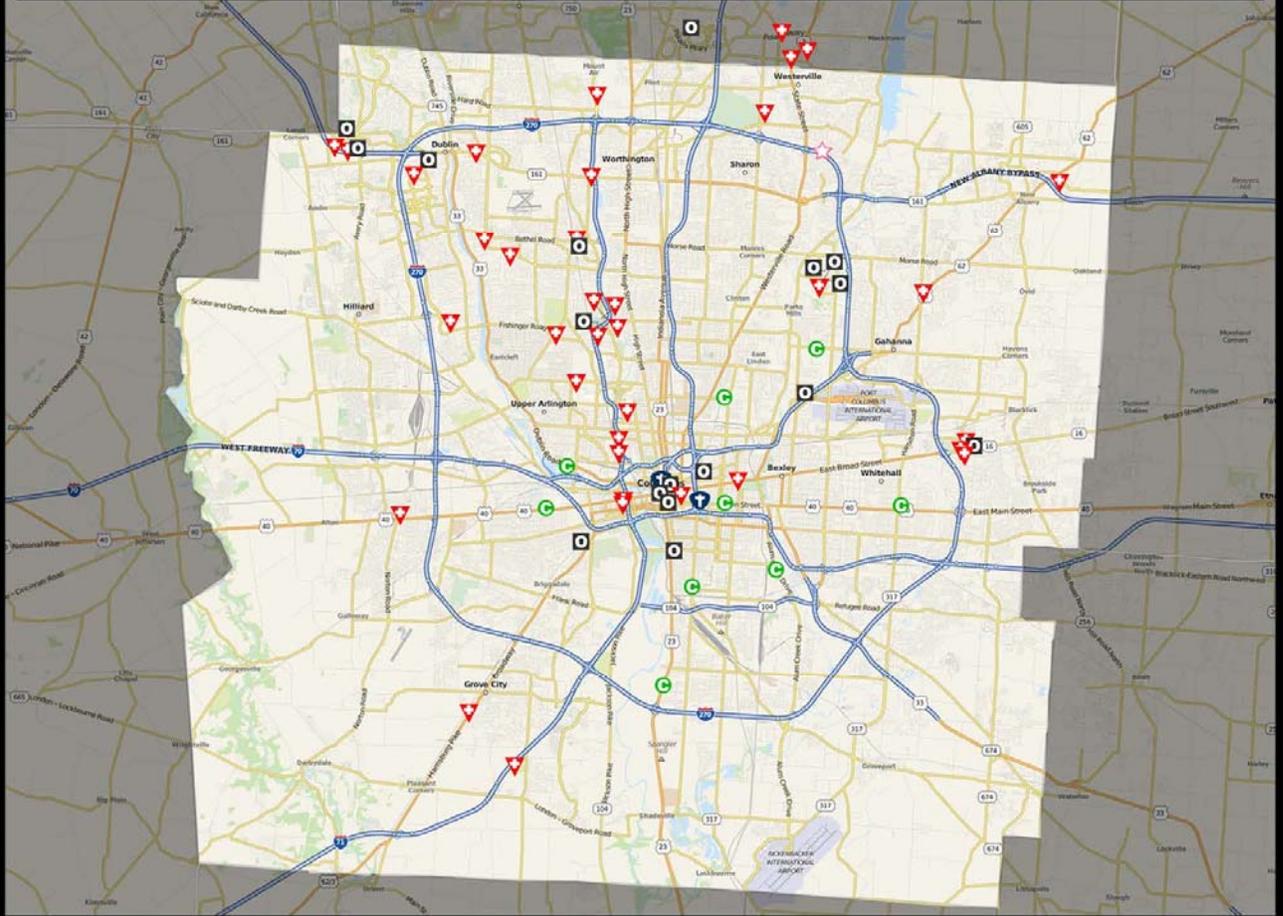
Franklin County is saturated with hospital systems offering comprehensive services across the CoC. Four facilities offer mobile mammography throughout Franklin County and beyond into the majority of the Komen Columbus service area, including Suburban and Rural-Appalachian areas. Quality care is available at many different accredited providers, including an NCI-designated Comprehensive Cancer Center. Clinical trial access is much higher than elsewhere in the area. There is access to a large number of survivorship services, including at least three breast cancer-specific boutiques and at least ten palliative care facilities.

Patient navigation is available at all public, nonprofit hospitals, where the majority of treatment may occur. However, patient navigation is not available at any private provider offices, where many diagnoses may occur.

Komen Columbus has not worked specifically with Columbus Public Health, which could help with access to minority communities, especially. Partnerships with the local faith communities are being built.

Metro-Franklin County

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



Statistics

Total Locations in Region: 69

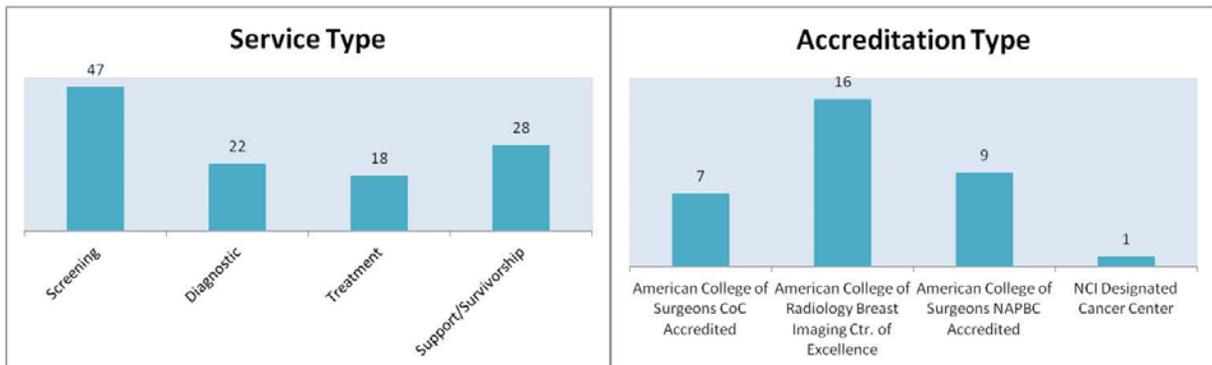


Figure 3.4. Breast cancer services available in Metropolitan Target Community

Local Hospitals' Community Health Needs Assessments

All available Community Health Needs Assessments for hospitals in the Komen Columbus service areas were evaluated in March 2014. Twenty-seven of the 38 hospital assessments listed breast cancer as a health priority. Seventy percent of hospitals in Central and Southeast Ohio recognize a need for increased breast cancer treatment and prevention. Komen Columbus is specifically mentioned in 15 of these assessments, either as a potential or existing partner/funder. Hospitals that name cancer as a health priority can be seen in Table 3.2, listed by county.

Table 3.2 identifies current partners and hospitals in target communities. Komen Columbus currently has a partnership with every hospital in the target communities, except Licking Memorial Hospital in Newark, Ohio. Historically, Komen Columbus has partnered with the Licking County Health Department (also the seat of the Region 6 BCCP program), which refers patients to Licking Memorial Hospital.

Outside of the target communities, there are several hospitals that are not current partners, including Berger Health System (a past grantee), Morrow County Hospital, Pike Community Hospital, and Diley Ridge Medical Center. Ensuring that these providers are aware of nearby resources could be an area for improvement.

Partnerships with health departments are essential, especially those the Affiliate has not worked with previously. Health departments should be considered in the mission plan and be made aware of the resources offered so that the Affiliate may effectively support their outreach, education and referral efforts. Health departments are also excellent connecting partners for mobile mammography. The need is also great for more mobile mammography opportunities, especially in the Rural-Appalachian communities.

Transportation needs for the Metropolitan target community differs from the transportation needs of Suburban and Rural or Appalachian communities. Non-traditional partners may be necessary to address these needs, including cab companies, the Red Cross, local public transportation and other groups. Addressing patient assistance needs for medication assistance or medical supplies, groceries, child care and housing needs will also require partners outside of the health system. An ideal partner would be a nonprofit that could work with these various non-traditional partners to deliver both transportation and patient assistance services throughout the target communities.

Table 3.2. Priorities of Community Hospital Needs Assessments in service area by county

County	Hospital	CHNA lists cancer as priority	Current partner or grantee	Target community
Athens Co	OhioHealth O'Bleness Hospital	✓	✓	
	Doctors Hospital of Nelsonville	✓	✓	
Champaign Co	Mercy Memorial Hospital-Urbana			
Clark Co	Springfield Regional Medical Center		✓	✓
Delaware Co	Grady Memorial-Ohio Hlth		✓	
Fairfield Co	Fairfield Medical Center-Lancaster	✓	✓	
	Diley Ridge Medical Center-Pickerington	✓		
Fayette Co	Fayette Co Memorial Hospital-Washington C.H.		✓	
Franklin Co	Dublin Methodist Hospital (OhioHealth)	✓	✓	✓
	Doctors Hospital West (OhioHealth)	✓	✓	✓
	Grant Hospital (OhioHealth)	✓	✓	✓
	Riverside Methodist Hospital (OhioHealth)	✓	✓	✓
	Mount Carmel East	✓	✓	✓
	Mount Carmel West	✓	✓	✓
	Mt. Carmel St. Ann's	✓	✓	✓
	Mt. Carmel Grove City	✓	✓	✓
	Mt. Carmel New Albany	✓	✓	✓
	The Ohio State University Wexner Medical Center	✓	✓	✓
The Ohio State University Hospitals East	✓	✓	✓	
Gallia Co	Holzer Medical Center-Gallipolis		✓	
Guernsey Co	Southeastern Ohio Regional Medical Center-Cambridge	✓	✓	✓
Hocking Co	Hocking Valley Community Hospital			✓
Jackson Co	Holzer Medical Center - Jackson	✓	✓	
Knox Co	Knox Community Hospital	✓	✓	
Licking Co	Licking Memorial Hospital-Newark	✓		✓
Madison Co	Madison County Hospital	✓	✓	✓
Marion Co	Marion General-Ohio Hlth			✓
Morrow Co	Morrow Co Hospital- Mt Gilead	✓		
Muskingum Co	Genesis Bethesda Hospital	✓	✓	✓
	Genesis Good Samaritan Hospital	✓	✓	✓
Pickaway Co	Berger Health System	✓		
Pike Co	Pike Community Hospital-Waverly			
Ross Co	Adena Regional Medical Center-Chillicothe		✓	
Scioto Co	Southern Ohio Medical Center	✓	✓	
Union Co	Memorial Hospital-Marysville	✓	✓	
Washington Co	Marietta Memorial Hospital		✓	✓

Target Community key: Rural or Appalachian (green); Suburban (orange); Metropolitan (blue).
CHNA sources listed in Works Cited.

Public Policy Overview

Ohio Breast and Cervical Cancer Project

Ohio's Breast and Cervical Cancer Project (BCCP) provides breast and cervical cancer screening and diagnostic services to women in Ohio who do not qualify for Medicaid, between 100 percent and 200 percent of the Federal Poverty Level (FPL). This is a critical and lifesaving safety net for the working poor in the state. In Ohio, these are the same women who earn too much income in order to qualify for Medicaid, but not enough to qualify for tax credits in the state insurance marketplace. Without BCCP, they would not have affordable access to these services.

Women can self-refer to BCCP by contacting the appropriate regional enrollment agency. Many providers have been educated about this resource and will also refer women to the program. The Komen Columbus service area includes counties covered by BCCP regions 2, 5, 6, 7 and 8 (Ohio Department of Health, 2012). Enrollment contacts are listed in Table 3.3. In addition to being at or below 200 percent FPL, women must be uninsured and be 40 years or older for Pap tests and clinical breast exams or be 50 years or older to receive mammograms. Women who are 40-49 may receive a mammogram if indicated by clinical breast exam or if they are considered high-risk. In 2014, Ohio BCCP adopted revisions from Centers for Disease Control to include coverage for MRI for high-risk individuals.

Table 3.3. BCCP regions and points of contact

BCCP Region	Counties	Point of contact to enroll
2	Clark, Champaign	Breast and Cervical Cancer Project, University of Cincinnati; 1-888-727-6266
5	Marion, Morrow, Knox	Breast & Cervical Health Screening Project, Mansfield Ontario Richland County Health Department; 1-800-655-4707
6	Union, Delaware, Madison, Fayette, Pickaway, Franklin, Licking, Fairfield	Breast and Cervical Cancer Project, Licking County Health Department; 1-866-418-4963
7	Ross, Pike, Scioto, Jackson, Vinton, Gallia, Lawrence	Southern Ohio Women's Cancer Project, Ross County Health District; 1-800-944-2232
8	Perry, Hocking, Athens, Meigs, Morgan, Muskingum, Guernsey, Noble, Monroe, Washington	Southeastern Ohio Breast & Cervical Cancer Project, Noble County Health Department; 1-800-236-6253

(Ohio Department of Health, 2012)

Komen Columbus grant programs are educated to screen patients for Medicaid or Ohio Hospital Care Assistance Program (HCAP) eligibility as the first safety net, screen for BCCP eligibility as the second safety net, and utilize Komen funds for those who fall through the cracks as a third safety net. Women diagnosed through BCCP have historically been enrolled in BCCP Medicaid for their treatment and this keeps women in the continuum of care. Since Medicaid was expanded in Ohio to 138 percent FPL, women who are eligible for BCCP at 138-200 percent FPL are not Medicaid eligible and may be eligible to purchase insurance with tax credits from the state insurance marketplace. The proposed Fiscal Year 2016-2017 budget would have cut access to Medicaid for treatment for women between 138-200% FPL diagnosed through the BCCP program. Komen Columbus worked with the other Ohio Affiliates to advocate for this item to be restored in the budget, and was ultimately successful in the Ohio Senate Medicaid Committee. The successful lobbying of this issue hinged upon two strategies: 1) Ohio BCCP

conducts outreach on breast health and upon enrollment in the program's services, refers all eligible women to Medicaid, acting as a pathway to health insurance and health care for low-income women, and in many cases, their families; 2) Ohio BCCP currently serves low-income, uninsured women, however, through the Centers for Disease Control initiative for BCCP, there is room to modernize and adjust the program, to make Ohio's 3:1 matched dollars go farther. The program could potentially serve underinsured women who've been diagnosed either through the program, or elsewhere, and face high out-of-pocket costs and deductibles. Further, the program's case management and education arms serve critical roles in navigating women to points of access, and may have expansion potential. Future advocacy efforts should center on these strategies of modernizing BCCP and leveraging the program as a transitional and sustainable resource for the state.

According to estimates BCCP provided to Komen Columbus, in 2012, 164,665 women were eligible for BCCP services in Ohio (McMahon, J, personal communication, July 23, 2014). In that same year, BCCP provided 12,756 screenings, serving approximately 8 percent of the eligible population. In 2013, Ohio BCCP served 10,808 women (eligibility estimates were not available for 2013). Throughout 2013, due to limited funds, BCCP was no longer able to accept new screening patients. In 2013, new patients were only able to access the program if an abnormality or symptoms were present. The budget for FY 16/17 maintained steady funding levels, though health care costs increased, resulting in fewer women served.

Komen Columbus works to educate providers about BCCP as a resource for referral, and to promote the program to local women who need linked to screening services. The Affiliate also communicates with BCCP throughout the year about funding levels, the status of resources available (i.e. accepting new patients), and progress on providing services and detecting cancers. This information is communicated to legislators and advocates for adequate funding for the program, for example, at Lobby Day. A new tax check-off option will bring additional funds to the program in FY 15. Komen Columbus will maintain and work to enhance its current relationship with BCCP to address any emerging issues. There are opportunities to reduce duplication and increase collaboration and the complementary nature of Komen and BCCP work..

Alignment with Coalitions and Statewide Plans

State Comprehensive Cancer Control Coalition

The Ohio Partners for Cancer Control is a statewide consortium dedicated to reducing the cancer burden in Ohio. The group consists of member organizations representing comprehensive cancer needs across the state. In the early detection piece of the plan, Objective 1 to "increase the percentage of women age 50-74 who have received breast cancer screening..." seeks to increase the screening proportions from a baseline of 81.9 percent to the Healthy People 2020 goal of 90.1 percent. Objective 2 is to "reduce the rate of female breast cancer identified at late stages" from 43.1 per 100,000 age adjusted to the year 2000 standard population to 40.9, the Healthy People 2020 target. The plan refers to The Community Guide for evidence-based strategies to accomplish these objectives. Susan G. Komen Columbus was closely involved in the creation of these objectives, and their alignment with Healthy People 2020.

Several other objectives in the plan apply to a general wellness and prevention approach. These include objectives to increase physical activity, increase fruit and vegetable consumption, reduce obesity, and to increase access to the Ohio Cancer Genetics Network. Objectives towards improving the lives of breast cancer patients under the Patient-Centered Services section include assessing the state of survivorship services by American College of Surgeons Commission on Cancer standards, which can provide valuable information for future Komen Columbus work in survivorship.

Komen Columbus will continue to engage with OPCC via quarterly meetings and monthly subcommittees meetings of the prevention, early detection and patient-centered services subcommittees when appropriate. The Affiliate plans to be very involved in the writing of the next OPCC plan, to advocate specifically for evidence-based strategies and measurable objectives, to assist in implementing a plan for ongoing evaluation of progress, and to represent the needs of breast cancer patients.

State Health Improvement Plan

The Ohio Department of Health convened stakeholders to complete a State Health Assessment and then to create Ohio's State Health Improvement Plan (SHIP). The Plan includes an objective to increase the percent of breast cancer diagnosed at early-stage (ages 50-74) by 5 percent, increase screening utilization. Strategies employed include creating partnerships with health systems and educating primary care physicians. Another objective is to increase the use of Community Health Workers (CHWs) by educating providers on how to utilize the community health worker model and providing culturally appropriate tools and resources for CHWs that address screening, tobacco cessation, nutrition and physical activity. Other aspects of the plan focus on access to care with the objective to move towards patient-centered care, disseminate information and education for minority groups, and strengthen the safety net system.

Komen Columbus engaged in the review process of the SHIP as a community partner and will continue to participate in the writing of the next plan, specifically as a member of the Chronic Disease Workgroup.

Ohio's Plan to Prevent and Reduce Chronic Disease

After the Department of Health and stakeholders completed work on the SHIP, the Chronic Disease Workgroup from the State Health Improvement Plan process developed a more specific plan to address chronic disease. This plan includes built-environment approaches to increase physical activity and nutrition and to decrease obesity prevalence. Specifically for breast health, Objective 2.2 aims to increase age-appropriate screening for breast cancers, from a baseline of 78.2 percent to a 5-year outcome of 82.1 percent (as measured and reported by the Behavioral Risk Factor Surveillance System). Strategies include: partnerships with health systems and providers, provider education, and targeted awareness campaigns in high-need communities. Objective 3.3 aims to use the CHW model to address disease prevention and management through the following strategies: assessing the current state of the CHW model and available resources, linking CHWs into existing provider models, training CHWs in disease prevention and control, expanding models for reimbursement, and developing and piloting models to integrate CHWs with public health models to develop community teams to improve disease management and risk factors. Komen Columbus is an official objective partner on

Objective 2.2 and can participate in the plan through its programming and through role as a funder.

Affordable Care Act

The 2010 Affordable Care Act (ACA) aimed to expand access to care through insurance coverage, enhance the quality of care and make health care more affordable. To expand access to insurance coverage, the law included an insurance mandate requiring all individuals to have insurance, and expanded access to insurance by expanding Medicaid and establishing state insurance marketplaces, where individuals could purchase insurance with financial assistance.

The Ohio legislature expanded access to Medicaid from 100 percent FPL to 138 percent FPL. Ohio opted to implement a federally run insurance marketplace as opposed to operating its own state-run exchange. Under the ACA, people with incomes between 138 percent and 400 percent FPL may be eligible for sliding scale tax credits when purchasing insurance on the Ohio Health Insurance Marketplace, established by ACA. As a result of Ohio's federally run exchange, many people who tried to obtain insurance in the winter and spring of 2014 (open enrollment) through the state insurance marketplace website (Healthcare.gov) encountered technical glitches experienced nationwide. An extension was offered so that these individuals could still enroll and satisfy the ACA's insurance mandate. Ohio's utilization of the federally run exchange also involves some enrollees in the pending court issues regarding the legality of tax credits currently being heard by the US Supreme Court. Statewide discussions have begun regarding the proposals for Ohio to create its own state-run exchange if the courts rule against the legality of federal tax rebates for buying on the federally run exchanges.

Because of the expanded eligibility shown in Figure 3.5, it is estimated that the number of uninsured will continue to decline (Health Policy Institute of Ohio, 2012). The number of Ohioans who gained access to insurance through either Medicaid expansion or Ohio's Health Insurance Marketplace are listed in Table 15. Those who remain uninsured may include the following groups:

- Individuals eligible for Medicaid but not enrolled
- Undocumented immigrants
- Those exempt from the individual mandate
- Individuals eligible for subsidized coverage but not enrolled
- Other uninsured adults who have an affordable private option, but do not qualify for a subsidy and voluntarily remain uninsured despite the mandate.

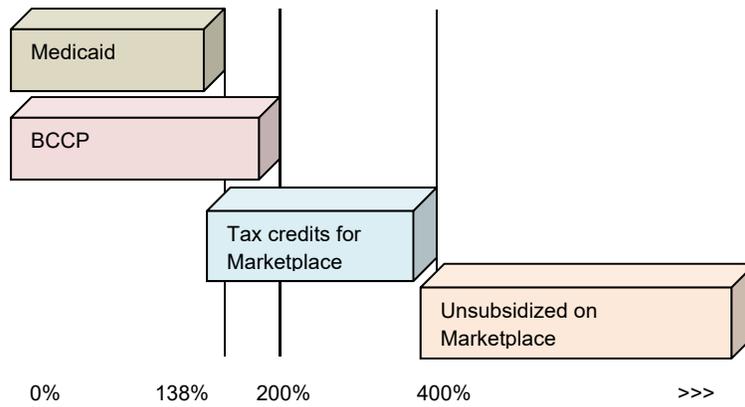


Figure 3.5. Income eligibility levels for Medicaid, BCCP services and Ohio Health Insurance Marketplace tax credits in Ohio

Projections estimate that 157,218 men and women, ages 19-64, were newly eligible for Medicaid in the service area alone, (734,000 in all Ohio) once Medicaid was expanded to 138 percent FPL. Actual numbers of newly eligible individuals that enrolled in Medicaid are not available. Healthcare.gov reports that 84,262 Ohio women enrolled in a marketplace plan and that 84 percent of those women were ages 35-64. Table 3.4 lists projections and actual enrollment numbers under expanded Medicaid and the Marketplace, to give an idea of the number of previously uninsured people in Ohio and the Komen Columbus service area who now have insurance.

Table 3.4. Estimates of ACA’s impact on Ohio’s uninsured

Target Community	Uninsured in 2012 (prior to insurance mandate)	Projected new 19-64 year olds covered due to Medicaid Expansion	Actual new 19-64 year olds covered due to Medicaid Expansion	Eligible for tax credits for Ohio Health Insurance Marketplace	Actual Insured through Ohio Health Insurance Marketplace
Service Area	175,081	157,218	106,851	Data unavailable	Data unavailable
Ohio	1,460,000	734,000	430,998	385,000	154,668

Note: The actual numbers of additional enrollees through Medicaid Expansion is not known publicly at this time. It is assumed that the actual number of additional insured will be lower than the potential numbers, as many people do not know about the availability of resources or have chosen not to enroll in insurance. These projections include men and women, ages 19-64. (The Kaiser Family Foundation, 2014) (Health Policy Institute of Ohio, 2013) (US Census Bureau, 2008-2012)(Health Policy Institute of Ohio, 2014)

Expanded coverage under Medicaid and access to the state insurance marketplace may have implications for BCCP in the future. Komen Columbus is aware that other states have moved away from funding BCCP programs, under the assumption that the insurance mandate and attempts towards affordability will erase the need for the BCCP safety net. In the future, if the changes made under ACA are successful, there is potential that the need for BCCP will diminish over time, and eventually, altogether. In fact, the Ohio Medicaid Expansion Study estimated Medicaid expansion alone could lead to \$2 million in savings on BCCP alone by 2014 (Health Policy Institute of Ohio, 2013). However, changes have not been universally successful or adopted, and BCCP remains a critical piece of the safety net in Ohio.

In addition to expanded insurance and access, the ACA also requires insurance to cover preventive services, including mammograms and annual well-woman visits where CBE can be offered at no cost to the patient, coverage of standard of care treatment for those participating in clinical trials, risk-reduction medication for individuals at high-risk of breast cancer. The law prohibits lifetime caps on coverage, prohibits insurers from denying coverage based on pre-existing conditions, and establishes minimum benefit standards.

The implications of health care reform and ACA mean access to preventive care and higher demands on the health system. Adaptations are needed not only to mission priorities, but also to whom and how the Affiliate makes grants. Two specific examples include a shift towards diagnostics and patient navigation, and adapting relationships with Local Health Departments. Many current grantees are reporting less need for the free and low-cost mammography being offered by their grant programs. Though many individuals have gained access to screening and primary care with no cost sharing, when abnormalities require further testing, diagnostic testing is often subject to high deductibles and no cost sharing. Even before the ACA, 23 percent of polled Ohioans reported the largest amount of their unpaid medical debt was a result of tests and diagnostic procedures (Health Policy Institute of Ohio, 2012). That number can only be expected to increase, as preventive visits become more universally covered. This is an issue that will be explored further through qualitative methods.

The ACA has implications for the funding of Local Health Departments (LHDs), which are often important partners and grantees of Komen Columbus. Most LHDs do not offer clinical breast exams or mammography. Historically, their efforts have been focused on education, and sometimes, LHDs have requested funding to provide mammograms through third parties or other Komen grantees. This practice has declined as the Affiliate restructured its funding rules to emphasize LHDs as a resource for education and referral to existing programs, to best utilize resources, however, more work is needed. It is important to understand the structure and funding sources of LHDs, in order to build granting guidelines that are shaped to empower LHDs to be effective and impactful in breast health. Many LHDs are moving towards cost and resource sharing models with each other, especially for salary and benefits. Staff time is usually very valuable and devoted to many projects, often across various grant projects. Funding is mostly from local nonprofit grants, local general revenue and public health levies. The ACA also mandated LHDs to participate in accreditation, which includes developing community needs assessments and health improvement plans. This will be an extra burden for LHDs financially and logistically. Finally, LHDs may represent an important resource for the community to learn about and be referred to Medicaid or state insurance exchanges.

Finally, though expanded access has been achieved by offering more affordable insurance coverage to new audiences, not all who have experienced increased access opportunity have utilized it by enrolling in insurance or utilizing care. In particular, the “working poor”, or those above 138 percent FPL who are not Medicaid eligible, may find it difficult to afford insurance through the state exchange, and many remain uninsured. Undocumented individuals also represent an important gap that is widely left out of any safety net coverage. Balancing those remaining needs and targeting these more specific gaps with early detection programming must be balanced with the need to shift toward later points of the continuum of care, like diagnostics and patient navigation. Patient navigation models, at the community and clinical level, are an

opportunity to increase adherence to recommended screening and follow-up by addressing non-traditional barriers to the continuum of care.

Affiliate's Public Policy Activities

Komen Columbus collaborates with the other three Ohio Affiliates on all possible advocacy work, communicating via monthly calls as appropriate. In 2013, the Ohio Affiliates moved Ohio Lobby Day from the spring, to October, Breast Cancer Awareness Month, in an attempt to best leverage the political attention paid to breast issues during that time. Each Affiliate schedules and meets with representatives from their area, delivering resources and discussing pending state issues, and advocating for BCCP.

From 2013-2014, the Ohio Affiliates achieved passage of oral anti-cancer drug parity legislation, expansion of Medicaid coverage in Ohio, protected state funding for BCCP and achieved passage of a tax check-off option to add additional funding to BCCP. After years of work, Governor John Kasich signed into law the Oral Chemotherapy bill (SB99) on June 17th, 2014. This means that patients who are prescribed an orally administered cancer medication will receive as much coverage by their insurance as they would for IV administered cancer medications. This bill is important because more than a quarter of the anti-cancer drugs in the research pipeline today are intended as oral drugs. Unfortunately, insurance practices have not kept up with advancements in science. Now, SB99 allows patients and their doctors to review the best possible treatment options based on what is best for the patient- not a price tag of treatment. The bill will go into effect January 1, 2015.

Coalition work, efforts to bring media attention through letters to the editor and media pitches, and activating the grassroots network with e-alerts to the Komen Advocacy Alliance have been effective tools in local advocacy work. For example, more than 385 Komen Advocacy Alliance supporters helped in the passage of SB99 (oral parity) in 2014 by writing letters to their House or Senate representatives through e-alerts.

Komen Columbus participated in advocacy for Medicaid expansion, which was successfully achieved in the fall of 2013, through work with several coalitions and leveraging the Komen Advocacy Alliance (KAA) e-alerts in the area to write legislators.

The Ohio Affiliates were proud to support House Bill (HB) 112, which will allow Ohio taxpayers to contribute a portion of their tax refund to the Ohio Breast and Cervical Cancer Project (BCCP). The bill was signed into law July 11, 2013 and contributions can be made for the tax year beginning January 1, 2014. The BCCP Tax Check-Off will enable the program to serve up to 1,700 additional women (approximately an 11 percent increase) with lifesaving and cost saving access to early detection and diagnostics.

Komen Columbus has a public policy committee, which follow the priorities set out by Komen HQ's public policy model. The committee and Director of Mission will utilize the state toolkit for guidance and resources in working towards the state priorities set out by HQ.

Of the priorities in the 2014 priorities, the only state issue that remains is to continue advocating for BCCP funding in the FY16/17 biennial budget, and to promote the tax-check-off option in the 2015 tax season to maximize funding to the program. Other upcoming or pending legislation in

Ohio that affects breast health includes S.B. 54 requiring physicians interpreting a mammogram who determines that the patient has dense breast tissue to specify this in the mammography report sent to the patient. As this bill is not currently endorsed as a Komen policy priority at the state level, its' progress will be monitored. Implications of ACA and any new legislation will also be monitored. The Affiliate will look to summarize current law and educate women on the laws that affect their insurance coverage and treatment rights. A summary of Ohio Breast Health Laws is included in Appendix A.

Finally, telehealth offers a cost-effective and convenient way to increase access to genetic counseling services to the Rural-Appalachian and Suburban counties that lack this access. However, insurance coverage presents a major barrier to this solution, since Ohio does not require private insurance or Medicaid to cover this type of telehealth service (Health Policy Institute of Ohio, 2013). Most of the work regarding telemedicine in Ohio, which could also help in the delivery of patient navigation to outlying areas, is limited to behavioral and mental health services covered by Medicaid. Komen Columbus will begin participation in the Health Policy Institute of Ohio's Telehealth Initiative, and utilize its work thus far in the Mission Action Plan.

Health Systems and Public Policy Analysis Findings

There are many changes occurring in health care, many of which are important to the context of community breast health and the work of Susan G. Komen Columbus. Rising demand, an aging population, rising costs, growing acceptance of prevention, ever-changing information technology, projected shortages of health care professionals, and a shift towards inter-professional team based, patient-centered care all play a role and have been drivers of reform of the US health care system.

New models of health care delivery are emerging and will continue to do so as a result of these factors driving health care reform. Health care is shifting in general toward an approach that emphasizes wellness overall (not just breast health). This shift includes growing emphasis on interdependent, integrative care models-- an area in which patient navigation is especially important. These factors should be considered not only in the content and priorities of grants and programs, but also in the review and awards process.

In the context of such shortages, increase in demand, a shift toward overall wellness and prevention, and improving access to care, the American Hospital Association's Primary Care Delivery Model report emphasizes the emerging priorities for primary health care delivery, including: communication, patient and family centered decision making and care planning, accessible care that meets the patient where the patient is (i.e. after-hours visits, online communication tools such as patient portal sites, email addresses of health care providers, etc.), and an evidence-based, outcomes-oriented safety and quality improvement culture that is supported by meaningful measurement. These points are important for an understanding of where and how to educate women about entry into screening and the continuum of care. These factors should be considered in the priorities, process and partnerships of Affiliate grants and programs. There may be a new opportunity to assist patients with education throughout the continuum of care, beyond screening, with patient navigation.

Specifically, gaps are present within the target communities of the service area. Rural-Appalachian counties have fewer specialists and access screening and diagnostics mostly through clinics and health departments. Often, these services are of lower quality. Treatment, reconstruction, survivorship and palliative services are available at hubs where hospitals are located, which means transportation and patient navigation to quality resources is necessary. Suburban counties have slightly better access to quality CoC services, though for survivorship, palliative and reconstruction needs, may also need to travel. The Metropolitan area serves as a large hub to all other areas of the service area, where many comprehensive and high quality services are available. However, education about these resources may be lacking and this area may face different, urban transportation barriers.

Whether or not patient navigation is available in each target community, its quality is unknown, and should be investigated further. As most resources throughout the service areas' counties tend to be concentrated, transportation also remains a critical piece of the CoC. Several potential partners may be important to addressing these gaps. Hospitals' Community Health Needs Assessments demonstrate that the target communities share concern about breast cancer in their communities. These hospitals will be important partners as the central providers in those areas. Redefining the role of LHDs in the grant programs is important, and new relationships must be created with several LHDs in the target communities.

The actual quality of cancer care presents an aspect of Komen's mission that has been largely unaddressed through reform, and may vary greatly even in areas with plenty of resources. More information is needed through qualitative data regarding the dissemination of research and quality of the care which so many have gained access to recently. For example, survivorship care plans, patient navigation and the personalization of treatments are all excellent tools that increase quality of care, but may not be of equal quality or available to much of the service area, even when a hospital or other resource is present. The American Hospital Association, American Society of Clinical Oncology and Institute of Medicine have published recommendations that may guide the role Komen Columbus can play to improve access to and quality of care, which will be discussed in the Mission Action Plan. Requirements of the American College of Surgeons and the National Accreditation Program for Breast Centers will be considered.

The impact of public policy on breast health care can be substantial, which is demonstrated by the recent improvements in access to primary care and screening. The Affiliate has discovered that the grassroots approach to state policy issues through storytelling and use of KAA e-alerts is the most effective and efficient approach to local public policy work. Komen Columbus has been successful working within the Public Policy priorities established, and will continue to focus on advocacy priorities within the Public Policy Model, with a focus on state issues. In the future, grassroots resources will be leveraged over direct lobbying. More can be learned about the impact of health care reform and resulting needs of hospitals, LHDs and providers through qualitative data collection. Information is needed on the quality and consistency of patient navigation throughout the service area. Komen Columbus grantees may also provide valuable information about the impact of ACA on the demand for screenings and diagnostics and other types of services. Need may increase for diagnostics, personalized treatment, education on specific topics, transportation, patient assistance, genetic counseling and testing and survivorship needs.

Qualitative Data: Ensuring Community Input

Qualitative Data Sources and Methodology Overview

Methodology

After assessing the quantitative, health systems and policy data, several breast health factors were identified for further qualitative investigation including: attitudes and beliefs, knowledge, utilization, access, transportation to each step of continuum, cost and other barriers, and knowledge of resources including patient navigation.

Because of the geographic range of the communities identified in previous sections of the assessment, key informant interviews and strategically placed focus groups were the most feasible options for qualitative data collection. Key informant interviews were used to gather breast health information within the geographic regions identified for further focus by quantitative data and health systems and policy analysis. This method facilitated data collection from a limited number of well-connected and informed community leaders and professionals, and to shape an understanding of the attitudes and beliefs of survivors and co-survivors. Through interviews, respondents could openly discuss the identified topic, and add to an understanding of the statistics and how they are interpreted in the community (Susan G. Komen, 2014).

Focus groups were used to investigate a range of ideas, beliefs and feelings about breast cancer, and to uncover factors that influence options and behavior of women in the service area. The data collected through focus groups clarified differences in perspectives between priority counties and identified barriers and ways to overcome them. Like the key informant interviews, this information, including the specific comments and language used by the participants, sheds light on the other data collected in this assessment.

Sampling

Komen Columbus staff and interns compiled lists of medical providers, current and past grantees, health departments, clinics, Federally Qualified Health Centers, support groups and other key contacts in each county. Each person was contacted by phone or e-mail, and invited to participate in a key informant interview. The interview incorporated skip-logic so that providers, survivors, and co-survivors each received customized, open-ended questions. For phone interviews, answers were entered into the interview form. When preferred, the interview was delivered via a format that allowed the informant to type their responses, while still maintaining the customized and open-ended nature of the interview. This assisted in efforts to reach and collect data from a desired number of informants. Each informant completed an electronic consent form before beginning the interview. All data were password protected on an internet server. Participants were informed that their information would remain confidential, and that all data would be reported in aggregate only, to protect anonymity.

The population of interest was community leaders and key stakeholders that encounter breast health issues or barriers to breast health through their personal experience or professional work. Snowball sampling was used by asking those who completed an interview to provide the names of colleagues or those in their network that might also be interested. This helped Komen Columbus include hard to reach members of the population, and helped the Affiliate include

people that had not been heard from before. Convenience sampling was used by reaching out to existing contacts, including grantees, or participants from various educational or other programs we've held, and professional network contacts. This was an efficient method to reach a large number of informative contacts that would not be possible using probability techniques. The combination of these methods meant that the sample may not be representative of the population. Convenience sampling means the sample may over represent and underrepresent some groups (Susan G. Komen, 2014).

Due to small populations in many of the rural and Appalachian counties, every attempt was made to hold focus groups in a central location and recruit from surrounding counties. Despite substantial recruitment efforts, throughout all three target communities, a limited number of focus groups could realistically be scheduled and conducted by Komen Columbus staff, resulting in low participation and small focus group count. Staff and interns scheduled, promoted, moderated and recorded focus groups. Participating community groups helped to promote and recruit participants.

Because much of the mission and key questions are aimed at women who have not yet been diagnosed with breast cancer, the population of interest was women, 40 years of age or older, residing in any of the target communities. However, after attempts to recruit diverse groups of non-survivor women 40 and older did not result in the number of participants needed, additional focus was placed on recruiting survivors. Convenience sampling was used to promote planned focus groups to survivors through the Komen Columbus survivor newsletter, flyers, e-mails to grantees and local support groups. Local organizations and businesses, including churches, book clubs, and women's groups were contacted about holding a group among their members, to some success. A local radio station that covered the suburban and metropolitan regions sent an invitation to its entire market research database, filtered to women 40 and older. Women who did not live in the area of focus completed a secondary survey, and that information is not reported here. Women who did live in the area of focus were invited to participate in a focus group. Throughout all recruitment efforts, snowball sampling was used by encouraging women to invite others to participate, adding some diversity and hard to reach individuals to the strength of the sample. However, these methods do not result in a representative sample and may over represent or underrepresent certain groups. Both survivors and women over 40 who have not had breast cancer are included, and contributed an insightful combination of experiences.

Ethics

Each participant completed a consent form and was informed that all data would be reported in aggregate or de-identified, to protect anonymity. No names were attached to data collected in the focus groups. Data were stored on a password protected computer in a locked office. Each participant received a \$10 gift card as an incentive.

The use of focus groups with women (survivors and general population ages 40+) and key informant interviews with a variety of health care providers, health officials, civic leaders and community leaders allowed Komen Columbus to compare and contrast the different perspectives about the barriers to screening, diagnostics and treatment in the metropolitan, suburban and rural-Appalachian target communities. This triangulation confirmed the themes and concerns of individuals at the community level with those at the system level.

Qualitative Data Overview

The key informant interview was designed to take 20-30 minutes to complete with open ended questions in two main categories: “Attitudes and Beliefs,” and “Education, Outreach, and Health Decision Making.” These two categories were then followed up with specific questions tailored to survivorship, co-survivorship, and health care provider association. Key informants ranged from community members with no direct ties to breast cancer, to breast health navigators, medical providers and administrators, survivors, and co-survivors. Detailed demographic data describing the key informants interviewed is in Table 4.1.

All key informant interviews were transcribed into an online data collection form, which also scripted the interview. This collection method allowed for the most flexible use of online software to filter, organize and analyze interview content, and allowed for skip-logic and consent to be integrated into one location.

Table 4.1. Key informant demographic summary

Target Community	Status					Gender		Age		
	Survivor	Co-survivor	Medical provider	Administrative staff	Other	Male	Female	<44	45-64	65+
Total respondents										
Metropolitan 20.2% (19)	41.2% (8)	70.6% (12)	35.3% (2)	23.5% (4)	11.8% (2)	10.5% (2)	89.5% (17)	36.8% (7)	47.4% (9)	15.8% (3)
Suburban 21.3% (20)	12.5% (2)	75.0% (12)	18.8% (3)	18.8% (3)	6.3% (1)	20.0% (4)	80.0% (16)	30.0% (6)	65.0% (13)	5.0% (1)
Rural-Appalachian 57.4% (55)	12.5% (6)	60.4% (29)	14.6% (7)	10.4% (5)	33.3% (16)	3.6% (2)	96.4% (53)	34.5% (19)	58.2% (32)	7.3% (4)

Metropolitan counties: Franklin (19). Suburban counties: Clark (5), Fairfield (1), Licking (5), Madison (9). Rural-Appalachian counties: Guernsey (4), Hocking, (3), Marion (7), Meigs (11), Monroe (1), Morgan (4), Muskingum (10), Noble (1), Perry (7), Vinton (3), Washington (4). All counties in target communities represented by at least one key informant interview.

A list of questions and script for focus groups was developed from earlier parts of the needs assessment and using the Community Profile Guidebook. All focus groups were recorded for back-up, and extensive notes were taken by the moderator during the discussion. These notes and recordings, when back-up or clarification was needed, were used as the main source of focus group data. Notes provided great detail, and remained anonymous, while recordings were available for clarification of any missing or unclear documentation. Detailed demographic data describing the focus group participants is in Table 4.2.

Table 4.2. Focus Group Demographic Data

Target Community	Age Range			Survivor	Income Level			Race/ Ethnicity		
	<40	40-59	60+		<\$30,000	\$30,001-\$50,000	More than \$50,000	Black/African American	White	Other
Total respondents										
Metropolitan 12.9% (8)	25.0% (2)	50.0% (4)	25.0% (2)	75.0% (6)	37.5% (3)	12.5% (1)	50.0% (4)	12.5% (1)	87.5% (7)	0.0% (0)
Suburban 11.3% (7)	0.0% (0)	42.9% (3)	57.1% (4)	85.7% (6)	0.0% (0)	42.9% (3)	42.9% (3)	14.3% (1)	85.7% (6)	0.0% (0)
Rural-Appalachian 75.8% (47)	4.3% (2)	27.7% (13)	68.1% (32)	34.0% (16)	25.5% (12)	12.8% (6)	36.2% (17)	4.3% (2)	91.5% (43)	2.1% (1)

Metropolitan counties: Franklin (8). Suburban counties: Licking, (2), Madison (5). Rural-Appalachian counties: Marion (22), Meigs (7), Muskingum (6), Washington (12). Note: All rows may not sum. Some questions were not answered or respondent selected “prefer not to disclose”.

Beginning with the key informant interview data, responses to each question were labeled with codes and those codes were organized into themes. Analysis was done by target community. Each response could be tagged, and subsequent references to that code could be re-tagged. This process allowed for filtering and counting the number of times each code emerged. Then codes could be grouped into themes, resulting in overall themes captured in the data for each target community (Table 4.3).

Table 4.3. Summary of key informant interview and focus group themes

Topic of interest	Metropolitan	Suburban	Rural-Appalachian
Available breast health services	<ul style="list-style-type: none"> Perceive many resources and services available, many places to get services without even going to hospital 	<ul style="list-style-type: none"> All have local hospital with screening and diagnostics Some other resources (especially reconstruction) have more options outside the area- works well to have a specialist travel to that county a few times a month to provide the service 	<ul style="list-style-type: none"> Health departments play larger role in this area. Less mention of local hospitals or providers, few options per area, small facilities Mobile units more relied on for mammography Lack of understanding about Komen grant process, (don't know they can apply for funding) and programs (that services are available and funded by Komen)
Barriers to care	<ol style="list-style-type: none"> Fear, pain/discomfort Education Time, convenience, Cost/ insurance/ connecting to a PCP (but seeing progress) Transportation 	<ol style="list-style-type: none"> Fear, pain/discomfort Education Cost/ insurance Time, child care, convenience, prioritizing self-care 	<ol style="list-style-type: none"> Time, transportation, convenience Cost/ insurance Fear Education, know risks <ul style="list-style-type: none"> Concern for women too young to be covered for mammograms Dislike of accepting free services

Topic of interest	Metropolitan	Suburban	Rural-Appalachian
Distance to care and transportation	<ul style="list-style-type: none"> Majority don't leave county for care Rely on family and friends for transportation help, harder for those with language barrier Resources that help include: incentives, gas cards Public transportation and cabs available. Receiving patients from other counties coming here for care 	<ul style="list-style-type: none"> Many do leave county for at least some aspect of care, many prefer to stay local for their care or are limited by work schedules or transportation issues from going to Columbus for care if they wish to. Very limited public transportation. Hard to use/ connect available. Komen grants' travel vouchers are major source of help. 	<ul style="list-style-type: none"> Almost everyone leaves county for care out of necessity- some prefer facilities in Columbus due to perception of size and quality, while others would prefer to stay local if possible Transportation has much bigger impact than other areas. Gas prices and lack of public transportation combine with poverty level to make bigger barrier and harder to overcome than in other areas. Time off work and extra stress to drive long distances multiple times per week Limited resources available outside Komen programs Managed Medicaid offers transportation, some options for senior citizens.
Mobile mammography	<ul style="list-style-type: none"> Promotion and advertising to participating groups is key Ability to accept "walk-ons" would help Reduces fear because in natural setting 	<ul style="list-style-type: none"> Doctor's order issues Strategic location and promotion make it a great tool for access Sometimes hard to fill schedule- many have impression it is only used for uninsured. Could be used more for access for insured 	<ul style="list-style-type: none"> Need more opportunities Some prefer a facility, but don't seem to understand the comparability of quality Some prefer the convenience of mobile

Topic of interest	Metropolitan	Suburban	Rural-Appalachian
Outreach and education	<ul style="list-style-type: none"> • Media, newspaper, TV, and internet are major source of information • Partnerships with community groups are needed to reach underserved/ minorities • Patient navigators (PN), providers, hotlines, mental health and social services, schools and churches suggested for disseminating information. Must be streamlined and simple • Recommend outreach and literature for reaching younger girls, who can also reach their mothers 	<ul style="list-style-type: none"> • Mobile units are visible reminders • Report seeing progress but outreach is missing some groups • Partnerships with community groups and health departments are emphasized • Media, newspaper, TV and internet also used • Providers, emphasized more as a source than metropolitan areas. • Providers and health departments, helpline, churches, salons, stores, churches, pharmacies and local organizations suggested for dissemination. Navigators must be familiar with available local resources and systems. • Personal relationships are drivers to action- individuals who outreach and speak to friends • Focus needed on remaining population that isn't utilizing and hard to motivate (like tobacco cessation) • Want more outside of October • Promote Komen Ambassadors as resources available to community- create conversation • Some concern over chemical exposure and air pollution as causes • In general, good understanding of risk factors and family risk 	<ul style="list-style-type: none"> • Health departments emphasized. • Newspaper is a major source. • Report seeing a lot of awareness but not sure of the outcomes. • Free luncheons • Less media and internet, especially for older women. • Almost exclusive reliance on health departments for disseminating resource information. Little mention of providers or patient navigators. Help line would be good, but limit the "runaround". • Attitude of not wanting to "bother the doctor" in small towns- survivors are visible and people ask them questions • Outreach to younger girls to dispel myths and embarrassment • Want more outside of October • Deep belief in environmental causes of cancer (Fracking, heavy metal exposure, air pollution, local electric and power plants) • Understanding of risk factors is mixed- belief in some myths • Aware of genetic factors, but unclear understanding of BRCA and how family history works • Perception that the area is plagued by greater cancer rates than other areas, and that it is being ignored • More outreach to working women
Survivor experience, survivorship services	<ul style="list-style-type: none"> • Varied experiences with provider communication. Mostly positive. • No delays in time to diagnosis/ follow-up • Lists of questions to ask and a "buddy" at the appointment are helpful 	<ul style="list-style-type: none"> • No delays in time to diagnosis/ follow-up 	<ul style="list-style-type: none"> • Mostly positive experiences. • When communication is poor, knowing what questions to ask is key tool- many would like record or written notes of visits • No delays in time to diagnosis/ follow-up • Feel abandoned after treatment is complete, concerned about diet and other health issues • Do not like getting news via phone call

Topic of interest	Metropolitan	Suburban	Rural-Appalachian
Trust in providers and health care system	<ul style="list-style-type: none"> Concerns are time spent with patient, costs, insurance and fear more than trusting providers. 	<ul style="list-style-type: none"> Many have impression that they can access better facilities in Columbus, but generally trust providers and system. 	<ul style="list-style-type: none"> Not many options to choose from for providers. Some trust and have positive experiences, some don't trust. Distrust centers around stories of mishandled cases. Lack of specialty providers drives distrust in expertise/knowledge of provider. Worry the system will be hard to work with if diagnosed Distrust insurance PCPs don't talk about breast health, screening recommendations and risk with patients General perception that breast cancer is not a priority concern
Patient navigation experience	<ul style="list-style-type: none"> Want help understanding diagnosis and options, locating support resources and coordinating appointments Some had very positive experiences with navigators, some had never heard of a navigator and wanted to know why they weren't offered one 	<ul style="list-style-type: none"> Want help understanding diagnosis and options, locating support resources and coordinating appointments Those that had navigators were positive, had gone to Columbus health system 	<ul style="list-style-type: none"> Need to be easily accessible, and communicative Want help understanding diagnosis and options, locating support resources and coordinating appointments Often discuss old American Cancer Society navigator program or other kinds of advocates- desire education about recovery, post treatment life and treatment options
Providers, tracking, CDC guidelines	<ul style="list-style-type: none"> Follow USPTF, NCCN, ACS guidelines Some implement tracking and reminder systems See awareness of resources and connecting to facilities as barriers for women Yearly reminder letters and making appointments for the following year at a visit seem helpful 	<ul style="list-style-type: none"> Follow USPTF, NCCN, ACS guidelines Unclear on tracking and reminder systems See education about recommendations and scheduling as barriers for women Note that a better connection to navigators or health department would be beneficial 	<ul style="list-style-type: none"> Follow USPTF, NCCN, ACS guidelines Some implement tracking and reminder systems See fear and confusion about recommendations as barriers for women Need help with follow-up diagnostics linkage and transportation Confusion about when recommendations suggest a woman stop being screened due to age

Qualitative Data Findings

Limitations of the Qualitative Data

Certain implications of data collection methods limit capability of the findings to represent each target community accurately. The use of focus groups enabled in-depth data collection, stimulated individuals to share openly, strengthened relationship with the community, and was an efficient way to collect wide range of information in a short amount of time. The focus groups also provided information about needs, community attitudes and norms. However, the data collected in focus groups can be hard to analyze and present in a scientific manner. Most importantly, it was challenging to recruit enough participants or schedule enough focus groups in the large number of target counties to meet best practice standard of three or more groups

per county. This makes it difficult to generalize the findings to the larger population. However, focus group saturation of themes was achieved, even without the ideal number of focus groups. Specifically, breast cancer survivors may be overrepresented in the focus group data, while the general population of women over 40 years of age and older may be underrepresented.

The use of key informant interviews allowed an exploration of topics in-depth and yielded detail-rich data and new insights. It allowed informants to clarify issues as needed and provided an opportunity to strengthen and build relationship with communities and new professional colleagues. It also gave investigators the flexibility to customize the interview to the individual and clarify questions. However, weaknesses of the data include the difficulty of selecting the “right” informants with appropriate diversity of backgrounds and viewpoints. There may be distortions in answers through recall error, selective perceptions or desire to please the interviewer. Due to the challenge of scheduling interviews, respondents were allowed a backup option of completing an automated version if necessary, which meant some interviews lack some of the flexibility of a traditional interview. In order to achieve a high standard of data, the goal was to complete eleven key informant interviews per county in each target community. This was achieved only in Franklin and Meigs Counties. Due to much smaller population size and difficulty contacting key informants, less than best practice key informant sample sizes were achieved in all other counties. These issues make it difficult to generalize the results to larger population and hard to compare respondents. The data may be better used at the aggregate level, when looking at the counties grouped by target community.

The qualitative data collection represented several different income levels, insurance coverage types, survivors and non-survivors, age ranges, providers, knowledge and education levels. However, the data may not represent Hispanics/ Latinas, Asian Americans, young survivors or male survivors specifically. Due to the number of counties in the Rural-Appalachian community, data presented in aggregate may over represent women living in those areas.

Barriers to Care

In Metropolitan and Suburban communities, fear of diagnosis, misconceptions about pain or discomfort of screening, and a lack of education about resources, risk or recommendations emerged as the top barriers to care. These concerns were followed by costs and insurance issues, and general access issues like child care, convenience, and the struggle of many women to prioritize their health over competing family needs. Transportation was not nearly as concerning in these areas as it was in Rural-Appalachian areas, where it was the top barrier. After transportation, time and convenience, fear and education emerged as important.

Fear

Fear was again cited as a common reason to not seek care among all communities. In addition to being fearful of the procedure and results, women reported nervousness about discomfort or pain during mammography as a possible concern. Participants stated that individuals are scared of finding out their test results and would rather not know the truth than face a cancer diagnosis. However, fear was also a motivating factor for one woman to get screened who said that “being a single parent, I have to stay alive for this child.” All areas noted that education about mammography, risk, breast abnormalities and breast cancer, and misconceptions would help to combat this issue.

Insurance/ Cost

Participants noted that coverage definitely affects whether or not a woman seeks care, but were encouraged by the effects of the Affordable Care Act and Medicaid expansion in making screening more available. Awareness of the available resources and insurance options, as well as how to use that insurance, was important in all communities. All areas reported seeing higher deductibles in their insurance coverage. Costs remained a more critical issue in the Rural-Appalachian areas, especially non-medical costs and transportation-related costs.

Transportation/ Access/ Time

Transportation was overall less of an issue for women in counties that were within one hour of Columbus and in Columbus, most women do not have any need to leave the county for care and the public transportation system is more comprehensive. Throughout the service area, women rely on family and friends for help with transportation, which is complicated by costs, language, disability or other issues. Helpful tools vary by area, but all areas report gas cards, extended hours and mobile mammography are helpful.

Though women in Metropolitan areas stay local for their care, many noted that providers should be aware that women may be traveling to the area for care from Suburban and Rural-Appalachian areas.

In Suburban areas, transportation was an issue as many participants frequently traveled to Columbus for treatment at the Ohio State University Wexner Medical Center, Grant, Mount Carmel, and Riverside Methodist. Scheduling was an issue for women travelling to Columbus because they would have to either miss half a day or work or attempt to schedule the appointment early enough to allow time to return to work. One individual had to request a note from her doctor to miss work because of exhaustion due to travel. While individuals in the focus group were able to provide their own transportation they perceived that many residents of their county do not have access to get to a hospital.

Transportation is a more complex and difficult barrier in the Rural-Appalachian community than other areas. Gas prices and lack of public transportation combine with the prevalence of poverty to make transportation issues harder to overcome. Women noted that they did not have time to seek screening services and that there is a lack of convenience associated with breast health screening, which deters women from getting care. Women are unable to take time off work for screening, and many locations do not offer flexible hours.

For women undergoing diagnostics or treatment, leaving the county becomes necessary in many Rural Appalachian counties. There is a perception that a bigger town or facility will have better technology or training, which is why women may desire to travel farther for services. Worrying about finances and time off work adds an additional layer of stress that is very frustrating for patients.

The available resources in Suburban and Rural Appalachian areas are difficult to access, and often only available for senior citizens or through Managed Medicaid.

Komen Community Grants provide gas assistance, and these are noted as one of the few sources of help available.

Outreach and Education

Media, newspaper, TV and internet are major sources of information across all communities. Many women report they see progress in the education being done in their areas, but doubt the success of that education in motivating women to take action, or suspect specific groups are not being reached. In all areas, women note that partnerships with other community groups to target and reach specific groups would be beneficial. All areas emphasized churches, social work or civic organizations and schools as potential sources of outreach. Suburban areas also mentioned local businesses like salons and pharmacies. The Rural-Appalachian area mentioned local media and matching survivors with others to provide support and education. In the Metropolitan and Rural Appalachian communities, targeted and sensitive outreach to younger girls during health classes in school was suggested as a way to dispel myths, create a healthy foundation for girls as they approach an age when they will be at risk, and to also bring education to their mothers.

In the Rural Appalachian community with an aging population, internet is not used or as readily available as in other areas. There is almost exclusive reliance on health departments, as opposed to health care providers, for information. Health departments were emphasized much more in Suburban and Rural-Appalachian areas as a resource where women look for information. Personal relationships were emphasized in both areas as crucial to getting women to take action. Survivors are held up as examples in these communities. Survivors and Komen Ambassadors were recommended as source of education. Both areas emphasized wanting more activity outside of October, Breast Cancer Awareness Month, and were concerned about “awareness” versus “education.”

Understanding of Risk

There are extensive misconceptions about risk and breast cancer in the Rural-Appalachian area. One participant had a mammogram following identification of a lump during a breast exam and did not understand what difference it would have made if it was found earlier during an annual exam. Rural Appalachian county residents held a deep belief in environmental circumstances affecting their risk for cancer. Environmental conditions included fracking, heavy metal exposure, chemical and electrical plants being in the vicinity, living near “big power lines,” and air pollution. Personal characteristics that contribute to being at risk include alcohol, drugs, smoking, chemicals in processed foods, the amount of red meat eaten, and stress. Increased calcium levels and lacking certain hormones were also probably causes. One participant worried that because she accompanied a friend to a radiation treatment she caused her own tumor to grow. There is a deep distrust for the chemical plants in the Mid-Ohio Valley. Respondents agree that they are a cause for cancer but because they provide employment for many residents in the county the issue is not addressed. Another woman believed that having a short hit to the breast or a fall could be a cause of cancer. There is a strong perception that the Rural Appalachian area is uniquely affected by high rates of cancer and that the problem is being ignored.

Similar beliefs were reported in the Suburban community, though are not held as deeply or as widely. Participants cited environmental issues such as air quality and chemical

exposures (“sprayed fields”), as a reason for being at an increased risk for breast cancer. In some aspects, Suburban participants demonstrated an accurate understanding of risk factors like age, stress, diet and weight. Overall, Suburban participants were skeptical to pinpoint an exact risk factor for the cause of cancer due to a lack of trust in the media, and personal experience with the disease without any known risk factors. “These days they tell you anything can cause cancer.” And in response to media reports for associated risk factors one participant stated that it should be “taken with a grain of salt.”

Understanding of family history and genetic factors varies widely. Participants in all communities were aware of the relationship between family history and genetic factors and breast cancer risk. There was a general understanding that a family history may mean increased risk of breast cancer. However, there was confusion over what constitutes a family history and how the BRCA gene affects risk. One participant wanted to be tested for the gene because her brother had prostate cancer and was upset to find that a local provider did not recommend the procedure. Another stated that because she and her sister had breast cancer her daughter was “going to get it.” Other participants discussed having the gene as a reason to seek a prophylactic mastectomy before a diagnosis.

Quality of Care

Recommendations and guidelines

Respondent providers use a variety of recommendations for screening, including United States Preventive Task Force, National Comprehensive Cancer Network, and American Cancer Society recommendations. A few referred to “breast self-exam.” Some providers reported using reminder and tracking systems, though the types varied, and the provider sample is not representative. Women reported that yearly reminders are very effective at encouraging routine screening, and missing a reminder has resulted in a missed mammogram. One woman said that setting up her next annual appointment while she was leaving her current appointment was very helpful. Through additional work with the Susan G. Komen Columbus Survivorship Steering Committee, 40 percent of participating providers reported that they were not familiar with the Center for Disease Control guidelines for time to diagnostic and treatment resolution. However, among focus group participants and key informants, delays in diagnosis or treatment were not a concern. Screening facilities in the Metropolitan area have tracking and reminder software that communicates with the electronic medical records of the referring primary care provider, though it is unclear how many facilities are using this tool.

Patient-provider communication

Respondents from all areas have a mixture of experiences with providers. Though most report positive experiences with providers and recommendations, some women did not feel like their provider communicated with them effectively about their care.

Women emphasized that communication with providers is better when the patient is prepared and is aware of questions to ask pertaining to their care. One participant reported bringing a list of questions to her doctor and then requested that she be called or emailed with the responses at a later date. One survivor felt that the doctor relayed

the information to her in the office very well but once she returned home she realized that she understood less than she thought. Communication is also improved if the patient has a “buddy” that is able to ask questions and take notes. Though some resources are available with questions to ask the doctor, women were not aware of them. Rural Appalachian respondents placed a greater trust in having a written report or notes from their appointment. Important pieces of the survivor experience included education about their treatment options at diagnosis, cooperative insurance and workplaces, family support and exercise and other classes.

Many women value second opinions very highly. Survivors noted they appreciate honesty and a balance of reality and positivity when communicating with their provider. Some also felt that their doctor wanted to keep them uplifted and wasn’t entirely forthcoming about recurrence statistics.

More information was requested about lifestyle changes after diagnosis such as exercise patterns and dieting recommendations. Almost no women in any area received survivorship care plans, and a few did not feel informed about their reconstruction options.

Trust in providers and health care system

Among Metropolitan respondents, concerns about trust centered on the time spent with a patient by a provider, costs and fear, more than distrust of the actual provider. In the Suburban areas, many women have the impression that they can access better facilities and care in Columbus, but generally, respondents reported trusting their providers and the health care system.

In the Rural Appalachian area, word of mouth plays a critical role, and one negative experience with a provider leads to distrust within the whole system.

Participants in the Rural Appalachian community reported having less trust in providers than they used to because of all the information that they now have access to online, and because the provider is not always familiar with their entire family. Participants feel as if providers’ “hands are tied” in a power struggle with insurance companies and this affects the care they receive leading to more patient-provider distrust. A lack of specialty providers in the area drives many to distrust the expertise or knowledge of their provider, and many reported concern that the system will be hard to work with if they are ever diagnosed. Many didn’t feel their primary care providers were concerned or discussed breast health and risk enough.

Mobile Mammography

Mobile mammography was generally seen as a critical tool in each community, though reasons varied. Throughout all communities, promotion and strategic partnerships with groups reaching target populations were seen as key to the success of mobile mammography. Among the Metropolitan group, the ability to accept “walk-on” patients for screening was seen as a way to increase the impact of mobile mammography. One of the strengths of mobile mammography was that it takes place in a natural setting and thus reduces fear.

In Suburban areas, referring physicians' orders and filling the schedule of the mobile unit were seen as struggles that reduce its effectiveness. However, it is seen as a great tool for access, with proper promotion and partnerships with local churches, senior centers, and civic groups.

The topic of mobile mammography elicited mixed responses from participants in Rural-Appalachian areas. A few respondents felt that a mobile unit would not be used because they prefer an actual screening facility. However, this concern seemed to bring up that education may be needed about the quality of mobile mammography and the process for follow-up with abnormal screenings. Myths about mobile mammography would need dispelled to increase its use. Other participants believed that, like in other communities, with appropriate hours, promotion and partnerships, a mobile unit would be more convenient than seeking services in an office location. Suggestions for mobile units and community outreach locations included the library, county fair, and schools.

Discussion about mobile mammography highlighted a unique issue in the Rural Appalachian community the attitude that women will overcome barriers if something is important enough to them. This sentiment emerged several times.

Patient Navigation Experience

Experiences with patient navigators (PNs) varied from extremely positive to non-existent. Most women in all three communities had never heard of a PN, including survivors. Those who had worked with a PN reported positive experiences. Most wished that the PN was also in contact with family for additional information and support. In all areas, women desired help in understanding a diagnosis and treatment options so they could make the best decisions, locating support resources (including disability, insurance and non-medical financial assistance), and coordinating appointments.

Among Metropolitan respondents, women were largely unfamiliar with patient navigation services and did not know if they would be assigned a navigator or if this was something they should have requested. Among Suburban respondents, those who interacted with a PN reported positive experiences throughout care. "I know I wasn't the only patient but she treated me like I was." In Rural Appalachian focus groups, patient navigation was not directly discussed, but participants suggested that there should be someone in the doctor's office that can provide information and educate patients. Washington County participants suggested having a personal trainer to help provide individualized recovery programs. One survivor was issued a navigator through her insurance company but was worried "she was getting in my business so I was hesitant to talk to her." The individual instead turned to friends and family for answers about the "little things" that doctors did not tell her. Women in Marion County differentiated between a PN and a patient advocate. The term "advocate" elicited more positive feelings and associations within the health care setting than did the word "navigator." Women who were unfamiliar with patient navigation (or advocate) services agreed that having this type of service would be a wonderful tool to help make sure women are educated about their diagnosis and receive appropriate support. Women recognized the importance of factors like weight, exercise and diet in recurrence, but wanted more information on how to implement risk reducing behaviors.

Komen Columbus's Survivorship Steering Committee identified patient navigation as a topic of focus for education and programming in its January 2014 meeting and subsequent committee work. Survivors reported varied quality of interactions with PNs and PNs were identified as crucial points in the system where education about various topics could greatly enhance a patient's experience throughout the continuum of care.

Interviews with PNs highlighted a wide range of experience, from cardiology to acute care to palliative care to neonatal to oncology. Most PNs were trained in nursing, but a minority were trained in a different field, like social work (refer to PN Key Informant Interview summary attachment). More than 30 percent reported no patient navigation training whatsoever. Within the group who received training, over 22 percent reported general training that was not breast specific. Fifty three percent reported there is no uniform training within their hospital or health system. The navigators were from seven different counties, including rural, Appalachian, suburban and metropolitan settings, and represented 13 hospitals in central and southeastern Ohio. Eighty four percent of respondents had experience as a PN greater than four years. Sixty nine percent reported patients don't receive a survivorship care plan yet, indicating a need for integration of that tool into their training. Sixty one percent reported they were not familiar with the Oncology Nursing Society's Nurse Navigator Core Competencies. Discussions revealed that many existing trainings are available at unreasonable costs.

Conclusions

Qualitative data affirmed the findings of the health systems analysis, which identified gaps in follow-up care, patient navigation, survivorship services and transportation in suburban and Rural-Appalachian communities. Those in the Metropolitan area enjoy a wider variety of services, which are more easily accessible. Those in Suburban and Rural Appalachian communities must travel farther to screening, though that distance and difficulty varies widely, and lack the variety of options offered in Columbus. Health departments play a much more critical role in the Rural Appalachian counties as a source of information and clearinghouse for resources than in other areas. Providers are relied on less directly than in other areas, and awareness of Komen grant funding opportunities and services offered is poor.

Mission Action Plan

Breast Health and Breast Cancer Findings of the Target Communities

Franklin County was selected as a target community due to its large female population and because it is the county with the highest number of breast cancer cases, highest number of breast cancer deaths, and the highest number of late-stage diagnoses (Table 2.1). Given the breast cancer death disparity in the Black/African-American population, Black/African-American women are a special population within this county (the county's Black/African-American population is the largest at 23.0 percent). The Suburban target community (Clark, Licking and Madison Counties) accounts for the second highest number of cases, deaths and late-stage diagnoses. These counties were selected based on their predicted time to achieve death and late-stage diagnosis Healthy People 2020 goals. The Rural-Appalachian target community counties (Guernsey, Hocking, Noble, Marion, Meigs, Monroe, Morgan, Muskingum, Perry, Vinton and Washington Counties) were selected due to their predicted failure to achieve Healthy People 2020 death and late-stage diagnosis goals. The Rural-Appalachian target community is characterized by low-income, lower educational attainment, mistrust of health care providers and fatalistic attitudes towards cancer. Proximity to health care facilities varies in this region- six of the counties have hospitals and six counties are medically underserved. Though these counties were selected for further exploration in the qualitative and health systems portions of the Community Profile and results of that work may not be applied to the rest of the counties in a region, the Mission Action Plan discusses problems, priorities and objectives on a regional level: Metropolitan, Suburban and Rural-Appalachian.

After quantitative data were used to identify areas of concern, further analyses were conducted to identify contributing factors to poor outcomes. The main findings of the health systems and public policy analysis highlighted several issues. Though many groups have gained insurance coverage through state exchanges and stipends or Medicaid expansion, many remain uninsured and face new financial barriers, like out of pocket diagnostic costs. Some have access to insurance, and may not find it affordable, while others are ineligible to access insurance coverage. In particular, groups most likely to remain uninsured may include individuals eligible for Medicaid but not enrolled, undocumented immigrants, those exempt from the individual mandate, individuals eligible for subsidized coverage but not enrolled, other uninsured adults who have an affordable private option, but do not qualify for a subsidy and voluntarily remain uninsured despite the mandate.

Financial barriers to care may still include the need for free or low cost screenings targeted specifically to this new uninsured population, assisting eligible women to enroll in available options or empowering them to understand and utilize their existing benefits. Financial barriers now include diagnostics and follow-up care, which are subject to out of pocket costs and deductibles under most new plans. Budget cycles and the impact of the Affordable Care Act and Medicaid Expansion will continue to affect Ohio BCCP.

There are opportunities for strengthening existing and creating new partnerships with hospitals, local health departments, FQHCs and Ohio BCCP. Especially in the Rural-Appalachian target community, relationships with health departments and local faith communities can play a critical role in awareness of and linkage to existing resources.

Patient navigation or some type of advocacy is needed specifically in counties where an abnormal screening requires follow-up in a separate facility, often in another county. This problem exists in both Rural-Appalachian and Suburban target communities. Information about the services provided is difficult to find, and could be addressed with patient navigation. Patient navigation can also assist women who may experience transportation or other barriers because they must utilize many different providers for the various services they need. Transportation needs for the Metropolitan target community differ from the transportation needs of Suburban and Rural-Appalachian communities, which was explored further with qualitative data. The need is great for more mobile mammography opportunities, especially in the Rural-Appalachian communities, where screening options are more limited and involve more transportation barriers.

Finally, this work revealed that policy barriers exist to the use of telehealth to increase access to genetic counseling in Rural-Appalachian and Suburban communities. Specifically, insurance coverage does not cover genetic counseling offered via telehealth in the same way as an in-person consultation.

Qualitative investigation was designed to investigate these factors further, and obtain feedback from the target population about the health system and policy barriers that may contribute to late-stage diagnosis and breast cancer death rates. The results highlighted some of the same issues from earlier analysis, while expanding on and revealing others. Education needs vary between the three target communities. Qualitative data and the health systems analysis show the importance of transportation and logistical or physical access to the continuum of care in Rural-Appalachian and Suburban counties. Qualitative data and the health systems analysis also showed gaps in patient navigation in these areas. The findings from earlier sections about the impacts of the Affordable Care Act and insurance coverage were further confirmed. Similarly, the need for mobile mammography throughout all areas, but specifically in Rural-Appalachian and Suburban counties was highlighted. The need for patient self-advocacy tools and resources emerged through conversations about patient-provider communication and trust in the health care system. Most surprisingly, qualitative analysis revealed most participants have no knowledge of patient navigation as a resource, while previous sections identified its importance as a tool to fill gaps.

Mission Action Plan

Problem statements were drawn directly from the findings and major themes of the preceding data sections. Priorities and possible action steps were identified through discussions and suggestions from a mission action planning team, made up of key stakeholders, providers and other content experts, who provided input and feedback. Staff used those suggestions to develop objectives that were measurable, time-bound and specific.

Problem Statement: The Metropolitan, Suburban, and Rural-Appalachian target communities experience informational, financial, logistical and physical barriers to entering the continuum of care through recommended screening which contributes to higher than average breast cancer late-stage diagnosis and death rates. Qualitative and health systems analysis revealed these communities experience communication and

access barriers to accessing, adhering to and receiving high quality care in a timely manner.

Priority: Increase the number of women entering the continuum of care through recommended screening by increasing breast self- awareness, understanding of personal risk, inherited risk, and reduce fears and myths surrounding screening and breast cancer, motivating and utilizing available resources, including utilizing existing insurance.

Objective 1: By September 2016, an educational webinar will be conducted with at least three community partners in the Suburban community and three community partners in the Metropolitan community.

Objective 2: On an annual basis (FY16 –FY19), Affiliate website will be updated with local resources for the Suburban, Metropolitan and Rural-Appalachian Regions, including local community health programs and screening resources.

Objective 3: By September 2015, promote local resources by disseminating link to website directory to at least 30 community partners and stakeholders in Suburban, Metropolitan and Rural-Appalachian Regions, repeating on an annual basis (FY16 – FY19).

Objective 4: By September 2019, provide support to local health plans in improving the screening rate among the Managed Care Plan members in Ohio by supporting partnerships with funded Komen Columbus programs, providing disparity awareness information, and training in support navigating non-compliant plan members to screening and follow-up.

Objective 5: By October 2016, add at least one evidence-based model component to include in the Worship in Pink program in Rural-Appalachian and Metropolitan communities.

1. Increase participation of Metropolitan faith-based organizations in the Worship in Pink program by five percent in FY2016, specifically addressing the Black/African-American population (baseline is 27 organizations in FY2015). Grow participation an additional two organizations in FY2017. Increase participation an additional two organizations in FY2018. Increase participation an additional two organizations in FY2019.
2. Expand participation in the Worship in Pink program from a baseline of five in FY2015 to ten participating organizations in Suburban community in FY2016. Grow by additional two organizations in FY2017. Grow participation an additional two organizations in FY2018. Grow participation an additional two organizations in FY2019.

Priority: Increase availability of mobile mammography in Suburban and Rural-Appalachian communities.

Objective 1: By 2017, hold a stakeholder meeting with six mobile mammography providers and partner organizations in Rural-Appalachian counties to discuss issues related to mobile mammography, including referrals, sites, target populations and partners, follow-up and availability of mobile units.

Objective 2: By FY2017, Community Grant RFA will include mobile mammography as a funding priority for the Rural-Appalachian community.

Priority: Improve the quality and capacity of clinical and lay patient navigation in all target communities to assess and address informational, educational, financial, logistical and other barriers to screening or follow-up care

Objective 1: In FY16 and FY17, deliver at least one online patient navigator training each year through Walgreens grant to reach at least 25 of patient navigators.

Objective 2: From FY2016 to FY2019, Community Grant RFA will include evidence-based education approaches that will dispel fears and measurably increase education and breast self-awareness with appropriate partners as a funding priority for programs occurring in the Metropolitan, Suburban and Rural-Appalachian regions.

Objective 3: From FY2016 to FY2019, Community Grant RFA will include evidence-based approaches to increase utilization of insurance benefits among non-compliant, insured population in Suburban, Metropolitan and Rural-Appalachian counties as a funding priority.

Objective 4: In FY2016, create RFA that reduces the financial barriers to screening, diagnostics and follow-up care in Suburban, Metropolitan and Rural-Appalachian counties (may include co-pays, out of pocket costs, genetic testing costs, transportation and more). Evaluate and revise RFA based on new evidence-based models, and previous years' grant outcomes through FY2019.

Objective 5: In FY2016, create RFA that reduces the physical and logistical barriers to screening, diagnostics and follow-up care in Suburban, Metropolitan and Rural-Appalachian counties (may include transportation vouchers, extended hours of availability, mobile mammography at workplaces and in communities lacking screening access). Evaluate and revise RFA based on new evidence-based models, and previous years' grant outcomes through FY2019.

Objective 6: FY2016 to FY2019, Community Grant RFA includes evidence-based patient navigation targeting vulnerable populations at the point of an abnormal screening result as a funding priority for programs in Rural-Appalachian and Suburban Regions.

Objective 7: Create a network for communication between patient navigators (meetings, listserv) to enable promotion of resources to patient navigators by FY2017.

Objective 8: Promote the use of available self-advocacy materials (i.e. Questions to Ask the Doctor series) to providers, patients and navigators through at least 10 social media posts, one letter to oncology offices partners by FY2017, and again in FY2019, and communication with navigators funded through Community Grant programs.

Objective 9: Improve capacity and quality of patient navigation through new strategic, philanthropic partnerships to support at least one pilot project by September 2018

Priority: Increase awareness of metastatic breast cancer resources and improve sensitivity to and support of metastatic breast cancer patients.

Objective 1: Disseminate the Metastatic Breast Cancer Toolkit to at least 30 community partners, hospitals and patient navigators in all target communities by FY2016.

Objective 2: Meet with or communicate with at least 30 provider community partners to promote available educational resources for metastatic breast cancer patients (fact sheets) by FY2017.

Priority: Increase awareness of and reduce the disparity in breast cancer mortality among local African American women.

Objective 1: Conduct quality assessment of resources in Metropolitan target community by June 2018.

Objective 2: Incorporate polices that improve overall social determinants of health into FY2018 RFA and other strategic mission partnerships and advocacy work.

Objective 3: Provide at least ten trainings (providers, health plans, policymakers, community) about breast cancer disparities and local solutions by June 2018.

Objective 4: Identify and implement at least two innovative partnerships to address disparities by July 2018.

Problem Statement: Health Systems Analysis revealed threats to the funding of the Breast and Cervical Cancer program. Advocacy work to adapt to ongoing health care reform and to protect BCCP are necessary.

Priority: Through advocacy, support the budget for and partner with the Ohio Breast and Cervical Cancer Program to ensure the continuum of care for its clients.

Objective 1: Coordinate with the other state affiliates through monthly meetings to support funding in the FY2016-2017 and FY2017-2018 state budgets.

Objective 2: Promote the state income tax check-off donation option in February and March of FY2017 so that enough donations are received to keep the check-off on the ballot for the following year.

Objective 3: Meet with BCCP quarterly to address any coverage gaps for BCCP clients due to changing eligibility.

Objective 4: Incorporate partnerships with BCCP and knowledge of unmet need into RFA by FY2017, to be used through 2019.

Objective 5: Promote the state income tax check-off donation option in December- March each year to increase BCCP funding.

Objective 6: Coordinate with the other state affiliates through monthly meetings to support increased funding in the FY2019-2020 state budget from FY2017-2018 levels.

References

American College of Radiology. (n.d.). Accredited Facility Search. Retrieved July 30, 2014, from <http://www.acr.org/Quality-Safety/Accreditation/Accredited-Facility-Search>

American College of Surgeons. (2011, September 1). National Accreditation Program for Breast Centers. Retrieved from <http://napbc-breast.org/resources/find.html>

American College of Surgeons. (n.d.). Cancer Programs. Retrieved July 30, 2014, from Search the CoC Hospital Locator: http://datalinks.facs.org/cpm/CPMApprovedHospitals_Search.htm

American Hospital Association. (2013). Workforce Roles in a Redesigned Primary Care Model. Retrieved April 2014, from 2013 AHA Policy Research: <http://www.aha.org/research/policy/2013.shtml>

American Society of Clinical Oncology. (2014). The State of Cancer Care in America: 2014. Alexandria, Virginia: American Society of Clinical Oncology.

Association of Health Commissioners, Inc. (2012). Executive Summary: Public Health Futures. Considerations for a New Framework for Local Public Health in Ohio. Association of Health Commissioners, Inc.

Balisteri, K., & Joyner, K. (2012). A Health Profile of Ohio Women and Children. Ohio Medicaid Assessment Survey.

Centers for Disease Control and Prevention (CDC). (2010-2012). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia, U.S.

Ferketich, A. K., Wang, L., & Sahr, T. R. (2013). Health Disparities Among Adults in Ohio. Ohio Medicaid Assessment Survey.

Food and Drug Administration Certified Mammography Facilities. (2014, July 28). Mammography Facility Database. Retrieved from Mammography Facilities: <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfMQSA/mqsa.cfm>

Health Policy Institute of Ohio, O. S. (2013). Expanding Medicaid in Ohio: Analysis of likely effects. Columbus, Ohio: Health Policy Institute of Ohio.
Health Policy Institute of Ohio. (2012). Ohio Access Basics. Columbus, Ohio: Health Policy Institute of Ohio.

Health Policy Institute of Ohio. (2013). Expanding Medicaid in Ohio: County-level analysis. Columbus, Ohio: Health Policy Institute of Ohio.

Health Policy Institute of Ohio. (2013). The Health Policy Institute of Ohio's Telehealth Leadership Summit. Columbus, Ohio.

Health Policy Institute of Ohio. (2014). Medicaid enrollment trends and impact analysis. Columbus, Ohio: Health Policy Institute of Ohio.

Health Resources and Services Administration. (2014, July 30). Find a health center. Retrieved from http://findahealthcenter.hrsa.gov/Search_HCC.aspx

HP 2020. Healthy People 2020. US Department of Health and Human Services. December 2, 2010. Available online at <http://www.healthypeople.gov/2020/about/> (accessed 8/2/2013).

Medicare. (n.d.). Hospital Compare. Retrieved from <http://www.medicare.gov/hospitalcompare/search.html?AspxAutoDetectCookieSupport=1>

National Association of County and City Health Officials. (2014). Directory of Local Health Departments. Retrieved from <http://www.naccho.org/about/lhd/>

National Association of Free and Charitable Clinics. (n.d.). Find a free or charitable clinic. Retrieved July 30, 2017, from <http://www.nafcclinics.org/clinics/search>

National Cancer Institute. (n.d.). NCI-Designated Cancer Centers. Retrieved July 30, 2014, from Find a Cancer Center.

Ohio Chronic Disease Workgroup. (2014). Ohio's Plan to Prevent and reduce Chronic Disease 2014-2018. Columbus, Ohio: Ohio Department of Health.

Ohio Department of Health, The Ohio State University Comprehensive Cancer Center- Arthur G. James Cancer Hospital and Richard J. Solove Research Institute. (2014). Cancer in Ohio 2014. Columbus, Ohio: Ohio Department of Health.

Ohio Department of Health. (2009-2011). Ohio Cancer Incidence Surveillance System. Columbus, Ohio, US Retrieved April 2014

Ohio Department of Health. (2012). Ohio State Improvement Plan 2012-2014. Columbus, Ohio: Ohio Department of Health.

Ohio Department of Health. (2012, April). Breast and Cervical Cancer Project. Retrieved July 2014, from http://www.odh.ohio.gov/odhprograms/hpr/bc_canc/bcanc1.aspx

Ohio Disability and Health Program. (2013). Disability and health in Ohio Public Health Needs Assessment. The Ohio State University Nisonger Center.

Ohio Partners for Cancer Control. (2012). The Ohio Comprehensive Cancer Control Plan 2011-2014. Columbus, Ohio: Ohio Department of Health.

SEER Summary Stage. Young, J.L. Jr., Roffers, S.D., Ries, L.A.G., Fritz, A.G., Hurlbut, A.A. (eds). *SEER Summary Staging Manual - 2000: Codes and Coding Instructions*, National Cancer Institute, NIH Pub. No. 01-4969, Bethesda, MD, 2001. Available online at <http://seer.cancer.gov/tools/ssm/> (accessed 8/2/2013).

Susan G. Komen. (2014). Community Profile Toolkit. Advantages and Disadvantages of Sampling Techniques. Dallas, TX.

Susan G. Komen. (2014). Community Profile Toolkit. Qualitative Data Collection Methods- Strengths and Limitations. Dallas, TX.

Susan G. Komen. (2014). Susan G. Komen Columbus quantitative data report: 2014. Dallas, TX: Author.

Susan G. Komen. (2014, April 1). Komen Perspectives: Breast Cancer Disparities. Retrieved April 7, 2014, from Susan G. Komen: www.komen.org/BCDisparities.html

The Kaiser Family Foundation. (2014, January). Interactive: A State-by-State Look at How the Uninsured Fare Under the ACA. Retrieved July 2014, from <http://kff.org/interactive/uninsured-gap/>

US Census Bureau. (2008-2012). American Community Survey.