susan g. komen®

COMMUNITY PROFILE REPORT 2015

SUSAN G. KOMEN® KANSAS

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Acknowledgments

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

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Executive Summary

Introduction to the Community Profile Report

Susan G. Komen Wichita Race for the Cure® was started in 1990 by the Junior League of Wichita. The Komen Wichita Race for the Cure was the first Komen co-ed Race for the Cure and the fourth Race for the Cure in the series. The 1990 race was the largest first-year road race in Kansas' history. More than 1,400 participants took part in the first Wichita Race for the Cure.

As a result of this initial success, the Susan G. Komen® Kansas Free Mammography Program was started with the event's proceeds. The Affiliate's program was the first such program for Komen nationally and served as a model program for many cities. The program predated the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). When the NBCCEDP was organized in Kansas in the mid-1990s, the Free Mammography Program rolled into the NBCCEDP. Historically, the State Health Department, who oversees the NBCCEDP, has been the Affiliate's largest grantee. The State Health Department has received grant funding to provide screening to individuals who do not qualify for the federal program. In Kansas, the federal program is only available to women who are age 50 and over. Funding from Komen grants have been used to pay for services for women under the age of 50 and for men. Additionally, providers from Sedgwick County give screening and diagnostic vouchers as in-kind sponsorships for the Wichita Race. These vouchers are used to supplement the NBCCEDP for people who do not qualify for the program but are still in need of services. The programs have provided over 44,000 free mammograms in the State of Kansas.

In 1993, the Susan G. Komen Kansas Affiliate was officially formed. Through events like the Race, the Affiliate has raised over $6 million to invest in research, education, outreach, and screening services. Up to 75 percent of net funds generated by the Affiliate stay in the 95 county service area to grant out for education, patient navigation, survivorship and screening services. The remaining 25 percent of funds raised by the Affiliate go toward the Susan G. Komen Research Programs supporting research awards and educational and scientific programs around the world.

Susan G. Komen Kansas is actively involved in the Kansas Cancer Partnership. The partnership provides statewide leadership in the development, coordination and implementation of cancer prevention and control in Kansas. The partnership brings together individuals and organizations from across the state to work toward reducing the burden and suffering of cancer in Kansas. The Susan G Komen Kansas Mission Advisory Council chair currently co-chairs the Kansas Cancer Partnership. The Mission staff chairs the Survivorship cancer action team for the partnership.

Affiliate Service Area

The Affiliate serves 95 of the 105 counties in the State of Kansas; the remaining ten counties are served by the Greater Kansas City Affiliate (Figure 1). As a whole, Kansas does not have exceptionally high or low incidences of breast cancer when compared to the rest of the country, but some troubling disparities in access to care and breast health education do exist upon closer examination of the data.

Kansas is a largely White state of approximately 2.9 million adult residents, half of whom are women. A large percentage of Kansas residents live in rural areas and many counties are considered to be frontier. This means they are the most geographically isolated areas in the country. Frontier counties are sparsely populated and face large distances and long travel time to access health services. Based on the statistics and demographics within the state, four counties, Cherokee County, Montgomery County, Sedgwick County and Shawnee County were chosen as the four focal point sites for the Community Profile. Cherokee and Montgomery Counties are both considered to be medically underserved and experience gaps in breast health services. This, obviously, could impact women's access to quality breast health care. Montgomery County also has a significantly lower mammography rate than the rest of the Affiliate service area. Sedgwick and Shawnee Counties make up one-third of all late-stage diagnoses of breast cancer in Kansas and have the highest percentage of Black/African-American women in the Affiliate service area. These two counties mirror alarming national data that show that Black/African-American women are more likely to die of breast cancer because of a later stage diagnosis.

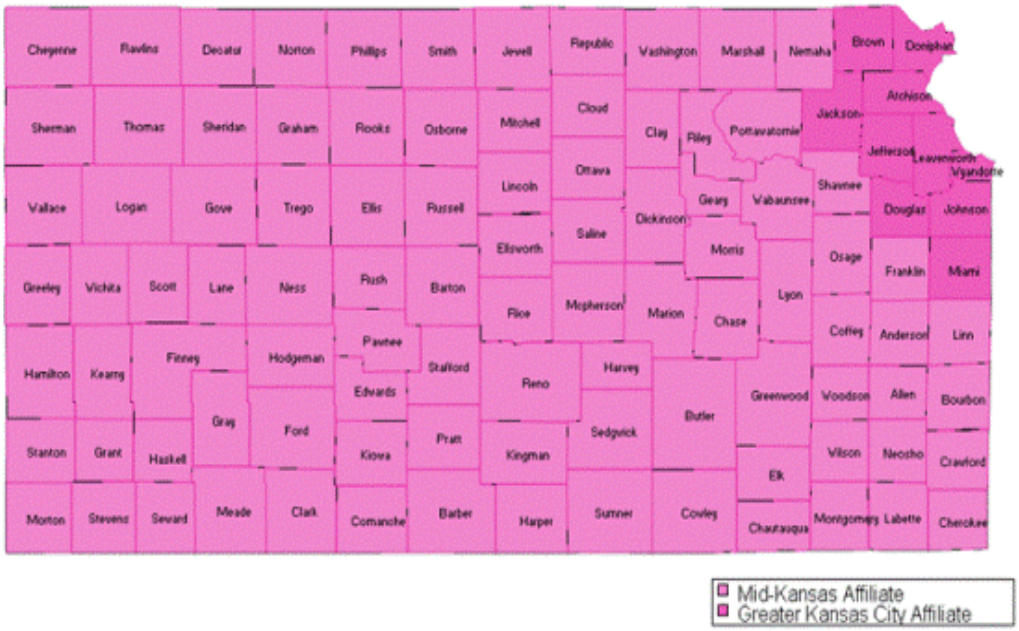


Figure 1. Susan G Komen Kansas service area

Purpose of the Community Profile Report

The Community Profile is the result of an assessment process the Affiliate performs. The Community Profile document is developed to understand and communicate the state of breast cancer, general breast health, and services available in the Affiliate service area. The Community Profile assists Affiliates to establish focused granting priorities, establish focused education and outreach needs and activities, drive public policy efforts and strengthen partnerships. The purpose of the Community Profile is to make data driven decisions about how to use resources in the best way and set priorities to ensure that the Affiliate serves the people who are in the most need.

The Community Profile guarantees mission and non-mission work is targeted and non-duplicative. It is used to create strategic and operational plans and is one way that the Affiliate communicates with community members, grantees, partners, sponsors and policymakers. The Affiliate knows its resources and limitations and the importance of these factors in setting realistic priorities and an action plan based on this report.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

Exploratory data provided Komen Kansas the opportunity to determine the most appropriate target communities for the Community Profile. Based on review of the Quantitative Data Report and additional quantitative data provided by the Kansas Department of Health and Environment (KDHE), the Affiliate chose Cherokee County, Montgomery County, Sedgwick County and Shawnee County as the four target areas for this document. The Affiliate will focus outreach efforts on these four areas with the idea of replicating successful outreach practices in other areas of the 95 county service areas. The target communities were identified as regions that were experiencing gaps in breast health services and where the Affiliate could focus efforts in order to be the most efficient stewards of resources. It is important to note that no county in the Affiliate service area demonstrated statistically significantly higher crude or age-adjusted rates for female breast cancer incidence (overall or late-stage) or death. Thus, absolute measures of burden including counts and crude rates of late-stage breast cancer were considered in determining where to focus limited resources. Of the 95 counties in the Affiliate service area, Sedgwick and Shawnee Counties comprised over one-third (36.9 percent) of all late-stage breast cancer diagnoses from 2006 to 2010.

Additionally, the Affiliate selected target communities by reviewing breast cancer county level incidence data as identified in the previous section and data related to Healthy People 2020 (HP2020) objectives, including:

- Reducing women's death rate from breast cancer
- Reducing the number of breast cancers that are found at a late-stage

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

- Incidence rates (overall and late-stage)
- Death rates
- Mammography percentages
- Education level
- Residents with incomes less than 100 percent poverty level
- Residents living in medically underserved areas
- Unemployment percentages

Additional Quantitative Data Exploration

The Quantitative Data Report for Komen Kansas did not include data on breast cancer incidence, including late-stage breast cancer incidence counts or rates. To fill this gap, county-level incidence rates were computed for all the Affiliate counties for 1) breast cancer incidence and 2) late-stage breast cancer incidence. In addition, the proportions of breast cancer incident cases that were localized vs. regional/distant/unstaged were computed for White and Black/African-American women in Sedgwick and Shawnee Counties. This analysis was not

possible for other counties due to low counts of breast cancer incident cases among non-White women.

The Kansas Department of Health and Environment's Senior Chronic Disease Epidemiologist examined female breast cancer incidence rates (all stages) among Kansas women for the 95 counties in the Komen Kansas service area for 2006-2010. Counts of incident female breast cancer cases during the five-year period were reviewed by county, along with the county-specific female population total, the county-specific crude rate (i.e. total count / total population), the county-specific age-adjusted rate and accompanying 95 percent confidence limits. Incidence data were obtained from the Kansas Cancer Registry (KCR) 2001-2010 dataset.

Health System and Public Policy Analysis

The continuum of care is available in all four of the Affiliate's target communities. The two more urban areas, Sedgwick and Shawnee Counties, have more services available in a smaller geographical area, but all four communities have access to the entire continuum within 25 miles. Access to transportation is an issue in all four communities, but by rural standards 25 miles is not a long distance. Survivorship services are consistently the weakest portion of the continuum in all four communities. Survivorship services are a relatively new concept in the Komen Kansas service area, but both survivors and the medical community are recognizing that survivorship services greatly impact quality of life. All four communities have access to a cancer center with American College of Surgeons Cancer Program accreditation. Improving survivorship services in the target communities is a tangible area in which Komen Kansas can have a great impact. Partnering with state programs as well as with other nonprofits will give Komen partnership opportunities with front line professionals who have access to survivors and providers and can ensure breast cancer survivors have access to the highest quality of support throughout their lives.

In the policy arena Komen Kansas will continue to encourage the state to expand Medicaid and will encourage the legislature to supplement the Early Detection Works (EDW) program with state funding. If the State of Kansas continues to refuse to expand Medicaid services to those most in need, additional supplemental funding would ensure that citizens of Kansas get the breast health services they need.

The findings of the Community Profile are impacted by several unique situations in the State of Kansas. Services are readily available in the four target communities of focus for the Profile, although travel can be a concern. Some residents may have to travel 25 miles to receive services. To most people who live in rural areas that's not an issue, but to some 25 miles will be a barrier. Additionally, the current political environment, with a legislature and governor who have refused to address the possibility of Medicaid expansion, impacts the access to quality care. Their refusal to expand Medicaid has left many women and men in Kansas without the ability to access available medical services because they lack health insurance. Komen Kansas was a member of two statewide coalitions during the 2015 legislative session to address the issue of Medicaid expansion and coverage for out of pocket services. Neither issue was able to move forward because of outstanding monetary issues with the state deficit. The budget crisis and gridlocked government in Kansas are issues that Komen Kansas will continue to face. As

an organization, the Affiliate will need to find new ways to ensure that the mission has a voice in the public policy arena

Qualitative Data: Ensuring Community Input

Data compiled by The Affiliate revealed little variability across the 95 counties served by the Affiliate with regard to diagnostic and service-related discrepancies. The Affiliate chose to focus on two urban counties (Shawnee and Sedgwick) where Black/African-American women tended toward later stage diagnosis, and two rural counties (Montgomery and Cherokee) where access to care is a concern for all women.

Key assessment questions and variables such as access to health care, attitude toward health care, knowledge about breast cancer, and barriers to obtaining treatment were identified based on multiple data sources. Specific focus group questions were selected after review of data and conversations with community partners and key informants. Data gathered from the community ad hoc committee, Sister to Sister, made up of multiple organizations that serve the Black/African-American community in Sedgwick County, focused on dissemination of information to target communities. KDHE epidemiologists suggested a need to focus on late-stage diagnosis among Black/African-American women in Shawnee and Sedgwick Counties. Board members at The Witness Project, staff from the Midwest Cancer Alliance and staff from Early Detection Works all voiced concerns about education and access to care for all communities. Focus group questions and provider survey questions were reviewed by a team of survey experts and specifically tailored questions were derived to maximize the impact of information obtained.

Original data include interview notes, focus group notes, use of verbatim quotes where available, and provider survey data. The rationale for using focus group notes was to identify qualitative themes that emerged in the communities of interest. Focus group notes were reviewed by the primary lead and specific themes were identified using an *a priori* determination of inclusion with at least three participants in the same community or at least two participants across different communities raising the issue. Themes from the provider survey and from particular focus groups were compared to examine discrepancies between the general public and breast health providers.

Qualitative Data Findings

Across multiple data methods, financial concerns are a clear issue that will require ongoing intervention. Monetary concerns were identified as a primary barrier to receiving screenings, but even more concerning, to receiving follow-up care after a positive mammogram. A related and growing concern is navigation of health insurance, the health care industry, and community programs available to support women in their pursuit of breast care. An important finding is the discrepancy between the provider survey and focus groups, where many providers feel that they are adequately educating patients about programs such as Early Detection Works, while community members do not feel that they have sufficient information about these programs to use them as they are intended. Bridging this gap will be an ongoing target for intervention.

Another important theme that emerged across all sources of information was community and patient education. Some excellent ideas were generated by focus groups with regard to venues

that would more adequately target Black/African-American communities and the suggestion for multi-generational education and information targeting younger audiences has merit. It also appears that there are regional differences with regard to health literacy and providers will need ongoing assistance in assessing the needs and understanding of their patients, with adapted educational materials to target those needs.

Finally, the focus groups invariably voiced a concern about access to mobile mammography. This was a much more prevalent service in the past and based on community responses, it would appear that resuming and expanding this service in the Affiliate services area would encourage enhanced screening behaviors. Important suggestions with regard to the hours this service is made available (e.g., after 2:30 when shift workers are able to claim an entire day's work) and the location (e.g., community grocery stores, large industry employer parking lots) offer valuable insight into options that would make screening behaviors more palatable. It should be noted that these suggestions were made regardless of the targeted group – that is, both the urban Black/African-American community and rural participants felt they would benefit from these strategies to make screening more accessible.

In summary, there is agreement about a number of needs in the Affiliate area, and these can be broken down into a few recurrent themes. These themes did not differ based on rural/urban setting or Black/White demographic distinctions, but were raised with almost equal frequency across all focus groups conducted. Excellent suggestions were provided across data sources for strategies the Affiliate could use to improve access to and utilization of breast care resources, particularly in rural communities and urban Black/African-American communities.

Mission Action Plan

Problem Statement

The Community Profile Team reviewed the findings from the data to determine the overarching priority of increasing early detection and access to services across the continuum of care for women in the State of Kansas, with a focus on Black/African-American women in Sedgwick and Shawnee Counties and women in Cherokee and Montgomery Counties in rural Southeast, Kansas.

Priority 1- Actionable Education

Effectively educate women on breast health and services available to them in language and culturally appropriate methods leading to increased screening and knowledge of survivorship services.

> ***Objective 1:*** By the end of April 2016, partner with the Early Detection Works program to host a minimum of a one day workshop in Sedgwick or Shawnee County focusing on evidence-based educational programs with emphasis on health literacy and cultural awareness. Ensure part of this includes "Train the Trainer" methodology so attendees can train providers and other constituents in target communities.
>
> ***Objective 2:*** By December 2016, partner with at least two community-based outreach/health organizations in each region to identify at least three leaders in target communities who are willing to be champions for breast health and educate them on

Komen messaging and resources available. Champions will be expected to share knowledge and resources during at least two community events.

Objective 3: By December 2015 coordinate and sponsor, with the Advocates in Science (AIS) Steering Committee, a Komen event in Sedgwick County focusing on survivorship. A Komen Scholar will be the main speaker. Telemedicine technology will be utilized to make the presentation available to Midwest Cancer Alliance partner cancer centers across the state.

Objective 4: By October 2015 implement the Pink Sunday Program in at least two churches in all four target counties.

Priority 2- Addressing Barriers to Accessing Care

Decrease the difficulty of getting screened by addressing barriers identified in the Community Profile, such as finances, transportation, clinic hours, and cultural norms, to therefore increase screening.

Objective 1: By the end of March 2017, revise Community Grant RFA to indicate after-work screening events are a priority for Cherokee, Montgomery, Sedgwick and Shawnee Counties.

Objective 2: From November 2015 to March 2017, Community Grant RFA funding priorities will include breast cancer screenings for the uninsured, transportation assistance, patient navigation and mobile mammography programs for Cherokee, Montgomery, Sedgwick and Shawnee Counties.

Objective 3**:** By May 2016 become a member of the Kansas Rural Health Association to enhance the health and well-being of rural Kansans through united advocacy, leadership, education, collaboration and resource development.

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

Affiliate History

Susan G. Komen Wichita Race for the Cure® was started in 1990 by the Junior League of Wichita. The Komen Wichita Race for the Cure was the first Komen co-ed Race for the Cure and the fourth Race for the Cure in the series. The 1990 race was the largest first-year road race in Kansas' history. More than 1,400 participants took part in the first Wichita Race for the Cure.

As a result of this initial success, the Susan G Komen® Kansas Free Mammography Program was started with the event's proceeds. The Affiliate's Free Mammography Program was the first such program for Komen nationally and served as a model program for many cities as they established their own Komen Race for the Cure Events. The program predated the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). When NBCCEDP was organized in Kansas in the mid-1990s, the Free Mammography Program rolled into the NBCCEDP. Providers that Komen Kansas had recruited for their program became the first providers for the NBCCEDP. Historically, the State Health Department, who oversees the NBCCEPD has been the Affiliate's largest grantee. The State Health Department has received grant funding to provide screening to individuals who do not qualify for the federal program. In Kansas, for example, the federal program is only available to women who are age 50 and over. Funding from Komen grants have been used to pay for services for women under the age of 50 and for men. Additionally, providers from Sedgwick County give screening and diagnostic vouchers as in-kind sponsorships for the Wichita Race. These vouchers are used to supplement the NBCCEDP for people who do not qualify for the program but are still in need of services. The programs have provided over 40,000 free mammograms in the State of Kansas. In 1993, the Susan G. Komen Kansas was officially formed. Through events like the Race, the Affiliate has raised over $6 million to invest in research, education, outreach, and screening services. Up to 75 percent of net funds generated by the Affiliate stay in the 95 County service area. The remaining 25 percent of funds raised by the Affiliate goes toward the Susan G. Komen Award and Research Grant Program supporting research awards and educational and scientific programs around the world.

In 2008, the Affiliate was the recipient of an extraordinary one-time fundraising opportunity. The Affiliate's media partner, KSN Channel 3 (NBC), developed and executed a project known as The KSN Dream House. The Dream House was designed and constructed entirely of donated time, supplies and money. The Dream House was then sold with all proceeds being provided to Komen. From the sale price ($600,000) of the Dream House, $150,000 was provided to Susan G. Komen Research Programs. The remaining $450,000 was provided as a donation to Komen Kansas. The funds were utilized to open the Center for Breast Cancer Survivorship housed at the University Of Kansas School Of Medicine - Wichita. Post treatment services and options for survivors have been identified as community needs in the Affiliate's Community Profile for many years. The Center offers a comprehensive, multi-disciplinary approach to assist those diagnosed with breast cancer and enhance their quality of life from the time they're diagnosed, through treatment and even after.
Susan G Komen® Kansas is actively involved in the Kansas Cancer Partnership. The partnership provides statewide leadership in the development, coordination and implementation of cancer prevention and control in Kansas. The partnership brings together individuals and

organizations from across the state to work toward reducing the burden and suffering caused by cancer in Kansas. The Susan G Komen® Kansas Mission Advisory Council chair currently co-chairs the Kansas Cancer Partnership. The Kansas Executive Director is an active member of the partnership and. chairs the Survivorship Quality of Life team for the partnership.

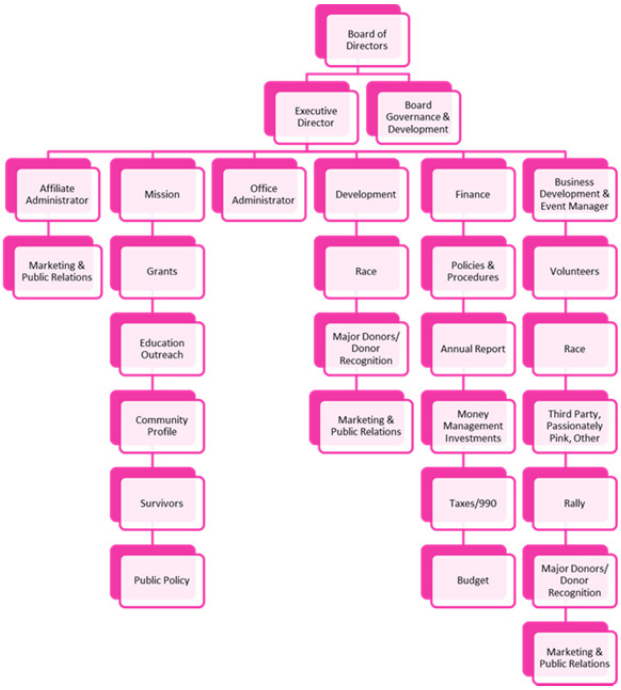
The Affiliate plans to strengthen its roles with the state cancer coalition by working to establish regional coalitions of the state cancer partnership in the Affiliate's service area. One such coalition, in the South Central Region of the state, has already been established, and a second regional coalition in southeast Kansas, which includes Cherokee and Montgomery counties, began meeting in 2014.

Affiliate Organizational Structure

Susan G. Komen is headquartered in Dallas, TX, and is governed by a Board of Directors. Komen Headquarters and the Komen Affiliates are separate, distinct legal entities. However, they are a mutually interdependent unit, working together in pursuit of a common mission. Komen Headquarters is charged with carrying out the mission on a national and international level and coordinating the efforts of all Affiliates. Komen Headquarters is also responsible for managing Susan G. Komen Research Programs. The Affiliate is responsible for carrying out the mission on a local level.

Susan G Komen Kansas is governed by a 12 member volunteer Board of Directors and employs two full time staff, two part time staff and 300 active volunteers who are helping make the mission a reality. Staff includes the following: Executive Director, Business Development and Event Manager, Office Manager and Affiliate Administrator. (Figure 1

Figure 1.1. Susan G Komen Kansas organizational chart



Affiliate Service Area

The Affiliate serves 95 of the 105 counties in the state of Kansas; the remaining ten counties are served by Komen Greater Kansas City (Figure 1.2). As a whole, Kansas does not have exceptionally high or low incidences of breast cancer when compared to the rest of the country, but some troubling disparities in access to care and breast health education do exist upon closer examination of the data.

Kansas is a largely White state of approximately 2.9 million adult residents, half of whom are women. A large percentage of Kansas residents live in rural area and many counties are considered to be frontier. This means they are the most geographically isolated areas in the country. Frontier counties are sparsely populated and face large distances and travel time to health services. The median household income for Kansas is $51,332, slightly lower than the national average. Likewise, the state poverty level is 13.7 percent which is also slightly lower than the national percentage of people living in poverty.

Based on the statistics and the demographics within the state, four counties, Cherokee County, Montgomery County, Sedgwick County and Shawnee County were chosen as the four focal point sites for the study. Cherokee and Montgomery Counties are both considered to be medically underserved and experience gaps in breast health services. This, obviously, could impact women's access to quality breast health care. Montgomery County also has a significantly lower mammography rate than the rest of the Affiliate service area. Sedgwick and Shawnee Counties make up one-third of all late-stage diagnoses of breast cancer in Kansas and have the highest percentage of Black/African-American women in the Affiliate service area. These two counties mirror alarming national data that show that Black/African-American women are more likely to die of breast cancer because of a later stage diagnosis.

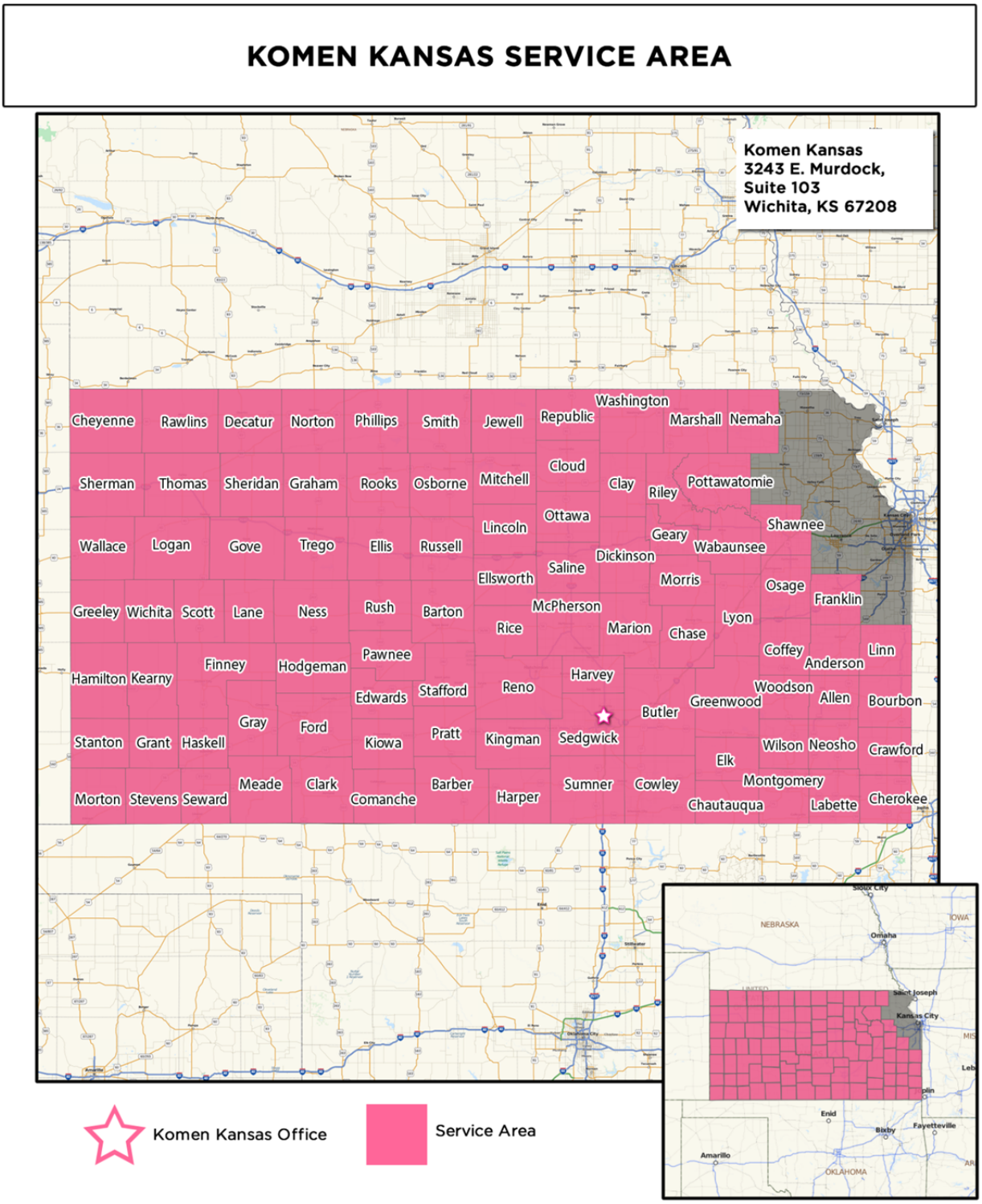


Figure 1.2. Susan G. Komen Kansas service area

Purpose of the Community Profile Report

The Community Profile is the result of an assessment process the Affiliate performs. The Community Profile document is developed to understand and communicate the state of breast cancer, general breast health, and services available in the Affiliate. The Community Profile assists Affiliates to establish focused granting priorities, establish focused education and

outreach needs and activities, drive public policy efforts and strengthen partnerships. The purpose of the Community Profile is to make data driven decisions about how to use resources in the best way and set priorities to ensure that The Affiliate serves the people who are in the most need.

The Community Profile guarantees mission and non-mission work is targeted and non-duplicative. It is used to create strategic and operational plans and is one way that the Affiliate communicates with community members, grantees, partners, sponsors and policymakers. The Affiliate recognizes the purpose and importance of the Community Profile. The Affiliate also knows its resources and limitations and the importance of these factors in setting realistic priorities and an action plan based on this report.

The Community Profile will be disseminated in a variety of ways. The Profile will be posted to Susan G Komen® Kansas's website, social media sites and will also be linked in The Affiliate's bimonthly newsletter. An article announcing the Community Profile will be sent to Affiliate media partners and will also be presented to the Kansas Cancer Partnership and regional cancer coalitions.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

Quantitative Data Report

Introduction

The purpose of the quantitative data report for Susan G. Komen® Kansas 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® Kansas' 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

		Incidence Rates and Trends			Death Rates and Trends			Late-stage Rates and Trends		
Population Group	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*	-
Kansas	1,416,658	1,951	123.2	-2.4%	378	22.2	-1.8%	692	44.5	-3.2%
Komen Kansas Service Area	926,428	1,231**	116.9**	-2.5%**	255	21.4	NA	436**	42.7**	-3.4%**
White	842,473	1,184	116.5	-2.9%	239	21.1	NA	413	42.0	-4.1%
Black/African-American	50,721	47	121.6	3.6%	12	32.1	NA	22	58.1	2.6%
American Indian/Alaska Native (AIAN)	12,956	NA	NA	NA	SN	SN	SN	NA	NA	NA
Asian Pacific Islander (API)	20,278	NA	NA	NA	SN	SN	SN	NA	NA	NA
Non-Hispanic/ Latina	834,803	1,193	118.1	-2.4%	249	21.7	NA	421	43.2	-3.1%
Hispanic/ Latina	91,625	38	84.8	-0.6%	5	11.2	NA	15	31.2	-1.7%
Allen County - KS	6,889	NA	NA	NA	SN	SN	SN	NA	NA	NA
Anderson County - KS	4,077	NA	NA	NA	SN	SN	SN	NA	NA	NA
Barber County - KS	2,452	NA	NA	NA	SN	SN	SN	NA	NA	NA
Barton County - KS	14,007	NA	NA	NA	5	22.9	NA	NA	NA	NA
Bourbon County - KS	7,734	NA	NA	NA	SN	SN	SN	NA	NA	NA
Butler County - KS	32,202	NA	NA	NA	8	20.2	-1.4%	NA	NA	NA
Chase County - KS	1,394	NA	NA	NA	SN	SN	SN	NA	NA	NA
Chautauqua County - KS	1,852	NA	NA	NA	SN	SN	SN	NA	NA	NA
Cherokee County - KS	10,962	NA	NA	NA	4	26.1	-1.6%	NA	NA	NA
Cheyenne County - KS	1,396	NA	NA	NA	SN	SN	SN	NA	NA	NA
Clark County - KS	1,146	NA	NA	NA	SN	SN	SN	NA	NA	NA
Clay County - KS	4,309	NA	NA	NA	SN	SN	SN	NA	NA	NA
Cloud County - KS	4,887	NA	NA	NA	SN	SN	SN	NA	NA	NA
Coffey County - KS	4,325	NA	NA	NA	SN	SN	SN	NA	NA	NA
Comanche County - KS	967	NA	NA	NA	SN	SN	SN	NA	NA	NA
Cowley County - KS	18,129	NA	NA	NA	6	26.0	-2.0%	NA	NA	NA
Crawford County - KS	19,683	NA	NA	NA	5	21.7	-2.0%	NA	NA	NA
Decatur County - KS	1,506	NA	NA	NA	SN	SN	SN	NA	NA	NA
Dickinson County - KS	10,006	NA	NA	NA	SN	SN	SN	NA	NA	NA
Edwards County - KS	1,532	NA	NA	NA	SN	SN	SN	NA	NA	NA
Elk County - KS	1,497	NA	NA	NA	SN	SN	SN	NA	NA	NA
Ellis County - KS	14,143	NA	NA	NA	4	26.2	1.4%	NA	NA	NA
Ellsworth County - KS	2,881	NA	NA	NA	SN	SN	SN	NA	NA	NA
Finney County - KS	18,033	NA	NA	NA	SN	SN	SN	NA	NA	NA
Ford County - KS	15,866	NA	NA	NA	3	21.3	NA	NA	NA	NA
Franklin County - KS	13,070	NA	NA	NA	4	27.3	-2.1%	NA	NA	NA
Geary County - KS	15,373	NA	NA	NA	3	26.1	NA	NA	NA	NA
Gove County - KS	1,373	NA	NA	NA	SN	SN	SN	NA	NA	NA
Graham County - KS	1,357	NA	NA	NA	SN	SN	SN	NA	NA	NA
Grant County - KS	3,790	NA	NA	NA	SN	SN	SN	NA	NA	NA
Gray County - KS	2,981	NA	NA	NA	SN	SN	SN	NA	NA	NA
Greeley County - KS	649	NA	NA	NA	SN	SN	SN	NA	NA	NA
Greenwood County - KS	3,456	NA	NA	NA	SN	SN	SN	NA	NA	NA
Hamilton County - KS	1,301	NA	NA	NA	SN	SN	SN	NA	NA	NA
Harper County - KS	3,066	NA	NA	NA	SN	SN	SN	NA	NA	NA

		Incidence Rates and Trends			Death Rates and Trends			Late-stage Rates and Trends		
Population Group	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)
Harvey County - KS	17,483	NA	NA	NA	4	18.3	NA	NA	NA	NA
Haskell County - KS	2,093	NA	NA	NA	SN	SN	SN	NA	NA	NA
Hodgeman County - KS	982	NA	NA	NA	SN	SN	SN	NA	NA	NA
Jewell County - KS	1,555	NA	NA	NA	SN	SN	SN	NA	NA	NA
Kearny County - KS	1,948	NA	NA	NA	SN	SN	SN	NA	NA	NA
Kingman County - KS	4,010	NA	NA	NA	SN	SN	SN	NA	NA	NA
Kiowa County - KS	1,364	NA	NA	NA	SN	SN	SN	NA	NA	NA
Labette County - KS	11,042	NA	NA	NA	4	23.0	-2.8%	NA	NA	NA
Lane County - KS	900	NA	NA	NA	SN	SN	SN	NA	NA	NA
Lincoln County - KS	1,658	NA	NA	NA	SN	SN	SN	NA	NA	NA
Linn County - KS	4,876	NA	NA	NA	SN	SN	SN	NA	NA	NA
Logan County - KS	1,406	NA	NA	NA	SN	SN	SN	NA	NA	NA
Lyon County - KS	17,824	NA	NA	NA	SN	SN	SN	NA	NA	NA
Marion County - KS	6,328	NA	NA	NA	SN	SN	SN	NA	NA	NA
Marshall County - KS	5,132	NA	NA	NA	SN	SN	SN	NA	NA	NA
McPherson County - KS	14,877	NA	NA	NA	5	26.2	-1.7%	NA	NA	NA
Meade County - KS	2,230	NA	NA	NA	SN	SN	SN	NA	NA	NA
Mitchell County - KS	3,183	NA	NA	NA	SN	SN	SN	NA	NA	NA
Montgomery County - KS	18,121	NA	NA	NA	8	32.8	-0.4%	NA	NA	NA
Morris County - KS	2,985	NA	NA	NA	SN	SN	SN	NA	NA	NA
Morton County - KS	1,660	NA	NA	NA	SN	SN	SN	NA	NA	NA
Nemaha County - KS	5,093	NA	NA	NA	SN	SN	SN	NA	NA	NA
Neosho County - KS	8,392	NA	NA	NA	SN	SN	SN	NA	NA	NA
Ness County - KS	1,555	NA	NA	NA	SN	SN	SN	NA	NA	NA
Norton County - KS	2,497	NA	NA	NA	SN	SN	SN	NA	NA	NA
Osage County - KS	8,262	NA	NA	NA	SN	SN	SN	NA	NA	NA
Osborne County - KS	1,974	NA	NA	NA	SN	SN	SN	NA	NA	NA
Ottawa County - KS	2,964	NA	NA	NA	SN	SN	SN	NA	NA	NA
Pawnee County - KS	3,111	NA	NA	NA	SN	SN	SN	NA	NA	NA
Phillips County - KS	2,825	NA	NA	NA	SN	SN	SN	NA	NA	NA
Pottawatomie County - KS	10,472	NA	NA	NA	SN	SN	SN	NA	NA	NA
Pratt County - KS	4,917	NA	NA	NA	SN	SN	SN	NA	NA	NA
Rawlins County - KS	1,304	NA	NA	NA	SN	SN	SN	NA	NA	NA
Reno County - KS	31,942	NA	NA	NA	10	21.2	-2.3%	NA	NA	NA
Republic County - KS	2,602	NA	NA	NA	SN	SN	SN	NA	NA	NA
Rice County - KS	5,097	NA	NA	NA	SN	SN	SN	NA	NA	NA
Riley County - KS	33,011	NA	NA	NA	5	19.1	-1.7%	NA	NA	NA
Rooks County - KS	2,663	NA	NA	NA	SN	SN	SN	NA	NA	NA
Rush County - KS	1,658	NA	NA	NA	SN	SN	SN	NA	NA	NA
Russell County - KS	3,530	NA	NA	NA	SN	SN	SN	NA	NA	NA
Saline County - KS	27,650	NA	NA	NA	9	23.0	-2.8%	NA	NA	NA
Scott County - KS	2,371	NA	NA	NA	SN	SN	SN	NA	NA	NA
Sedgwick County - KS	246,066	NA	NA	NA	58	21.9	-2.0%	NA	NA	NA
Seward County - KS	10,988	NA	NA	NA	SN	SN	SN	NA	NA	NA
Shawnee County - KS	90,718	NA	NA	NA	26	22.1	-1.5%	NA	NA	NA
Sheridan County - KS	1,272	NA	NA	NA	SN	SN	SN	NA	NA	NA
Sherman County - KS	3,005	NA	NA	NA	SN	SN	SN	NA	NA	NA
Smith County - KS	2,006	NA	NA	NA	SN	SN	SN	NA	NA	NA
Stafford County - KS	2,242	NA	NA	NA	SN	SN	SN	NA	NA	NA

		Incidence Rates and Trends			Death Rates and Trends			Late-stage Rates and Trends		
Population Group	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)
Stanton County - KS	1,083	NA	NA	NA	SN	SN	SN	NA	NA	NA
Stevens County - KS	2,795	NA	NA	NA	SN	SN	SN	NA	NA	NA
Sumner County - KS	12,216	NA	NA	NA	4	21.8	-2.8%	NA	NA	NA
Thomas County - KS	3,937	NA	NA	NA	SN	SN	SN	NA	NA	NA
Trego County - KS	1,507	NA	NA	NA	SN	SN	SN	NA	NA	NA
Wabaunsee County - KS	3,419	NA	NA	NA	SN	SN	SN	NA	NA	NA
Wallace County - KS	753	NA	NA	NA	SN	SN	SN	NA	NA	NA
Washington County - KS	2,891	NA	NA	NA	SN	SN	SN	NA	NA	NA
Wichita County - KS	1,098	NA	NA	NA	SN	SN	SN	NA	NA	NA
Wilson County - KS	4,903	NA	NA	NA	SN	SN	SN	NA	NA	NA
Woodson County - KS	1,691	NA	NA	NA	SN	SN	SN	NA	NA	NA

*Target as of the writing of this report.
** Incidence and late-stage statistics for Kansas sub-state areas do not include API and AIAN cases.
NA – data not available.
SN – data suppressed due to small numbers (15 cases or fewer for the 5-year data period).
Data are for years 2006-2010.
Rates are in cases or deaths per 100,000.
Age-adjusted rates are adjusted to the 2000 US standard population.
Source of incidence and late-stage data: North American Association of Central Cancer Registries (NAACCR) – Cancer in North America (CINA) Deluxe Analytic File.
Source of death rate data: Centers for Disease Control and Prevention (CDC) – National Center for Health Statistics (NCHS) mortality data in SEER*Stat.
Source of death trend data: National Cancer Institute (NCI)/CDC State Cancer Profiles.

Incidence rates and trends summary

Overall, the breast cancer incidence rate and trend in the Komen Kansas service area were lower than that observed in the US as a whole. The incidence rate of the Affiliate service area was significantly lower than that observed for the State of Kansas and the incidence trend was not significantly different than the State of Kansas. Unfortunately, breast cancer incidence data were not available for the Komen Kansas's service area counties.

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 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. The incidence rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

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 Kansas service area was slightly lower than that observed in the US as a whole and the death rate trend was not available for comparison

with the US as a whole. The death rate of the Affiliate service area was not significantly different than that observed for the State of Kansas.

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. The death rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

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

Late-stage incidence rates and trends summary

Overall, the breast cancer late-stage incidence rate in the Komen Kansas service area was slightly lower than that observed in the US as a whole and the late-stage incidence trend was lower than the US as a whole. The late-stage incidence rate and trend of the Affiliate service area were not significantly different than that observed for the State of Kansas. Unfortunately, late-stage incidence data were not available for the Komen Kansas's service area counties.

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. 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 late-stage incidence rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

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
Informed decision-making with a health care provider at age 40 Mammography every year starting at age 45 Mammography every other year beginning at age 55	Mammography every year starting at age 40	Informed decision-making with a health care provider ages 40-49 Mammography every 2 years ages 50-74

*As of October 2015

Because having regular mammograms lowers the chances of dying from breast cancer, it's important to know whether women are having mammograms when they should. This information can be used to identify groups of women who should be screened who need help in meeting the current recommendations for screening mammography. The Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factors Surveillance System (BRFSS) collected the data on mammograms that are used in this report. The data come from interviews with women age 50 to 74 from across the United States. During the interviews, each woman was asked how long it has been since she has had a mammogram. The proportions in Table 2.3 are based on the number of women age 50 to 74 who reported in 2012 having had a mammogram in the last two years.

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

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

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

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

Because the screening proportions come from samples of women in an area and are not exact, Table 2.3 includes confidence intervals. A confidence interval is a range of values that gives an

idea of how uncertain a value may be. It's shown as two numbers—a lower value and a higher one. It is very unlikely that the true rate is less than the lower value or more than the higher value.

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

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

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

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
US	174,796	133,399	77.5%	77.2%-77.7%
Kansas	4,733	3,672	77.4%	75.8%-78.9%
Komen Kansas Service Area	2,229	1,747	78.2%	75.9%-80.3%
White	2,110	1,655	78.5%	76.2%-80.6%
Black/African-American	63	52	79.3%	62.3%-89.9%
AIAN	20	13	73.1%	36.2%-92.9%
API	SN	SN	SN	SN
Hispanic/ Latina	40	30	78.2%	56.9%-90.7%
Non-Hispanic/ Latina	2,186	1,714	78.2%	75.9%-80.3%
Allen County - KS	24	16	79.8%	56.7%-92.2%
Anderson County - KS	SN	SN	SN	SN
Barber County - KS	SN	SN	SN	SN
Barton County - KS	48	38	76.7%	56.7%-89.2%
Bourbon County - KS	32	27	82.3%	59.6%-93.6%
Butler County - KS	102	78	79.7%	68.7%-87.6%
Chase County - KS	SN	SN	SN	SN
Chautauqua County - KS	SN	SN	SN	SN
Cherokee County - KS	25	18	73.1%	46.3%-89.5%
Cheyenne County - KS	SN	SN	SN	SN
Clark County - KS	SN	SN	SN	SN
Clay County - KS	SN	SN	SN	SN
Cloud County - KS	SN	SN	SN	SN
Coffey County - KS	SN	SN	SN	SN
Comanche County - KS	SN	SN	SN	SN
Cowley County - KS	61	45	81.1%	65.4%-90.7%
Crawford County - KS	61	45	68.4%	52.5%-80.9%
Decatur County - KS	SN	SN	SN	SN
Dickinson County - KS	38	32	87.8%	69.0%-95.9%
Edwards County - KS	SN	SN	SN	SN
Elk County - KS	SN	SN	SN	SN
Ellis County - KS	36	30	84.9%	63.1%-94.8%
Ellsworth County - KS	SN	SN	SN	SN
Finney County - KS	34	23	64.6%	41.9%-82.2%
Ford County - KS	30	22	73.5%	43.2%-91.0%
Franklin County - KS	51	39	69.3%	50.3%-83.5%

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Geary County - KS	12	11	90.7%	55.2%-98.7%
Gove County - KS	SN	SN	SN	SN
Graham County - KS	SN	SN	SN	SN
Grant County - KS	SN	SN	SN	SN
Gray County - KS	SN	SN	SN	SN
Greeley County - KS	SN	SN	SN	SN
Greenwood County - KS	SN	SN	SN	SN
Hamilton County - KS	SN	SN	SN	SN
Harper County - KS	SN	SN	SN	SN
Harvey County - KS	67	58	84.6%	71.2%-92.4%
Haskell County - KS	SN	SN	SN	SN
Hodgeman County - KS	SN	SN	SN	SN
Jewell County - KS	SN	SN	SN	SN
Kearny County - KS	SN	SN	SN	SN
Kingman County - KS	SN	SN	SN	SN
Kiowa County - KS	SN	SN	SN	SN
Labette County - KS	32	25	80.1%	57.9%-92.2%
Lane County - KS	SN	SN	SN	SN
Lincoln County - KS	SN	SN	SN	SN
Linn County - KS	SN	SN	SN	SN
Logan County - KS	SN	SN	SN	SN
Lyon County - KS	54	42	80.4%	63.3%-90.7%
Marion County - KS	SN	SN	SN	SN
Marshall County - KS	SN	SN	SN	SN
McPherson County - KS	52	41	82.7%	65.9%-92.2%
Meade County - KS	SN	SN	SN	SN
Mitchell County - KS	SN	SN	SN	SN
Montgomery County - KS	62	41	61.9%	47.3%-74.5%
Morris County - KS	SN	SN	SN	SN
Morton County - KS	SN	SN	SN	SN
Nemaha County - KS	SN	SN	SN	SN
Neosho County - KS	31	22	68.6%	46.2%-84.7%
Ness County - KS	SN	SN	SN	SN
Norton County - KS	SN	SN	SN	SN
Osage County - KS	41	26	54.6%	36.8%-71.3%
Osborne County - KS	SN	SN	SN	SN
Ottawa County - KS	SN	SN	SN	SN
Pawnee County - KS	SN	SN	SN	SN
Phillips County - KS	SN	SN	SN	SN
Pottawatomie County - KS	46	37	81.9%	63.6%-92.1%
Pratt County - KS	SN	SN	SN	SN
Rawlins County - KS	SN	SN	SN	SN
Reno County - KS	118	92	79.5%	68.7%-87.2%
Republic County - KS	SN	SN	SN	SN
Rice County - KS	SN	SN	SN	SN
Riley County - KS	46	39	83.5%	64.4%-93.4%
Rooks County - KS	SN	SN	SN	SN
Rush County - KS	SN	SN	SN	SN
Russell County - KS	SN	SN	SN	SN
Saline County - KS	79	66	80.7%	67.9%-89.1%
Scott County - KS	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Sedgwick County - KS	672	521	77.6%	73.3%-81.5%
Seward County - KS	23	18	88.0%	64.7%-96.7%
Shawnee County - KS	305	254	82.2%	76.2%-86.9%
Sheridan County - KS	SN	SN	SN	SN
Sherman County - KS	SN	SN	SN	SN
Smith County - KS	SN	SN	SN	SN
Stafford County - KS	SN	SN	SN	SN
Stanton County - KS	SN	SN	SN	SN
Stevens County - KS	SN	SN	SN	SN
Sumner County - KS	47	41	87.3%	70.6%-95.1%
Thomas County - KS	SN	SN	SN	SN
Trego County - KS	SN	SN	SN	SN
Wabaunsee County - KS	SN	SN	SN	SN
Wallace County - KS	SN	SN	SN	SN
Washington County - KS	SN	SN	SN	SN
Wichita County - KS	SN	SN	SN	SN
Wilson County - KS	SN	SN	SN	SN
Woodson County - KS	SN	SN	SN	SN

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 Kansas 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 Kansas.

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 and not significantly different among AIANs than Whites. There were not enough data available within the Affiliate service area to report on APIs so comparisons cannot be made for this racial group. The screening proportion among Hispanics/Latinas was not significantly different than among Non-Hispanics/Latinas.

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

- Montgomery County
- Osage County

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

Population Characteristics

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

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

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

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

Table 2.4. Population characteristics – demographics

Population Group	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 %
Kansas	88.9 %	6.8 %	1.4 %	2.9 %	89.7 %	10.3 %	47.1 %	34.3 %	15.0 %
Komen Kansas Service Area	90.4 %	5.8 %	1.5 %	2.4 %	89.1 %	10.9 %	47.8 %	35.6 %	16.2 %
Allen County - KS	95.3 %	2.7 %	1.2 %	0.8 %	97.3 %	2.7 %	52.8 %	41.2 %	20.0 %
Anderson County - KS	97.7 %	0.9 %	0.6 %	0.8 %	98.2 %	1.8 %	54.0 %	41.4 %	21.9 %
Barber County - KS	97.6 %	1.0 %	0.8 %	0.6 %	97.1 %	2.9 %	55.9 %	44.4 %	22.0 %
Barton County - KS	96.5 %	2.1 %	0.9 %	0.5 %	87.1 %	12.9 %	51.6 %	39.6 %	19.1 %
Bourbon County - KS	95.1 %	3.2 %	1.1 %	0.6 %	97.9 %	2.1 %	51.2 %	40.3 %	19.7 %
Butler County - KS	96.3 %	1.3 %	1.2 %	1.1 %	96.3 %	3.7 %	48.5 %	34.7 %	14.4 %
Chase County - KS	98.3 %	0.4 %	0.7 %	0.6 %	97.3 %	2.7 %	59.0 %	46.3 %	23.8 %
Chautauqua County - KS	93.3 %	1.3 %	5.1 %	0.3 %	97.5 %	2.5 %	61.4 %	49.3 %	25.3 %
Cherokee County - KS	93.2 %	1.2 %	4.8 %	0.8 %	97.8 %	2.2 %	52.7 %	39.2 %	17.7 %
Cheyenne County - KS	98.5 %	0.1 %	0.2 %	1.1 %	95.4 %	4.6 %	64.7 %	54.1 %	29.2 %
Clark County - KS	97.1 %	0.7 %	1.3 %	0.9 %	93.3 %	6.7 %	58.9 %	46.6 %	25.3 %
Clay County - KS	97.9 %	0.9 %	0.6 %	0.6 %	97.7 %	2.3 %	55.2 %	43.2 %	22.5 %
Cloud County - KS	98.2 %	1.0 %	0.4 %	0.3 %	97.2 %	2.8 %	55.3 %	43.8 %	24.2 %
Coffey County - KS	97.4 %	1.3 %	0.9 %	0.5 %	97.7 %	2.3 %	55.9 %	42.0 %	19.2 %
Comanche County - KS	98.4 %	0.7 %	0.3 %	0.6 %	95.4 %	4.6 %	57.1 %	47.6 %	25.2 %
Cowley County - KS	92.2 %	3.3 %	2.7 %	1.8 %	91.2 %	8.8 %	49.9 %	37.7 %	18.1 %
Crawford County - KS	94.2 %	2.5 %	1.4 %	1.9 %	95.7 %	4.3 %	44.8 %	34.2 %	16.6 %

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
Decatur County - KS	98.3 %	0.8 %	0.6 %	0.3 %	98.8 %	1.2 %	65.9 %	54.6 %	30.0 %
Dickinson County - KS	97.2 %	1.4 %	0.8 %	0.6 %	96.1 %	3.9 %	53.6 %	40.5 %	20.2 %
Edwards County - KS	95.5 %	2.4 %	1.5 %	0.6 %	81.1 %	18.9 %	55.3 %	43.5 %	20.8 %
Elk County - KS	96.9 %	0.8 %	1.8 %	0.6 %	97.2 %	2.8 %	63.2 %	50.9 %	26.7 %
Ellis County - KS	96.8 %	1.2 %	0.4 %	1.6 %	95.6 %	4.4 %	43.3 %	32.5 %	15.2 %
Ellsworth County - KS	98.1 %	0.7 %	0.6 %	0.6 %	96.3 %	3.7 %	59.3 %	47.9 %	23.9 %
Finney County - KS	91.8 %	2.9 %	1.5 %	3.9 %	54.1 %	45.9 %	38.5 %	25.5 %	9.5 %
Ford County - KS	93.1 %	3.0 %	1.9 %	2.0 %	50.2 %	49.8 %	38.5 %	26.7 %	11.3 %
Franklin County - KS	96.4 %	1.8 %	1.3 %	0.6 %	96.7 %	3.3 %	49.9 %	36.2 %	16.0 %
Geary County - KS	72.0 %	20.3 %	1.7 %	6.0 %	87.0 %	13.0 %	32.0 %	21.4 %	8.6 %
Gove County - KS	99.0 %	0.3 %	0.3 %	0.4 %	98.5 %	1.5 %	58.7 %	49.0 %	26.6 %
Graham County - KS	94.0 %	4.6 %	0.8 %	0.6 %	97.5 %	2.5 %	62.6 %	51.2 %	26.6 %
Grant County - KS	96.2 %	1.4 %	1.9 %	0.5 %	57.6 %	42.4 %	42.0 %	30.0 %	12.1 %
Gray County - KS	97.7 %	0.9 %	1.0 %	0.5 %	85.6 %	14.4 %	43.3 %	31.1 %	13.3 %
Greeley County - KS	97.7 %	1.4 %	0.5 %	0.5 %	85.6 %	14.4 %	55.2 %	43.9 %	22.4 %
Greenwood County - KS	97.6 %	0.7 %	1.2 %	0.4 %	96.7 %	3.3 %	58.5 %	47.0 %	23.7 %
Hamilton County - KS	97.3 %	0.8 %	1.4 %	0.5 %	70.0 %	30.0 %	45.4 %	33.4 %	15.1 %
Harper County - KS	97.0 %	1.0 %	1.5 %	0.5 %	95.6 %	4.4 %	57.2 %	46.8 %	25.0 %
Harvey County - KS	95.8 %	2.1 %	1.0 %	1.0 %	89.7 %	10.3 %	51.2 %	39.1 %	19.5 %
Haskell County - KS	96.9 %	0.9 %	1.4 %	0.8 %	74.3 %	25.7 %	44.0 %	31.9 %	12.8 %
Hodgeman County - KS	97.1 %	2.0 %	0.5 %	0.4 %	93.5 %	6.5 %	56.2 %	43.0 %	21.1 %
Jewell County - KS	98.7 %	0.6 %	0.6 %	0.1 %	97.6 %	2.4 %	67.2 %	56.0 %	30.8 %
Kearny County - KS	96.9 %	1.1 %	1.4 %	0.6 %	71.6 %	28.4 %	46.7 %	33.4 %	15.6 %
Kingman County - KS	97.8 %	0.6 %	0.9 %	0.8 %	97.2 %	2.8 %	56.2 %	43.5 %	22.0 %
Kiowa County - KS	96.8 %	0.9 %	1.2 %	1.2 %	96.1 %	3.9 %	53.5 %	41.5 %	20.9 %
Labette County - KS	90.7 %	5.8 %	3.0 %	0.6 %	96.1 %	3.9 %	53.6 %	40.5 %	19.2 %
Lane County - KS	96.8 %	1.7 %	1.2 %	0.3 %	95.8 %	4.2 %	59.1 %	46.8 %	24.7 %
Lincoln County - KS	98.8 %	0.5 %	0.5 %	0.2 %	97.2 %	2.8 %	58.6 %	46.4 %	22.4 %
Linn County - KS	97.7 %	1.1 %	0.8 %	0.4 %	98.1 %	1.9 %	55.8 %	42.2 %	20.3 %
Logan County - KS	97.4 %	1.4 %	0.7 %	0.6 %	96.6 %	3.4 %	56.5 %	45.9 %	23.9 %
Lyon County - KS	92.3 %	3.4 %	1.5 %	2.8 %	80.5 %	19.5 %	42.2 %	31.4 %	14.0 %
McPherson County - KS	97.2 %	1.4 %	0.6 %	0.8 %	96.5 %	3.5 %	53.6 %	41.6 %	20.8 %
Marion County - KS	97.6 %	1.3 %	0.7 %	0.4 %	97.4 %	2.6 %	57.3 %	45.0 %	24.0 %
Marshall County - KS	98.4 %	0.7 %	0.4 %	0.5 %	98.2 %	1.8 %	56.9 %	44.9 %	23.2 %
Meade County - KS	97.6 %	1.0 %	0.8 %	0.5 %	85.8 %	14.2 %	51.3 %	37.5 %	19.3 %
Mitchell County - KS	98.3 %	0.7 %	0.5 %	0.5 %	98.8 %	1.2 %	58.0 %	47.2 %	24.3 %
Montgomery County - KS	88.1 %	6.3 %	4.6 %	0.9 %	94.9 %	5.1 %	52.3 %	40.3 %	20.0 %
Morris County - KS	97.5 %	1.2 %	0.8 %	0.5 %	96.1 %	3.9 %	60.5 %	47.9 %	24.6 %
Morton County - KS	95.5 %	0.7 %	1.3 %	2.4 %	82.5 %	17.5 %	50.7 %	38.4 %	19.1 %
Nemaha County - KS	97.9 %	1.2 %	0.5 %	0.4 %	98.8 %	1.2 %	54.6 %	41.8 %	23.4 %
Neosho County - KS	96.3 %	1.7 %	1.3 %	0.7 %	96.0 %	4.0 %	51.8 %	39.8 %	19.6 %
Ness County - KS	97.7 %	0.9 %	1.2 %	0.3 %	92.0 %	8.0 %	60.2 %	48.5 %	26.5 %
Norton County - KS	98.2 %	0.8 %	0.4 %	0.6 %	97.2 %	2.8 %	57.7 %	44.1 %	23.1 %
Osage County - KS	97.9 %	0.8 %	0.9 %	0.4 %	97.7 %	2.3 %	54.9 %	41.1 %	18.4 %
Osborne County - KS	98.2 %	0.5 %	0.5 %	0.8 %	99.0 %	1.0 %	62.9 %	50.1 %	29.0 %
Ottawa County - KS	98.0 %	1.1 %	0.5 %	0.3 %	98.1 %	1.9 %	55.6 %	41.6 %	19.8 %
Pawnee County - KS	95.1 %	3.6 %	0.5 %	0.7 %	94.0 %	6.0 %	56.2 %	44.5 %	21.9 %
Phillips County - KS	97.7 %	0.9 %	0.6 %	0.9 %	97.4 %	2.6 %	56.9 %	45.3 %	22.6 %

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
Pottawatomie County - KS	96.1 %	1.8 %	1.1 %	1.0 %	95.7 %	4.3 %	45.6 %	32.4 %	13.6 %
Pratt County - KS	96.8 %	1.7 %	0.8 %	0.6 %	93.9 %	6.1 %	53.4 %	42.4 %	21.3 %
Rawlins County - KS	98.8 %	0.6 %	0.3 %	0.3 %	96.3 %	3.7 %	64.9 %	54.1 %	28.6 %
Reno County - KS	95.8 %	2.6 %	0.9 %	0.7 %	92.5 %	7.5 %	52.4 %	40.5 %	19.8 %
Republic County - KS	98.4 %	1.0 %	0.3 %	0.3 %	98.7 %	1.3 %	64.2 %	53.5 %	30.1 %
Rice County - KS	96.4 %	1.9 %	1.1 %	0.7 %	90.4 %	9.6 %	51.4 %	39.9 %	20.4 %
Riley County - KS	87.0 %	7.1 %	1.0 %	4.9 %	93.2 %	6.8 %	28.0 %	20.4 %	8.7 %
Rooks County - KS	97.6 %	1.1 %	0.4 %	0.9 %	97.9 %	2.1 %	55.7 %	43.9 %	22.2 %
Rush County - KS	98.2 %	1.0 %	0.4 %	0.4 %	97.4 %	2.6 %	62.9 %	51.6 %	26.3 %
Russell County - KS	97.1 %	1.4 %	0.7 %	0.8 %	98.5 %	1.5 %	59.2 %	47.1 %	25.0 %
Saline County - KS	92.5 %	4.1 %	0.9 %	2.6 %	90.4 %	9.6 %	49.8 %	36.9 %	16.6 %
Scott County - KS	97.5 %	0.9 %	0.8 %	0.8 %	85.2 %	14.8 %	54.7 %	42.5 %	21.7 %
Sedgwick County - KS	83.0 %	10.7 %	1.7 %	4.5 %	87.2 %	12.8 %	44.5 %	32.0 %	13.1 %
Seward County - KS	90.8 %	4.2 %	1.8 %	3.2 %	44.8 %	55.2 %	36.5 %	24.2 %	9.9 %
Shawnee County - KS	86.4 %	10.0 %	1.9 %	1.6 %	89.4 %	10.6 %	49.6 %	37.2 %	16.2 %
Sheridan County - KS	98.2 %	0.9 %	0.6 %	0.3 %	97.0 %	3.0 %	59.4 %	47.5 %	26.5 %
Sherman County - KS	96.8 %	1.5 %	0.4 %	1.3 %	88.2 %	11.8 %	53.6 %	42.3 %	21.9 %
Smith County - KS	98.5 %	0.8 %	0.5 %	0.3 %	98.3 %	1.7 %	64.5 %	52.3 %	29.0 %
Stafford County - KS	96.2 %	1.0 %	2.2 %	0.5 %	88.9 %	11.1 %	57.8 %	44.9 %	23.0 %
Stanton County - KS	96.4 %	0.6 %	2.8 %	0.3 %	63.4 %	36.6 %	47.9 %	34.2 %	17.7 %
Stevens County - KS	97.1 %	0.8 %	1.7 %	0.4 %	67.8 %	32.2 %	44.4 %	31.9 %	15.0 %
Sumner County - KS	96.2 %	1.6 %	1.7 %	0.5 %	95.4 %	4.6 %	52.2 %	39.7 %	18.0 %
Thomas County - KS	97.6 %	0.8 %	0.7 %	0.9 %	95.6 %	4.4 %	47.1 %	36.1 %	17.0 %
Trego County - KS	98.7 %	0.9 %	0.1 %	0.4 %	98.0 %	2.0 %	62.7 %	50.6 %	25.0 %
Wabaunsee County - KS	97.5 %	1.4 %	0.8 %	0.3 %	96.9 %	3.1 %	53.7 %	40.0 %	17.0 %
Wallace County - KS	97.8 %	0.9 %	1.2 %	0.1 %	93.0 %	7.0 %	54.7 %	41.9 %	21.2 %
Washington County - KS	98.5 %	0.7 %	0.4 %	0.4 %	97.5 %	2.5 %	59.5 %	46.9 %	26.2 %
Wichita County - KS	98.2 %	0.9 %	0.7 %	0.2 %	76.4 %	23.6 %	52.0 %	39.8 %	19.9 %
Wilson County - KS	97.1 %	0.9 %	1.4 %	0.6 %	97.7 %	2.3 %	55.5 %	43.9 %	21.6 %
Woodson County - KS	97.8 %	0.8 %	1.1 %	0.2 %	97.7 %	2.3 %	59.6 %	48.0 %	23.3 %

Data are for 2011.
Data are in the percentage of women in the population.
Source: US Census Bureau – Population Estimates

Table 2.5. Population characteristics – socioeconomics

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un-employed	Foreign Born	Linguistic-ally Isolated	In Rural Areas	In Medically Under-served Areas	No Health Insurance (Age: 40-64)
US	14.6 %	14.3 %	33.3 %	8.7 %	12.8 %	4.7 %	19.3 %	23.3 %	16.6 %
Kansas	10.5 %	12.6 %	29.6 %	6.4 %	6.5 %	2.5 %	25.8 %	12.5 %	13.2 %
Komen Kansas Service Area	11.9 %	13.8 %	33.4 %	6.3 %	5.7 %	2.4 %	32.6 %	17.1 %	14.5 %
Allen County - KS	10.7 %	15.4 %	40.7 %	6.3 %	0.7 %	0.2 %	57.2 %	0.0 %	14.6 %
Anderson County - KS	13.4 %	12.8 %	38.4 %	6.8 %	0.3 %	0.8 %	58.8 %	0.0 %	16.3 %
Barber County - KS	8.0 %	11.0 %	35.1 %	1.1 %	0.6 %	0.4 %	100.0 %	0.0 %	15.2 %
Barton County - KS	14.4 %	12.7 %	33.9 %	5.6 %	6.6 %	3.3 %	31.8 %	0.0 %	16.3 %
Bourbon County - KS	11.8 %	15.9 %	45.1 %	5.2 %	0.3 %	0.2 %	48.0 %	5.6 %	15.3 %

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)
Butler County - KS	7.8 %	7.6 %	25.1 %	6.4 %	1.7 %	0.3 %	40.5 %	3.9 %	11.1 %
Chase County - KS	10.5 %	13.3 %	36.6 %	4.0 %	1.7 %	0.7 %	100.0 %	100.0 %	16.9 %
Chautauqua County - KS	14.2 %	14.7 %	44.3 %	5.7 %	1.7 %	0.2 %	100.0 %	100.0 %	21.3 %
Cherokee County - KS	14.2 %	15.4 %	43.8 %	5.6 %	0.8 %	0.1 %	49.1 %	100.0 %	15.2 %
Cheyenne County - KS	12.7 %	10.3 %	40.1 %	2.3 %	1.9 %	0.2 %	100.0 %	0.0 %	16.5 %
Clark County - KS	8.6 %	12.2 %	33.4 %	3.5 %	3.0 %	0.0 %	100.0 %	0.0 %	14.1 %
Clay County - KS	7.6 %	11.6 %	33.7 %	2.4 %	1.3 %	0.0 %	49.5 %	0.0 %	13.6 %
Cloud County - KS	11.4 %	16.2 %	39.7 %	6.1 %	1.5 %	0.0 %	44.0 %	100.0 %	15.1 %
Coffey County - KS	7.7 %	9.9 %	29.4 %	5.0 %	0.9 %	0.7 %	70.9 %	7.3 %	12.0 %
Comanche County - KS	11.5 %	6.3 %	35.5 %	0.9 %	2.1 %	1.2 %	100.0 %	100.0 %	18.7 %
Cowley County - KS	12.8 %	16.8 %	36.9 %	7.3 %	3.5 %	2.3 %	31.0 %	3.1 %	14.0 %
Crawford County - KS	11.3 %	19.1 %	42.5 %	6.6 %	3.5 %	0.9 %	34.9 %	20.0 %	15.4 %
Decatur County - KS	8.4 %	9.6 %	40.8 %	3.9 %	1.7 %	0.5 %	100.0 %	0.0 %	17.0 %
Dickinson County - KS	9.1 %	10.3 %	32.3 %	5.2 %	0.8 %	0.0 %	64.3 %	0.0 %	13.2 %
Edwards County - KS	17.4 %	15.4 %	34.5 %	5.1 %	9.3 %	1.9 %	100.0 %	0.0 %	17.5 %
Elk County - KS	10.5 %	19.3 %	45.4 %	7.8 %	0.7 %	0.3 %	100.0 %	100.0 %	22.0 %
Ellis County - KS	8.5 %	15.4 %	29.7 %	4.0 %	2.1 %	1.2 %	25.6 %	0.0 %	10.6 %
Ellsworth County - KS	9.6 %	6.2 %	31.6 %	5.4 %	2.2 %	0.2 %	54.1 %	100.0 %	13.9 %
Finney County - KS	28.2 %	15.1 %	38.0 %	3.4 %	20.0 %	9.8 %	18.6 %	0.0 %	18.5 %
Ford County - KS	30.9 %	15.5 %	38.3 %	5.0 %	24.9 %	14.6 %	19.3 %	20.4 %	20.1 %
Franklin County - KS	9.2 %	10.2 %	32.7 %	6.5 %	1.6 %	0.6 %	52.1 %	2.5 %	11.9 %
Geary County - KS	8.7 %	12.5 %	46.5 %	6.4 %	7.6 %	2.5 %	11.7 %	18.1 %	16.5 %
Gove County - KS	7.9 %	9.4 %	32.7 %	2.9 %	1.0 %	0.9 %	100.0 %	0.0 %	16.1 %
Graham County - KS	9.4 %	10.5 %	34.1 %	4.1 %	0.5 %	0.0 %	100.0 %	100.0 %	16.1 %
Grant County - KS	18.0 %	13.2 %	31.6 %	6.9 %	15.2 %	8.9 %	19.8 %	0.0 %	17.9 %
Gray County - KS	24.5 %	7.6 %	28.5 %	3.5 %	12.3 %	4.3 %	100.0 %	100.0 %	17.7 %
Greeley County - KS	11.5 %	6.2 %	29.1 %	0.9 %	5.0 %	2.6 %	100.0 %	0.0 %	16.0 %
Greenwood County - KS	9.2 %	18.1 %	39.8 %	8.1 %	0.4 %	0.0 %	61.3 %	100.0 %	16.2 %
Hamilton County - KS	20.3 %	8.8 %	39.3 %	3.3 %	12.4 %	4.4 %	100.0 %	100.0 %	20.8 %
Harper County - KS	13.1 %	13.9 %	38.4 %	4.5 %	2.2 %	2.0 %	100.0 %	100.0 %	17.4 %
Harvey County - KS	10.2 %	11.1 %	30.8 %	5.7 %	4.4 %	2.3 %	30.9 %	0.0 %	13.8 %
Haskell County - KS	26.9 %	11.8 %	32.8 %	4.3 %	15.6 %	5.4 %	100.0 %	0.0 %	17.6 %
Hodgeman County - KS	9.9 %	5.2 %	33.2 %	4.1 %	3.8 %	0.4 %	100.0 %	0.0 %	16.2 %
Jewell County - KS	9.0 %	10.6 %	38.4 %	4.3 %	1.4 %	0.0 %	100.0 %	100.0 %	18.0 %
Kearny County - KS	22.3 %	9.5 %	34.4 %	3.0 %	11.7 %	3.2 %	100.0 %	5.3 %	18.7 %
Kingman County - KS	10.8 %	11.4 %	31.9 %	3.7 %	0.5 %	0.0 %	62.1 %	100.0 %	14.3 %
Kiowa County - KS	7.9 %	13.2 %	36.4 %	4.1 %	2.1 %	0.2 %	100.0 %	100.0 %	15.8 %
Labette County - KS	12.2 %	16.1 %	43.8 %	7.1 %	1.3 %	0.5 %	52.3 %	42.3 %	13.8 %
Lane County - KS	12.1 %	15.8 %	29.1 %	4.9 %	1.8 %	0.3 %	100.0 %	100.0 %	16.1 %
Lincoln County - KS	9.5 %	11.5 %	40.6 %	4.4 %	1.6 %	0.0 %	100.0 %	100.0 %	18.8 %
Linn County - KS	12.0 %	10.9 %	37.9 %	6.5 %	1.9 %	0.3 %	100.0 %	100.0 %	16.0 %
Logan County - KS	10.4 %	11.3 %	34.0 %	2.6 %	2.3 %	0.0 %	100.0 %	100.0 %	16.1 %
Lyon County - KS	14.7 %	21.2 %	38.2 %	7.3 %	10.1 %	4.7 %	26.3 %	0.0 %	16.7 %
McPherson County - KS	12.7 %	8.6 %	24.0 %	3.2 %	1.7 %	0.7 %	43.5 %	2.8 %	10.9 %
Marion County - KS	10.8 %	10.2 %	33.0 %	4.2 %	1.1 %	0.1 %	77.8 %	0.0 %	14.8 %
Marshall County - KS	9.8 %	11.8 %	31.6 %	2.9 %	0.9 %	0.5 %	71.0 %	0.0 %	12.7 %
Meade County - KS	13.8 %	10.0 %	32.4 %	3.8 %	7.3 %	2.3 %	100.0 %	6.6 %	17.3 %
Mitchell County - KS	9.4 %	8.3 %	31.2 %	1.3 %	1.5 %	0.5 %	48.3 %	0.0 %	13.2 %
Montgomery County - KS	12.9 %	15.3 %	39.3 %	10.3 %	2.8 %	1.1 %	43.4 %	10.4 %	15.5 %

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)
Morris County - KS	8.9 %	7.8 %	35.4 %	4.5 %	1.9 %	0.5 %	100.0 %	6.2 %	14.8 %
Morton County - KS	13.9 %	5.3 %	33.5 %	3.9 %	6.2 %	2.2 %	100.0 %	19.7 %	15.8 %
Nemaha County - KS	9.2 %	11.2 %	31.9 %	2.1 %	0.6 %	0.1 %	75.2 %	0.0 %	13.3 %
Neosho County - KS	12.0 %	16.8 %	40.2 %	9.6 %	1.8 %	0.6 %	45.1 %	2.9 %	15.0 %
Ness County - KS	8.9 %	7.4 %	28.7 %	2.3 %	3.5 %	2.1 %	100.0 %	0.0 %	15.5 %
Norton County - KS	11.2 %	12.7 %	33.8 %	2.4 %	1.4 %	0.0 %	49.0 %	100.0 %	13.5 %
Osage County - KS	9.6 %	10.8 %	32.2 %	6.7 %	0.5 %	0.3 %	83.5 %	100.0 %	12.6 %
Osborne County - KS	11.1 %	14.2 %	41.8 %	1.9 %	0.8 %	0.1 %	100.0 %	0.0 %	17.8 %
Ottawa County - KS	10.3 %	9.9 %	31.7 %	5.6 %	0.8 %	0.0 %	100.0 %	0.0 %	14.0 %
Pawnee County - KS	9.0 %	6.5 %	36.0 %	4.9 %	1.5 %	0.9 %	31.7 %	100.0 %	13.7 %
Phillips County - KS	9.5 %	12.7 %	36.4 %	4.4 %	1.1 %	0.2 %	53.8 %	100.0 %	15.1 %
Pottawatomie County - KS	6.8 %	6.8 %	28.0 %	2.4 %	2.8 %	1.1 %	58.9 %	27.0 %	12.5 %
Pratt County - KS	11.1 %	7.6 %	31.7 %	4.5 %	2.1 %	0.6 %	32.2 %	0.0 %	14.6 %
Rawlins County - KS	9.2 %	13.5 %	35.5 %	1.3 %	2.3 %	0.0 %	100.0 %	100.0 %	17.2 %
Reno County - KS	11.4 %	13.0 %	34.5 %	5.3 %	2.2 %	0.7 %	31.3 %	9.3 %	13.6 %
Republic County - KS	6.3 %	12.4 %	37.3 %	3.4 %	0.8 %	0.2 %	100.0 %	100.0 %	16.1 %
Rice County - KS	9.7 %	14.7 %	32.8 %	6.3 %	3.5 %	1.0 %	63.8 %	100.0 %	14.6 %
Riley County - KS	4.7 %	23.6 %	30.4 %	4.7 %	6.5 %	2.6 %	13.8 %	0.9 %	12.5 %
Rooks County - KS	8.6 %	15.5 %	36.9 %	4.2 %	0.3 %	0.2 %	100.0 %	100.0 %	17.4 %
Rush County - KS	12.9 %	13.5 %	36.6 %	6.1 %	1.4 %	0.4 %	100.0 %	0.0 %	16.0 %
Russell County - KS	9.9 %	13.9 %	37.3 %	3.2 %	0.5 %	0.2 %	41.1 %	0.0 %	17.5 %
Saline County - KS	11.3 %	13.9 %	32.8 %	5.3 %	5.2 %	1.4 %	14.6 %	9.2 %	14.6 %
Scott County - KS	11.4 %	7.2 %	26.6 %	1.1 %	11.5 %	4.9 %	26.1 %	0.0 %	15.3 %
Sedgwick County - KS	12.0 %	14.0 %	31.0 %	8.2 %	7.9 %	3.2 %	7.7 %	6.2 %	14.5 %
Seward County - KS	35.2 %	16.2 %	42.8 %	9.3 %	30.9 %	18.0 %	11.4 %	0.0 %	22.4 %
Shawnee County - KS	9.7 %	14.7 %	30.6 %	7.2 %	4.5 %	1.9 %	15.8 %	21.4 %	12.5 %
Sheridan County - KS	7.3 %	13.4 %	28.9 %	1.6 %	0.3 %	0.0 %	100.0 %	0.0 %	14.1 %
Sherman County - KS	13.1 %	19.9 %	38.9 %	4.8 %	3.3 %	1.0 %	24.2 %	0.0 %	17.6 %
Smith County - KS	11.9 %	13.8 %	36.1 %	2.2 %	0.5 %	0.1 %	100.0 %	100.0 %	15.3 %
Stafford County - KS	13.4 %	11.2 %	36.8 %	3.3 %	6.0 %	3.2 %	100.0 %	100.0 %	20.6 %
Stanton County - KS	26.9 %	4.6 %	35.1 %	7.3 %	21.6 %	11.9 %	100.0 %	0.0 %	24.9 %
Stevens County - KS	16.7 %	12.8 %	30.5 %	3.7 %	18.5 %	9.7 %	31.2 %	0.0 %	19.8 %
Sumner County - KS	9.0 %	12.6 %	31.4 %	7.0 %	0.5 %	0.1 %	62.9 %	0.0 %	12.8 %
Thomas County - KS	10.5 %	7.8 %	30.3 %	4.3 %	2.4 %	0.4 %	30.8 %	0.0 %	13.6 %
Trego County - KS	10.7 %	9.4 %	33.1 %	1.1 %	1.0 %	0.1 %	100.0 %	100.0 %	14.6 %
Wabaunsee County - KS	5.1 %	6.7 %	29.5 %	4.8 %	0.8 %	0.2 %	100.0 %	100.0 %	12.3 %
Wallace County - KS	11.8 %	14.1 %	33.8 %	1.5 %	3.9 %	3.3 %	100.0 %	100.0 %	16.1 %
Washington County - KS	11.4 %	12.3 %	37.0 %	2.6 %	2.1 %	1.6 %	100.0 %	100.0 %	17.4 %
Wichita County - KS	18.4 %	13.0 %	33.3 %	3.5 %	10.1 %	3.2 %	100.0 %	0.0 %	20.7 %
Wilson County - KS	18.2 %	13.3 %	41.8 %	6.9 %	0.5 %	0.1 %	72.7 %	0.0 %	16.4 %
Woodson County - KS	10.6 %	18.6 %	43.3 %	6.9 %	0.0 %	0.0 %	100.0 %	100.0 %	19.5 %

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

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

- Geary County

The following county has a substantially larger API female population percentage than that of the Affiliate service area as a whole:

- Geary County

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

- Chautauqua County
- Cherokee County
- Montgomery County

The following counties have substantially larger Hispanic/Latina female population percentages than that of the Affiliate service area as a whole:

- Edwards County
- Finney County
- Ford County
- Grant County
- Hamilton County
- Haskell County
- Kearny County
- Lyon County
- Morton County
- Seward County
- Stanton County
- Stevens County
- Wichita County

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

- Anderson County
- Barber County

- Chase County
- Chautauqua County
- Cheyenne County
- Clark County
- Clay County
- Cloud County
- Comanche County
- Decatur County
- Elk County
- Ellsworth County
- Gove County
- Graham County
- Greeley County
- Greenwood County
- Harper County
- Jewell County
- Kingman County
- Lane County
- Lincoln County
- Logan County
- Marion County
- Marshall County
- Mitchell County
- Morris County
- Nemaha County
- Ness County
- Norton County
- Osborne County
- Pawnee County
- Phillips County
- Pratt County
- Rawlins County
- Republic County
- Rooks County
- Rush County
- Russell County
- Scott County
- Sheridan County
- Sherman County
- Smith County
- Stafford County
- Trego County
- Washington County
- Wilson County
- Woodson County

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

- Edwards County
- Finney County
- Ford County
- Grant County
- Gray County
- Hamilton County
- Haskell County
- Kearny County
- Seward County
- Stanton County
- Wichita County
- Wilson County

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

- Crawford County
- Elk County
- Sherman County

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

- Montgomery County
- Neosho County

The counties with substantial foreign born and linguistically isolated populations are:

- Finney County
- Ford County
- Grant County
- Haskell County
- Seward County
- Stanton County
- Stevens County

The following counties have substantially larger percentage of adults without health insurance than does the Affiliate service area as a whole:

- Chautauqua County
- Elk County
- Ford County
- Hamilton County
- Seward County
- Stafford County
- Stanton County
- Stevens County
- Wichita County
- Woodson 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 Kansas 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				
Time to Achieve Death Rate Reduction Target		13 years or longer	7-12 yrs.	0 – 6 yrs.	Currently meets target	Unknown
	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 Kansas 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
Cherokee County - KS	Highest	13 years or longer	NA	%AIAN, rural, medically underserved
Ellis County - KS	Highest	13 years or longer	NA	
Franklin County - KS	Highest	13 years or longer	NA	Rural
McPherson County - KS	Highest	13 years or longer	NA	Rural
Montgomery County - KS	Highest	13 years or longer	NA	%AIAN, employment, rural
Cowley County - KS	Medium High	12 years	NA	
Crawford County - KS	Medium Low	3 years	NA	Poverty
Labette County - KS	Medium Low	4 years	NA	Rural, medically underserved
Reno County - KS	Medium Low	2 years	NA	
Saline County - KS	Medium Low	4 years	NA	
Sedgwick County - KS	Medium Low	4 years	NA	
Shawnee County - KS	Medium Low	5 years	NA	
Sumner County - KS	Medium Low	2 years	NA	Rural
Butler County - KS	Lowest	Currently meets target	NA	Rural
Riley County - KS	Lowest	Currently meets target	NA	
Allen County - KS	Undetermined	SN	NA	Rural
Anderson County - KS	Undetermined	SN	NA	Older, rural
Barber County - KS	Undetermined	SN	NA	Older, rural
Barton County - KS	Undetermined	NA	NA	
Bourbon County - KS	Undetermined	SN	NA	Rural
Chase County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Chautauqua County - KS	Undetermined	SN	NA	%AIAN, older, rural, insurance, medically underserved
Cheyenne County - KS	Undetermined	SN	NA	Older, rural
Clark County - KS	Undetermined	SN	NA	Older, rural
Clay County - KS	Undetermined	SN	NA	Older, rural
Cloud County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Coffey County - KS	Undetermined	SN	NA	Rural
Comanche County - KS	Undetermined	SN	NA	Older, rural, medically underserved

County	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Decatur County - KS	Undetermined	SN	NA	Older, rural
Dickinson County - KS	Undetermined	SN	NA	Rural
Edwards County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, rural
Elk County - KS	Undetermined	SN	NA	Older, poverty, rural, insurance, medically underserved
Ellsworth County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Finney County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, foreign, language
Ford County - KS	Undetermined	NA	NA	%Hispanic/Latina, education, foreign, language, insurance
Geary County - KS	Undetermined	NA	NA	%Black/African-American, %API
Gove County - KS	Undetermined	SN	NA	Older, rural
Graham County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Grant County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, foreign, language
Gray County - KS	Undetermined	SN	NA	Education, foreign, rural, medically underserved
Greeley County - KS	Undetermined	SN	NA	Older, rural
Greenwood County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Hamilton County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, foreign, rural, insurance, medically underserved
Harper County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Harvey County - KS	Undetermined	NA	NA	
Haskell County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, foreign, language, rural
Hodgeman County - KS	Undetermined	SN	NA	Rural
Jewell County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Kearny County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, foreign, rural
Kingman County - KS	Undetermined	SN	NA	Older, rural, medically underserved

County	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Kiowa County - KS	Undetermined	SN	NA	Rural, medically underserved
Lane County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Lincoln County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Linn County - KS	Undetermined	SN	NA	Rural, medically underserved
Logan County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Lyon County - KS	Undetermined	SN	NA	%Hispanic/Latina
Marion County - KS	Undetermined	SN	NA	Older, rural
Marshall County - KS	Undetermined	SN	NA	Older, rural
Meade County - KS	Undetermined	SN	NA	Rural
Mitchell County - KS	Undetermined	SN	NA	Older, rural
Morris County - KS	Undetermined	SN	NA	Older, rural
Morton County - KS	Undetermined	SN	NA	%Hispanic/Latina, rural
Nemaha County - KS	Undetermined	SN	NA	Older, rural
Neosho County - KS	Undetermined	SN	NA	Employment, rural
Ness County - KS	Undetermined	SN	NA	Older, rural
Norton County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Osage County - KS	Undetermined	SN	NA	Rural, medically underserved
Osborne County - KS	Undetermined	SN	NA	Older, rural
Ottawa County - KS	Undetermined	SN	NA	Rural
Pawnee County - KS	Undetermined	SN	NA	Older, medically underserved
Phillips County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Pottawatomie County - KS	Undetermined	SN	NA	Rural, medically underserved
Pratt County - KS	Undetermined	SN	NA	Older
Rawlins County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Republic County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Rice County - KS	Undetermined	SN	NA	Rural, medically underserved
Rooks County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Rush County - KS	Undetermined	SN	NA	Older, rural

County	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Russell County - KS	Undetermined	SN	NA	Older, rural
Scott County - KS	Undetermined	SN	NA	Older, foreign
Seward County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, foreign, language, insurance
Sheridan County - KS	Undetermined	SN	NA	Older, rural
Sherman County - KS	Undetermined	SN	NA	Older, poverty
Smith County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Stafford County - KS	Undetermined	SN	NA	Older, rural, insurance, medically underserved
Stanton County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, foreign, language, rural, insurance
Stevens County - KS	Undetermined	SN	NA	%Hispanic/Latina, foreign, language, insurance
Thomas County - KS	Undetermined	SN	NA	
Trego County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Wabaunsee County - KS	Undetermined	SN	NA	Rural, medically underserved
Wallace County - KS	Undetermined	SN	NA	Rural, medically underserved
Washington County - KS	Undetermined	SN	NA	Older, rural, medically underserved
Wichita County - KS	Undetermined	SN	NA	%Hispanic/Latina, education, rural, insurance
Wilson County - KS	Undetermined	SN	NA	Older, education, rural
Woodson County - KS	Undetermined	SN	NA	Older, rural, insurance, 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.

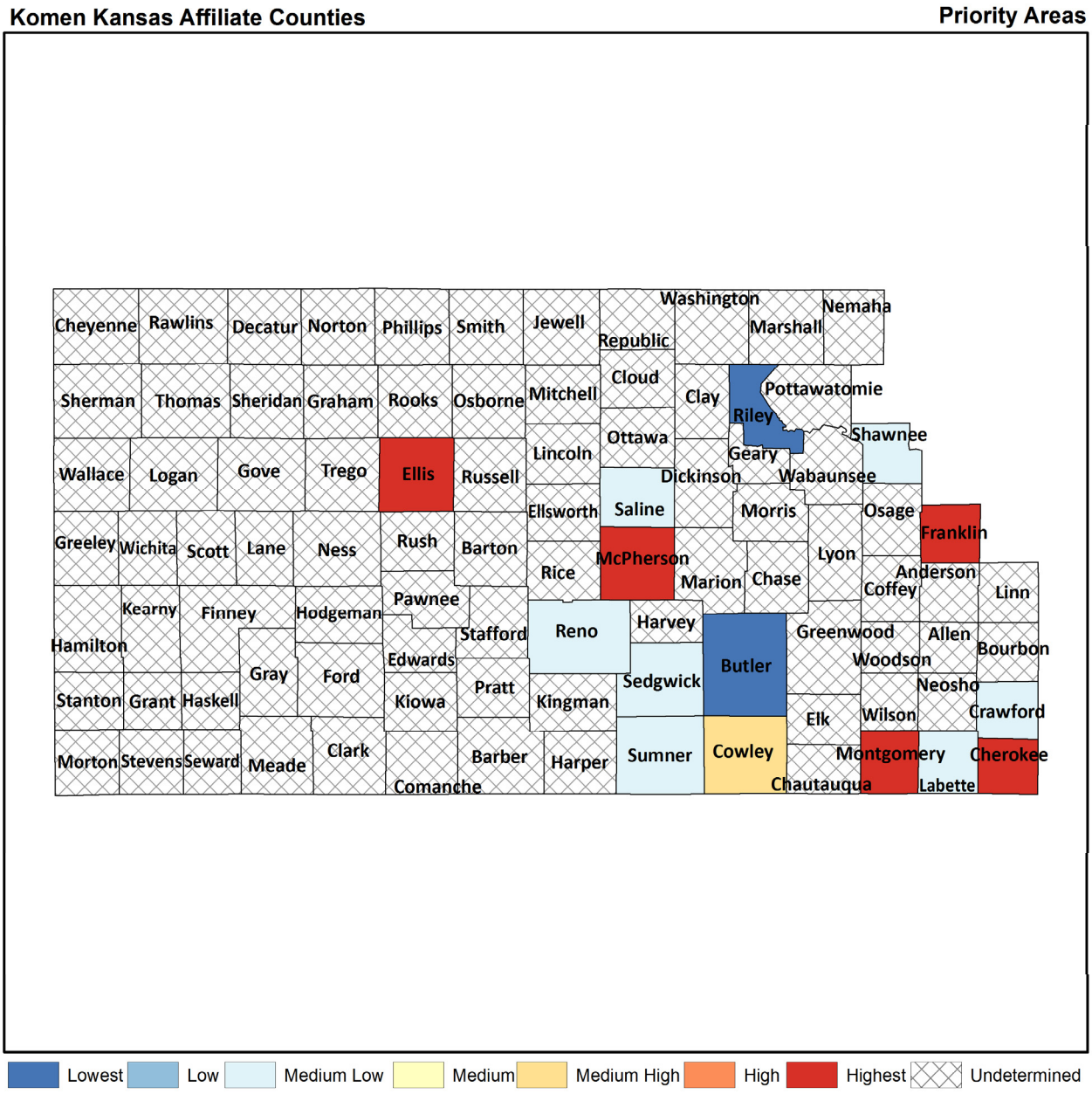


Figure 2.1. Intervention priorities

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

Five counties in the Komen Kansas service area are in the highest priority category. All of the five, Cherokee County, Ellis County, Franklin County, McPherson County and Montgomery County, are not likely to meet the death rate HP2020 target.

Screening percentages in Montgomery County (62.0 percent) are significantly lower than the Affiliate service area as a whole (78.0 percent).

Cherokee County has a relatively large AIAN population. Montgomery County has a relatively large AIAN population and high unemployment.

Medium high priority areas

One county in the Komen Kansas service area is in the medium high priority category. Cowley County is expected to take twelve years to reach the death rate HP2020 target.

Additional Quantitative Data Exploration

The Quantitative Data Report for Komen Kansas did not include data on breast cancer incidence, including late-stage breast cancer incidence counts or rates. To fill this gap, county-level incidence rates were computed for all Affiliate counties for 1) breast cancer incidence and 2) late-stage breast cancer incidence. In addition, the proportions of breast cancer incident cases that were localized vs. regional/distant/unstaged were computed for White and Black/African-American women in Sedgwick and Shawnee counties. This analysis was not possible for other counties due to low counts of breast cancer incident cases among non-White women.

The Kansas Department of Health and Environment's Senior Chronic Disease Epidemiologist examined female breast cancer incidence rates (all stages) among Kansas women for the 95 counties in the Komen Kansas service area for 2006-2010 (Table 2.8). Counts of incident female breast cancer cases during the five-year period were reviewed by county, along with the

county-specific female population total, the county-specific crude rate (i.e. total count / total population), the county-specific age-adjusted rate and accompanying 95.0 percent confidence limits. Incidence data were obtained from the Kansas Cancer Registry (KCR) 2001-2010 dataset. Data from the KCR is continually being updated; thus, incidence rates may differ from previous reports or analyses based on older datasets. Incidence rates from most recent years are likely underestimated and can be expected to increase once analyses are conducted on later datasets. Counts and rates for counties with low counts (<20) of incident female breast cancer cases are suppressed. All rates are per 100,000 population and age-adjusted to the 2000 US Standard Population based on 19 age categories.

Table 2.8. Female breast cancer incidence statistics, Kansas Komen counties 2006-2010

County	Cases	Population	Crude Rate	AA Rate	LCL	UCL	
Allen	63	34,187	184.3	147.9	111.3	196.2	
Anderson	32	20,179	158.6	131.0	88.3	191.6	
Barber	21	12,137	173.0	134.0	78.0	228.6	
Barton	119	70,474	168.9	127.1	103.8	155.7	
Bourbon	48	38,234	125.5	98.3	71.1	135.1	
Butler	220	158,424	138.9	125.7	109.3	144.0	
Chase	11	7,072					
Chautauqua	7	9,711					
Cherokee	64	54,267	117.9	102.2	78.0	132.6	
Cheyenne	8	6,931					
Clark	7	5,438					
Clay	31	21,744	142.6	95.6	63.3	145.1	
Cloud	55	24,427	225.2	162.9	120.2	222.4	
Coffey	35	21,513	162.7	129.0	88.7	185.8	
Comanche	13	4,903					
Cowley	140	87,781	159.5	131.8	110.2	157.2	
Crawford	122	98,565	123.8	108.6	89.4	131.4	
Decatur	9	7,465					
Dickinson	67	49,014	136.7	100.5	77.0	131.0	
Edwards	14	7,723					
Elk	11	7,754					
Ellis	79	70,287	112.4	105.9	83.0	134.7	
Ellsworth	28	14,438	193.9	133.7	86.7	207.0	
Finney	78	97,353	80.1	93.4	73.4	117.9	
Ford	80	80,639	99.2	108.3	85.7	135.3	
Franklin	100	66,044	151.4	130.7	105.9	160.3	
Geary	76	75,181	101.1	114.8	90.3	144.3	
Gove	6	6,706					
Graham	13	6,580					
Grant	19	18,706					
Gray	18	14,602					
Greeley							

Greenwood	28	17,368	161.2	100.5	65.4	157.6	
Hamilton	7	6,567					
Harper	22	14,882	147.8	95.9	56.1	166.4	
Harvey	146	86,558	168.7	136.7	114.7	162.7	
Haskell	10	10,026					
Hodgeman							
Jewell	12	7,807					
Kearny	9	10,250					
Kingman	42	19,660	213.6	152.1	107.9	216.9	
Kiowa	19	6,826					
Labette	78	55,400	140.8	114.1	89.0	145.8	
Lane	7	4,431					
Lincoln	15	8,235					
Linn	38	24,131	157.5	122.6	85.0	175.4	
Logan	11	6,723					
Lyon	94	88,195	106.6	105.1	84.6	129.8	
Marion	41	31,270	131.1	92.5	63.7	134.6	
Marshall	52	25,653	202.7	139.6	102.3	193.2	
McPherson	123	74,014	166.2	125.7	103.7	152.4	
Meade	14	11,070					
Mitchell	32	15,812	202.4	149.8	97.6	232.2	
Montgomery	108	89,411	120.8	95.6	77.5	117.5	
Morris	32	15,217	210.3	142.4	93.2	218.3	
Morton	10	8,037					
Nemaha	38	25,378	149.7	100.5	68.2	150.0	
Neosho	69	41,512	166.2	129.4	99.9	167.1	
Ness	26	7,460	348.5	172.6	108.8	310.2	
Norton	20	12,082	165.5	117.7	69.9	197.1	
Osage	63	41,605	151.4	115.7	88.0	151.3	
Osborne	20	9,657	207.1	127.6	73.1	238.3	
Ottawa	21	14,959	140.4	116.5	70.1	188.2	
Pawnee	30	14,809	202.6	146.4	96.7	222.0	
Phillips	30	13,659	219.6	139.6	92.8	217.4	
Pottawatomie	58	50,252	115.4	109.3	82.7	142.7	
Pratt	43	24,105	178.4	122.4	86.7	173.8	
Rawlins	9	6,391					
Reno	247	158,524	155.8	117.8	102.9	134.7	
Republic	22	12,469	176.4	118.0	66.2	219.1	
Rice	37	25,845	143.2	108.7	75.7	157.3	
Riley	152	163,767	92.8	129.4	109.3	152.5	
Rooks	28	12,972	215.8	181.3	115.8	280.9	
Rush	7	8,253					
Russell	28	17,277	162.1	110.7	69.0	178.4	
Saline	189	137,861	137.1	115.3	99.0	133.7	

Scott	16	11,693					
Sedgwick	1,562	1,221,502	127.9	122.7	116.6	129.1	
Seward	50	55,847	89.5	104.5	77.2	138.9	
Shawnee	659	450,521	146.3	123.4	114.0	133.5	
Sheridan	10	6,334					
Sherman	21	14,508	144.7	94.3	57.0	161.2	
Smith	18	9,972					
Stafford	24	11,132	215.6	137.1	85.7	234.5	
Stanton							
Stevens	14	13,245					
Sumner	108	60,357	178.9	146.1	119.2	178.8	
Thomas	29	19,043	152.3	128.4	84.8	193.5	
Trego	15	7,507					
Wabaunsee	18	17,017					
Wallace							
Washington	36	14,261	252.4	166.5	112.9	257.0	
Wichita	6	5,384					
Wilson	35	24,729	141.5	104.6	71.2	152.9	
Woodson	16	8,441					

Source of incidence and late-stage data: Kansas Cancer Registry. Source of population data: National Center for Health Statistics 2006-2010.
Note: Rates are per 100,000 population and are age-adjusted to the 2000 US Standard Population. Numbers <6 or rates based on counts <20 are suppressed. AA= age-adjusted. LCL=lower 95% confidence limit. UCL=upper 95% confidence limit.

It is important to note that despite apparent differences in age-adjusted rates by county, overlapping 95.0 percent confidence intervals indicate no *statistically significant* differences in age-adjusted rates by county. Thus, no county is significantly higher or lower than any other county. The incidence data were included in this report as the Komen Kansas Community Profile Team reviewed the data to determine if there were significant differences in incidence rates by county. However, as stated previously there were not significant incidence rate differences.

The epidemiologist also examined late-stage (i.e. regional and distant) female breast cancer incidence rates among Kansas women in the 95 counties served by Komen Kansas for 2006-2010 (Table 2.9). Counts of incident late-stage female breast cancer cases during the five-year period were reviewed by county, along with the county-specific female population total, the county-specific crude rate (i.e. total count / total population), the county-specific age-adjusted rate and accompanying 95 percent confidence limits. Late-stage incidence data were obtained from the Kansas Cancer Registry (KCR) 2001-2010 dataset. The year of cancer case is based on year of diagnosis not year case is reported to the registry. Data from the KCR is continually being updated; thus, incidence rates shown may differ from previous reports or analyses based on older datasets. Incidence rates from most recent years are likely underestimated and can be expected to increase once analyses are conducted on later datasets. Counts and rates for counties with low counts (<20) of late-stage female breast cancer incident cases are suppressed. All rates are per 100,000 population and age-adjusted to the 2000 US Standard Population based on 19 age categories.

Table 2.9. Late-stage female breast cancer incidence statistics, Kansas Komen counties 2006-2010

County	Cases	Population	Crude Rate	AA Rate	LCL	UCL
Allen	23	34,187	67.3	51.3	31.8	83.0
Anderson	15	20,179				
Barber	8	12,137				
Barton	43	70,474	61.0	53.0	37.3	74.4
Bourbon	23	38,234	60.2	47.6	29.1	76.3
Butler	75	158,424	47.3	43.2	33.8	54.7
Chase						
Chautauqua						
Cherokee	24	54,267	44.2	40.2	25.3	61.6
Cheyenne						
Clark						
Clay	9	21,744				
Cloud	22	24,427	90.1	66.6	40.7	110.6
Coffey	13	21,513				
Comanche	6	4,903				
Cowley	56	87,781	63.8	54.9	41.1	72.8
Crawford	50	98,565	50.7	44.2	32.5	59.7
Decatur						
Dickinson	21	49,014	42.8	33.3	19.8	54.5
Edwards						
Elk						
Ellis	27	70,287	38.4	38.7	24.9	58.8
Ellsworth	9	14,438				
Finney	29	97,353	29.8	35.5	23.5	52.2
Ford	29	80,639	36.0	38.1	25.5	55.3
Franklin	35	66,044	53.0	45.1	31.2	64.2
Geary	28	75,181	37.2	42.7	28.2	62.3
Gove						
Graham						
Grant	11	18,706				
Gray	8	14,602				
Greeley						
Greenwood	10	17,368				
Hamilton						
Harper	6	14,882				
Harvey	46	86,558	53.1	44.8	32.4	61.2
Haskell						
Hodgeman						
Jewell	6	7,807				
Kearny						
Kingman	15	19,660	76.3	55.0	29.9	103
Kiowa						
Labette	37	55,400	66.8	60.8	42.0	86.7
Lane						
Lincoln	6	8,235				

Linn	12	24,131				
Logan						
Lyon	31	88,195	35.1	37.2	25.0	54.0
Marion	17	31,270				
Marshall	13	25,653				
McPherson	44	74,014	59.4	48.4	34.8	67.1
Meade						
Mitchell	9	15,812				
Montgomery	49	89,411	54.8	45.7	33.3	62.2
Morris	7	15,217				
Morton						
Nemaha	16	25,378				
Neosho	21	41,512	50.6	41.3	25.2	66.6
Ness	10	7,460				
Norton						
Osage	26	41,605	62.5	47.9	30.6	73.6
Osborne	6	9,657				
Ottawa	10	14,959				
Pawnee	12	14,809				
Phillips	14	13,659				
Pottawatomie	19	50,252				
Pratt	12	24,105				
Rawlins						
Reno	84	158,524	53.0	41.7	32.8	52.7
Republic	9	12,469				
Rice	15	25,845				
Riley	51	163,767	31.1	46.0	34.1	60.9
Rooks	8	12,972				
Rush						
Russell	8	17,277				
Saline	61	137,861	44.2	38.2	29.0	49.9
Scott	5	11,693				
Sedgwick	582	1,221,502	47.6	45.8	42.2	49.8
Seward	15	55,847				
Shawnee	222	450,521	49.3	42.5	36.9	48.7
Sheridan						
Sherman						
Smith						
Stafford	13	11,132				
Stanton						
Stevens	6	13,245				
Sumner	36	60,357	59.6	49.9	34.7	71.4
Thomas	12	19,043				
Trego						
Wabaunsee	7	17,017				
Wallace						
Washington	7	14,261				
Wichita						
Wilson	11	24,729				

Woodson	8	8,441				

It is important to note that despite apparent differences in age-adjusted rates by county, overlapping 95.0 percent confidence intervals indicate no *statistically significant* differences in age-adjusted rates by county. Thus, no county is significantly higher or lower than any other county. Because there was no significant difference in relative measures of burden, the Community Profile Team used crude rates in target community justifications to highlight absolute measures of late-stage breast cancer burden.

Selection of Target Communities

Exploratory data provided Komen Kansas the opportunity to determine the most appropriate target communities for the Community Profile. Based on review of the Quantitative Data Report and additional quantitative data provided by the Kansas Department of Health and Environment, the Affiliate chose Cherokee County, Montgomery County, Sedgwick County and Shawnee County as the four target areas for this document. The Affiliate will focus outreach efforts on these four areas with the idea of replicating successful outreach practices in other areas of the 95 county service area. The target communities were identified as regions that were experiencing gaps in breast health services and where the Affiliate could focus efforts in order to be the most efficient stewards of resources. It is important to note that no county in the Affiliate service area demonstrated statistically significantly higher crude or age-adjusted rates for female breast cancer incidence (overall or late-stage) or death. Thus, absolute measures of burden, including counts and crude rates of late-stage breast cancer, were considered in determining where to focus limited resources. Of the 95 counties in the Affiliate service area, Sedgwick and Shawnee Counties comprised over one-third (36.9 percent) of all late-stage breast cancer diagnoses from 2006 to 2010.

Additionally, the Affiliate selected target communities by reviewing breast cancer county level incidence data as identified in the previous section and data related to Healthy People 2020 (HP2020) objectives, including:

- Reducing women's death rate from breast cancer
- Reducing the number of breast cancers that are found at a late-stage

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

- Incidence rates (overall and late-stage)
- Death rates
- Mammography percentages
- Education level
- Residents with incomes less than 100 percent poverty level
- Residents living in medically underserved areas
- Unemployment percentages

Cherokee County

Cherokee County was identified in the quantitative report as being at highest risk of not achieving the Healthy People 2020 breast cancer death rate target. Socioeconomic characteristics of the region in southeast Kansas indicate that access to affordable health care

is an issue that needs to be addressed. Cherokee County is in an area that is considered to be rural. The number of residents who live in rural areas, where resources are limited, are higher than the Affiliate average (49.1 percent compared 32.6 percent) (Table 2.5). One hundred percent of the county is medically underserved, which means the population has limited access to primary care services (Table 2.5). Additionally, 15.4 percent of Cherokee County residents have yearly incomes below 100 percent poverty level which is two percentage points higher than the Affiliate rate of 13.8 percent (Table 2.5). Forty three point eight percent of Cherokee County residents have yearly incomes below 250 percent poverty level as compared with the Affiliate rate of 33.4 percent (Table 2.5). 14.2 percent of Cherokee County residents have less than a high school education (Komen Kansas as a whole is 11.9 percent) (Table 2.5). Cherokee County also has a larger American Indian and Alaska Native (AIAN) female population percentage than that of the Affiliate's service area as a whole. Cherokee County has an AIAN population rate of 4.8 percent. The Affiliate area has an AIAN population rate of 1.5 percent (Table 2.4).

The Affiliate is interested in understanding demographic, socioeconomic and racial barriers that could impact women's access to quality health care in southeast Kansas. A health systems review will analyze the availability of services in Cherokee County. Cherokee County is in a medically underserved area and the work the Affiliate has done in the past four years has revealed that cost, transportation and time off from work for appointments are issues that affect the health of residents in south eastern Kansas. Additional understanding of barriers and successful practices on how to overcome those barriers for replication to other areas of the region is needed.

Montgomery County

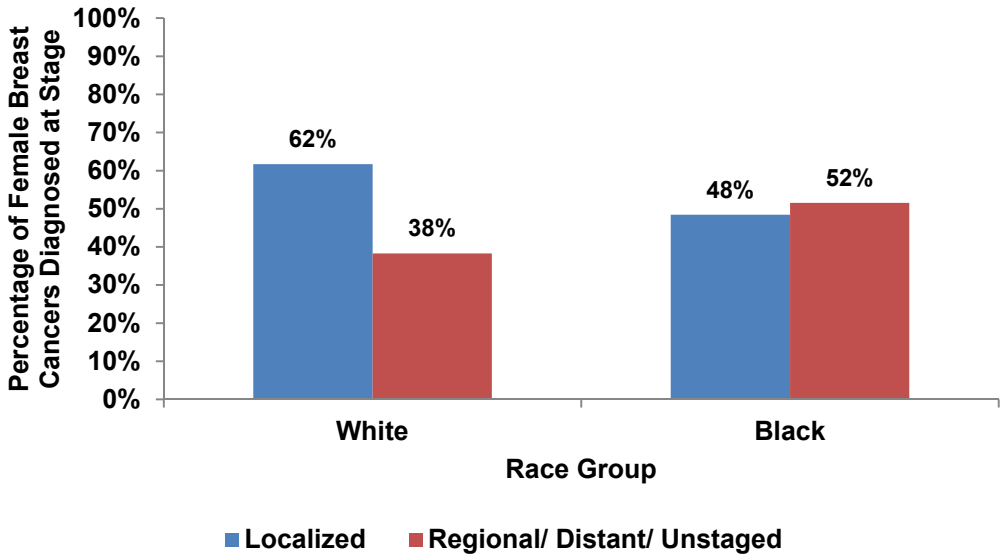
Montgomery County was identified in the quantitative report as being at highest risk of not achieving the Healthy People 2020 breast cancer death rate target. Montgomery County is considered to be rural with limited access to medical resources. The county has substantially lower employment levels than that of the Affiliate service area as a whole. The unemployment percentage in Montgomery County is 10.3 percent. The State of Kansas unemployment percentage is 6.4 percent (Table 2.5). The mammography screening percentage for Montgomery County is 61.9 percent. This is lower than both the state and national screening percentages of 77.4 percent and 77.5 percent respectively (Table 2.3). Montgomery County also has a larger American Indian and Alaska Native (AIAN) female population percentage than that of the Affiliate's service area as a whole. Montgomery County has an AIAN population rate of 4.6 percent. The Affiliate area as a whole has an AIAN population rate of 1.5 percent (Table 2.4).

The Affiliate is interested in understanding demographic, socioeconomic and racial barriers that could impact women's access to quality health care in southeast Kansas. A health systems review will analyze the availability of services in Montgomery County. Montgomery County is in a rural area and the work the Affiliate has done in the past four years has revealed that cost, transportation and time off from work for appointments are issues that affect the health of residents in south eastern Kansas. Additional understanding of barriers and successful practices on how to overcome those barriers for replication to other areas of the region is needed.

Sedgwick County

The Quantitative Data Report for Komen Kansas, based solely on breast cancer death rates, categorized Sedgwick County as a medium-low priority county. However, further review of additional quantitative data supports consideration of Sedgwick County as a high priority county. The crude incidence rate of late-stage female breast cancer in Sedgwick County was 47.6 incident cases per 100,000 women from 2006-2010 (Table 2.9). Due to its large population size, the number of women affected by late-stage breast cancer diagnosis – nearly 600 women from 2006-2010 – is vastly higher in Sedgwick County than any other county in the Affiliate service area. In fact, more than one quarter (26.7 percent) of late-stage breast cancer diagnoses from 2006 to 2010 in the Affiliate service area were among Sedgwick County residents.

Sedgwick County is a racially diverse county, with 10.7 percent of its population comprised of Blacks/African-Americans – nearly twice which of the Affiliate service area as a whole (5.8 percent) (Table 2.4). Disparities in late-stage female breast cancer diagnoses were observed among Sedgwick County women from 2006-2010. Specifically, more than half (52.0 percent) of female breast cancers diagnosed among Black/African-American women in Sedgwick County were late-stage, compared to only 38 percent of female breast cancers among White women in Sedgwick County (Figure 2.2). This disparity mirrors national findings and is often cited as a rationale for why Black/African-American women are more likely to die from breast cancer than White women.



Source: Kansas Cancer Registry, 2006-2010

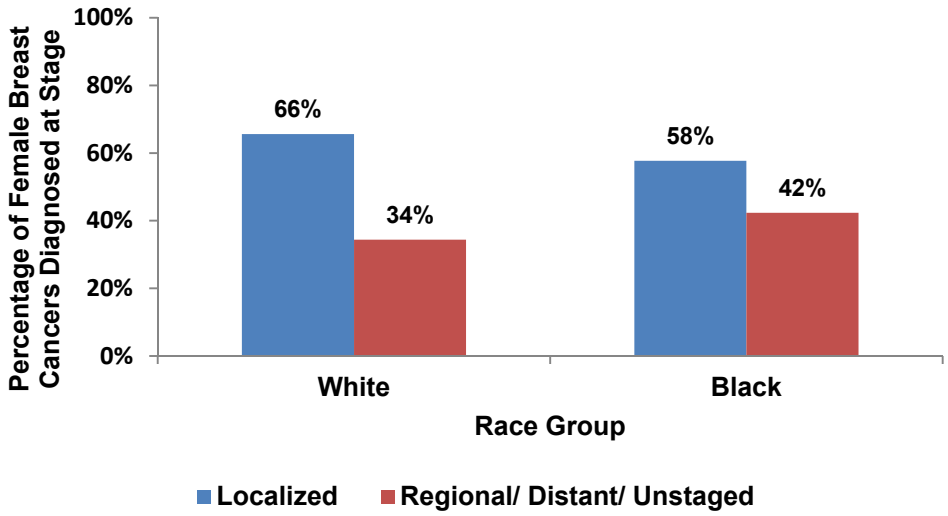
Figure 2.2. Female breast cancer stage at diagnosis among race groups, Sedgwick County 2006-2010

Outreach efforts that aim to reduce late-stage breast cancer diagnosis in Sedgwick County reflect a more efficient use of resources with potentially greater impact on the number of women served compared to other counties. Specifically, the Affiliate is interested in understanding the reasons why Black/African-American women in Sedgwick County are experiencing such a high percentage of women diagnosis at a late stage.. A health systems review will analyze the availability of services in Sedgwick County and explore barriers Black/African-American women face when seeking screening and diagnosis services there.

Shawnee County

The Quantitative Data Report for Komen Kansas, based solely on breast cancer death rate data, categorized Shawnee County as a medium-low priority county. However, further review of additional quantitative data supports consideration of Shawnee County as a high priority county. The crude incidence rate of late-stage female breast cancer in Shawnee County was 49.3 incident cases per 100,000 women from 2006-2010 (Table 2.9). Due to its relatively large population size, the number of women affected by late-stage breast cancer diagnosis – approximately 220 women from 2006-2010 – is substantially higher in Shawnee County than any other county in the Affiliate service area, with the exception of Sedgwick County (Table 2.9). In fact, more than 1 in 10 (10.2 percent) late-stage breast cancer diagnoses from 2006 to 2010 in the Affiliate service area were among Shawnee County residents.

Shawnee County is a racially diverse county, with 10.0 percent of its population comprised of Blacks/African-Americans – nearly twice which of the Affiliate service area as a whole (5.8 percent) (Table 2.4). Disparities in late-stage female breast cancer diagnoses were observed among Shawnee County women from 2006-2010. Specifically, 42.0 percent of female breast cancers diagnosed among Black/African-American women in Shawnee County were late-stage, compared to only 34.0 percent of female breast cancers among White women in Shawnee County (Figure 2.3). This disparity mirrors national findings and is often cited as a rationale for why Black/African-American women are more likely to die from breast cancer than White women.



Source: Kansas Cancer Registry, 2006-2010

Figure 2.3. Female breast cancer stage at diagnosis among race groups, Shawnee County 2006-2010

Outreach efforts that aim to reduce late-stage breast cancer diagnosis in Shawnee County reflect a more efficient use of resources with potentially greater impact on the number of women served compared to other counties. Specifically, the Affiliate is interested in understanding the reasons why Black/African-American women in Shawnee County are experiencing such a high percentage of women diagnosed at a late-stage. A health systems review will analyze the availability of services in Shawnee County and explore barriers Black/African-American women face when seeking screening and diagnosis services there.

Health Systems Analysis Data Sources

To determine a comprehensive understanding of the programs and services offered in each target community, a health systems template was sent to the six National Breast and Cervical Cancer Early Detection Program (NBCCEDP) staff in the target communities. They completed the spreadsheet to the best of their ability and then returned the spreadsheet to Komen Kansas staff. After reviewing the data Komen staff returned the spreadsheet to NBCCEDP staff for additional information, and then sent the spreadsheet to other grantees and community agencies such as the American Cancer Society for supplemental information. Finally, staff reviewed the following websites to ensure the information was as complete as possible: the Food and Drug Administration Certified Mammography Facilities, hospitals that have been registered with Medicare, the National Association of County and City Health Officials directory of local health departments, the Health Resources and Services Administrations list of community health centers, the National Association of Free and Charitable Clinics, the American College of Surgeons Commission on Cancer, American College of Radiology Centers of Excellence, American College of Surgeons National Accreditation Program for Breast Centers and the National Cancer Institute Designated Cancer Centers. The spreadsheets were then reviewed by Komen mission staff, grantees and the Komen Kansas Mission Advisory Council to determine if there were service gaps in the counties.

Health Systems Overview

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 (Figure 3.1). Ideally, a woman would move through the CoC quickly and seamlessly, receiving timely, quality care in order to have the best outcomes. Education plays an important role throughout the entire CoC.

While a woman may enter the continuum at any point, ideally, a woman should enter the CoC by being screened for breast cancer – with a clinical breast exam and/or a screening mammogram. If the screening test results are normal, she would follow with another screening exam at the recommended interval, mostly like one year. Education plays a role in both providing education to encourage women to be screened and by reinforcing the need for routine screening thereafter.

If a screening exam resulted in abnormal results, diagnostic tests would be done to determine if the abnormal finding is breast cancer. If the tests were negative and breast cancer was not found, she would go into follow-up, and return for screening at the recommended interval. The recommended intervals may range from three to six months for higher risk women to 12 months for most women. Education plays a role in communicating the importance of proactively being tested and receiving results, keeping follow-up appointments and understanding what it all means.

If breast cancer is diagnosed, a woman would proceed to developing a treatment plan. Education can aid such topics as treatment options, how the pathology report and further tests if necessary determines the best options for treatment, understanding side effects and how to manage them, and helping to formulate questions a woman should have for her providers.

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 may occur at the same time. Follow up and survivorship could include things like navigating insurance issues, locating financial assistance or symptom management (i.e. 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 can be delays in moving from one point of the continuum to another – follow-up of abnormal screening exam results, starting treatment, or 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 lack of transportation, health system issues including long waits for appointments and inconvenient clinic hours, language barriers, fear due to lack of information or the wrong information. Education can address some of these barriers and help a woman progress through the CoC more quickly.

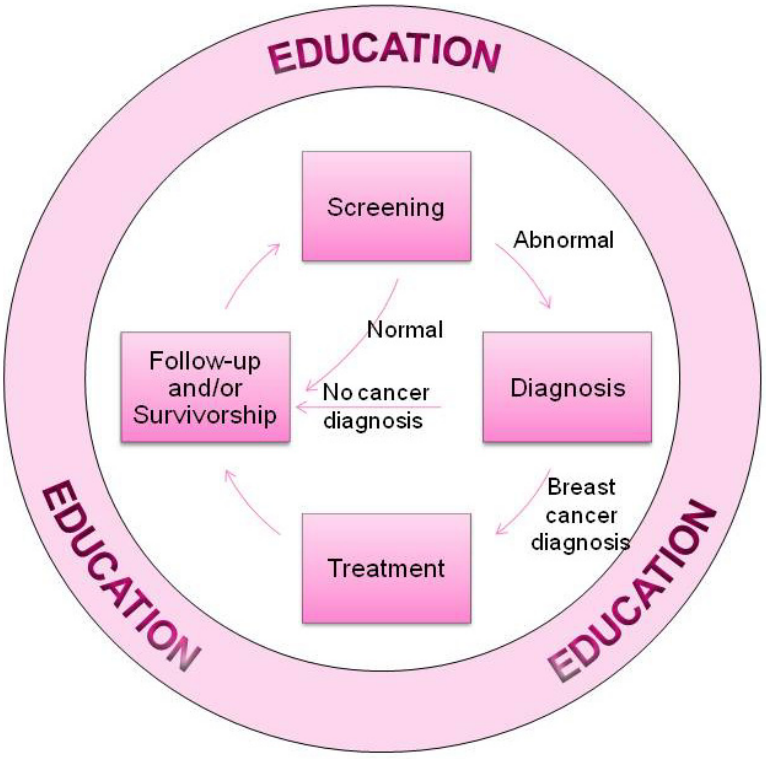


Figure 3.1. Breast Cancer Continuum of Care (CoC)

Cherokee County (Figure 3.2)

The NBCCEDP staff based in Crawford County offer breast health education in schools, churches and community organizations. Cherokee County has had limited screening services in the past because it does not have a hospital with in-house mammography facilities. Patients have had to travel 25 minutes east into Missouri or 25 miles north into Crawford County to receive a mammogram. The three largest communities in Cherokee County previously had access to the Via Christi mobile mammography van housed in Crawford County. The van, however, closed its service line in May 2013. The same shortage of services holds true for diagnostic, treatment and survivorship services. The closest services are in neighboring Crawford County or over the border into Missouri. Additionally, in past years there were few physicians' offices in Cherokee County that offered reduced rate fees for low income/un-insured women, and existing clinics have not regularly referred their patients to the NBCCEDP program. Two things have changed in Cherokee county in the last two years that should help raise screening percentages. First, the Community Health Centers of Southeast Kansas opened clinics in both Baxter Springs and Columbus**.** These two clinics offer a sliding fee scale based health care. Second, as of Jan 1, 2014 both of these clinics became provider sites for the NBCCEDP program and both clinics are actively identifying eligible women within their patient base. Additionally, after a 2011 tornado in Joplin, Missouri, decimated Mercy St. Johns Hospital, the Mercy mobile mammography van was housed in the Columbus, (Cherokee County) Kansas facility. But, the mobile van was still being utilized primarily in Missouri. In 2014, however, the Mercy Health System and Maude Norton Hospital in Columbus merged and the mobile van became contracted with the Kansas NBCCEDP program. This partnership will enable the NBCCEDP to recapture women in Cherokee County who fell out of the program last year because of the Via Christi mobile van's closure. With increased access to a mobile van and two active clinics participating in the NBCCEDP program, screening and diagnosis numbers in Cherokee County should experience a rise in the next few years. Via Christi – Pittsburg is accredited by the American College of Surgeons and offers a full spectrum of support/survivorship services as part of their accreditation. Additionally, The Midwest Cancer Alliance (MCA), with support from Komen Kansas, worked with the Cancer Center in Crawford County to consult on survivorship services and genetic counseling.

Key mission partnerships in Cherokee County have been the nursing and outreach staff of the Kansas NBCCEDP program. Both workers are originally from the area and have many partnerships with providers, agencies, businesses and community groups across the county. A potential partnership is with the mobile mammography unit in Columbus and Kansas Cancer Partnership members. Another partnership possibility is working with MCA to determine how to ensure that survivorship services are available to women in Cherokee County.

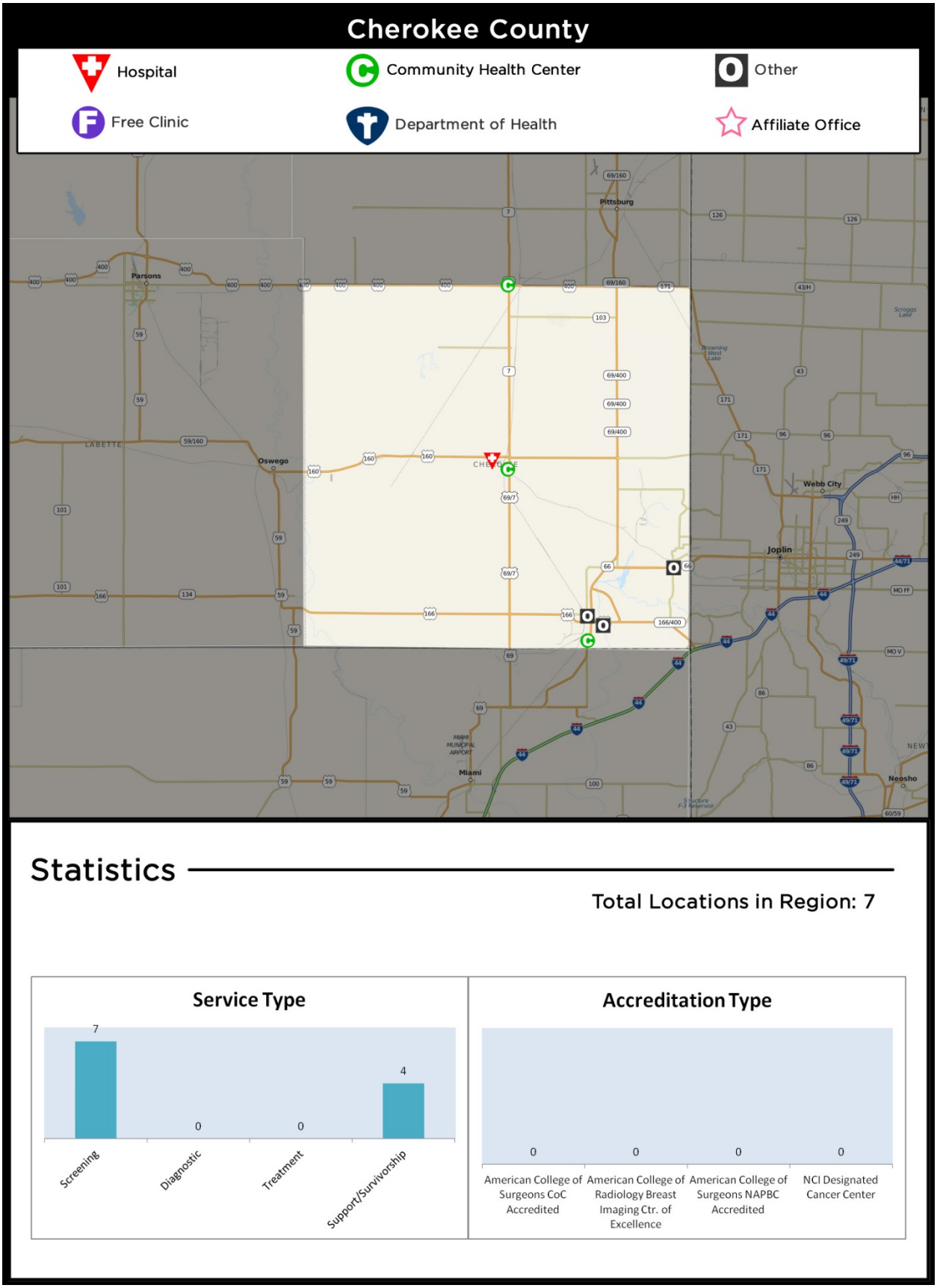


Figure 3.2. Breast cancer services available in Cherokee County

Montgomery County (Figure 3.3)

Montgomery County does have the entire continuum of care offered. The NBCCEDP staff based in Crawford County offer breast health education in schools, churches, and community organizations. At least thirteen providers offer screening services throughout the county. Two facilities offer diagnostic services and there is a comprehensive cancer center in Coffeyville that is accredited by the American College of Surgeons and offers the full spectrum of the continuum of care. A large oncology group located in Wichita also has a satellite clinic in Independence that offers treatment and some support/survivorship services. Independence, Cherryvale and Coffeyville all have contracted NBCCEDP provider sites, but only one clinic in Coffeyville routinely identifies and enrolls un-insured women for breast cancer screening through NBCCEDP. Some residents also travel to neighboring counties such as Labette County and Crawford County for services.

Key mission partnerships in Montgomery County have been the nursing and outreach staff of the Kansas NBCCEDP program. Both workers are originally from southeast Kansas and have many partnerships with providers, agencies, businesses and community groups across the county. Potential partnerships for outreach include churches, schools and the Kansas State Extension Office and Kansas Cancer Partnership members.

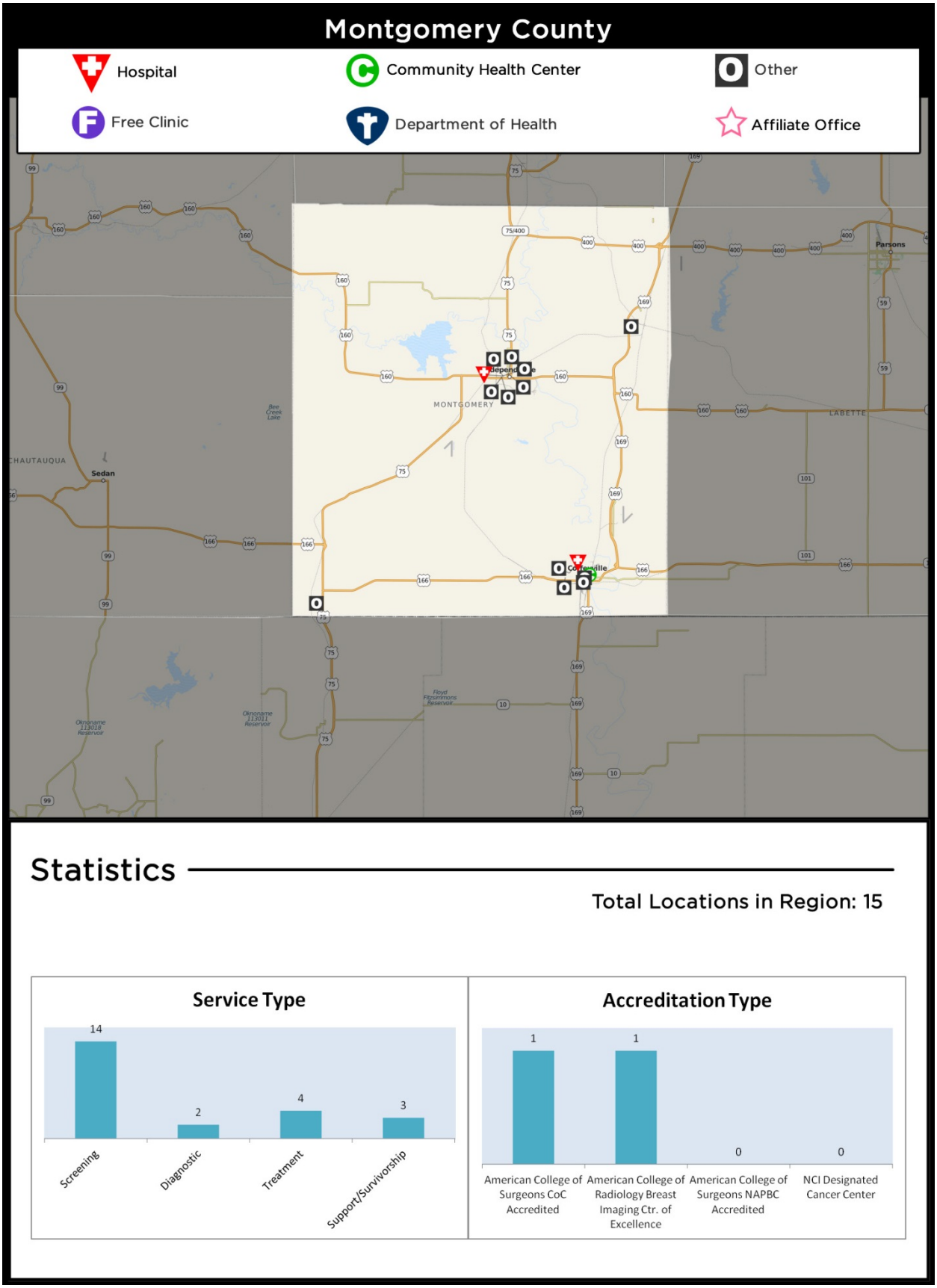


Figure 3.3. Breast cancer services available in Montgomery County

Sedgwick County (Figure 3.4)

Sedgwick County offers the entire continuum of care. It has multiple programs that offer education programs. Sedgwick County has at least twenty eight providers that offer screening, including clinics that offer free and reduced services. Fourteen clinics offer diagnostic services throughout the city. While Wichita is the largest city in Kansas and offers the most comprehensive services in the Affiliate service area, there is a shortage of Oncology offices. There are two practices in Wichita, but one practice sees the majority of cancer patients in the area. Thus, the availability of second opinions is minimal. In 2010, Komen Kansas was able to do a one-time grant to establish the Wichita Center for Breast Cancer Survivorship at the University Of Kansas School of Medicine-Wichita. The Center offers a comprehensive, multi-disciplinary approach to assist those diagnosed with breast cancer and enhance their quality of life from the time they're diagnosed, through treatment, and even after. Despite the fact that multiple educational campaigns were done throughout the area, the center has never received local support from local oncologists. Local providers do not refer patients to the center on a regular basis.

Key mission partnerships in Sedgwick County have been the NBCCEDP program, The Witness Project of Kansas, the E.C. Tyree Clinic, the Wichita Center for Breast Cancer Survivorship, The American Cancer Society, The Leukemia Lymphoma Society, Kansas Cancer Partnership, Witnessing in the Heartland, The Sedgwick County Health Department and two large community event boards. Potential new partnerships include outreach workers at local provider offices, Wichita State University, Black/African-American Women Empowered in Wichita, NAACP, Urban League, the local chapter of the Black/African-American Nurses Association, Black/African-American sororities and neighborhood shops such as hair salons.

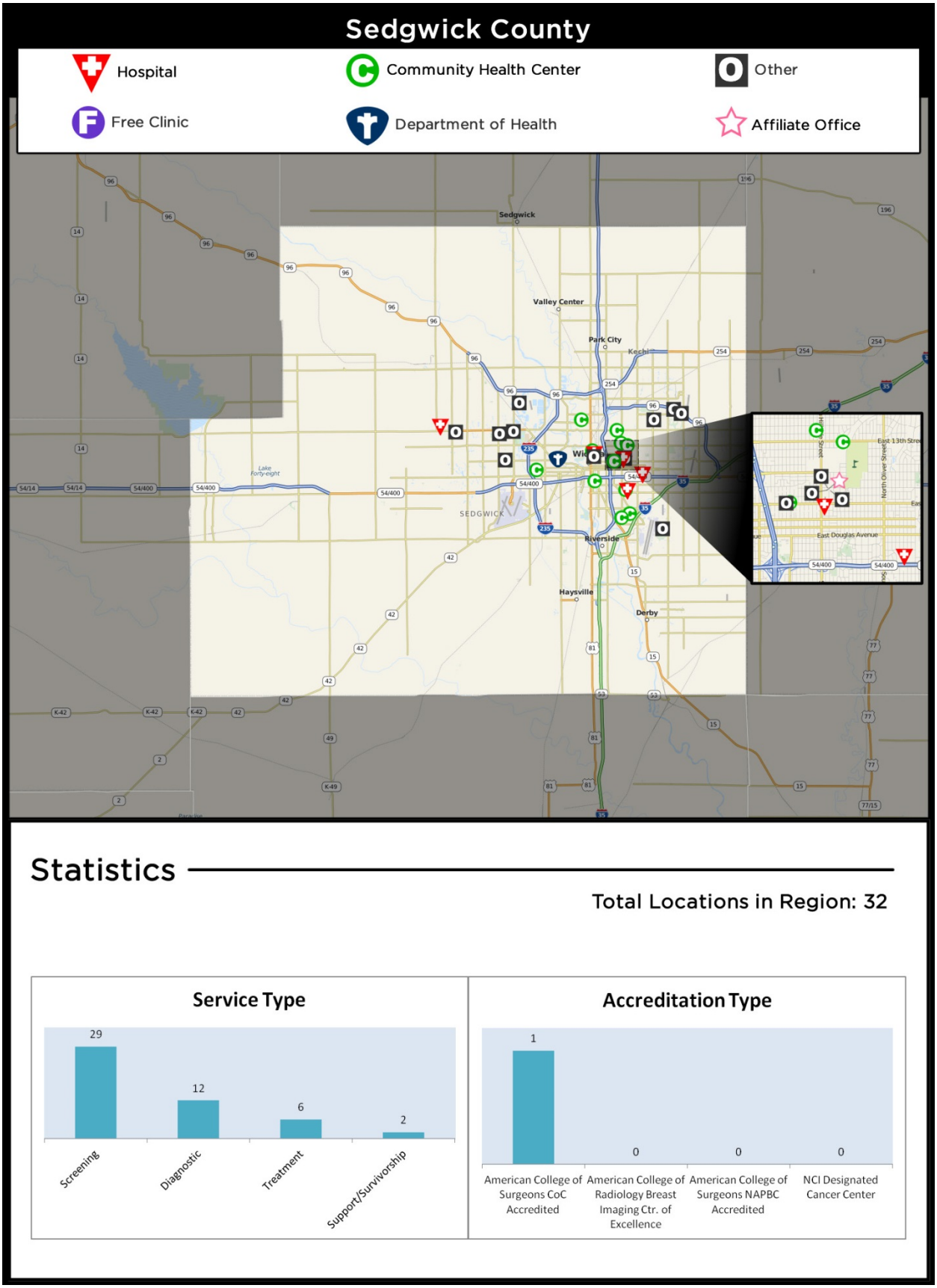


Figure 3.4. Breast cancer services available in Sedgwick County

Shawnee County (Figure 3.5)

Shawnee County facilities offer the entire continuum of care to cancer patients. However, there do not appear to be any specific outreach educational programs to the Black/African-American community in Topeka. There are at least ten facilities that offer breast cancer screening, including NBCCEDP providers. Additionally, Shawnee County has a local organization called the Race Against Breast Cancer (RABC) which pays for screening and diagnostic mammograms for women in Shawnee County. There are at least six facilities that offer diagnostic services. There are two comprehensive cancer centers in Topeka and both cancer centers are accredited by the American College of Surgeon's Commission on Cancer and thus offer an array of survivorship support services. There is the potential for the Midwest Cancer Alliance to partner with Stormont Vail and St. Francis to consult on additional survivorship services to cancer patients in Shawnee County.

Historically, Komen Kansas has not worked in Shawnee County because of an unwritten agreement with the RABC that their organization would work with women in Shawnee County to move them into screening. However, when breast cancer death rate data were analyzed for the quantitative section of the Community Profile it became clear that there is a need to do outreach in the Black/African-American community in Topeka to ensure that women are diagnosed at an early stage. Current partners in Shawnee County include The NBCCEDP program, which is based in Topeka, the American Cancer Society and members of the Kansas Cancer Partnership. Potential partners include RABC, Black/African-American churches and The Witness Project of Kansas.

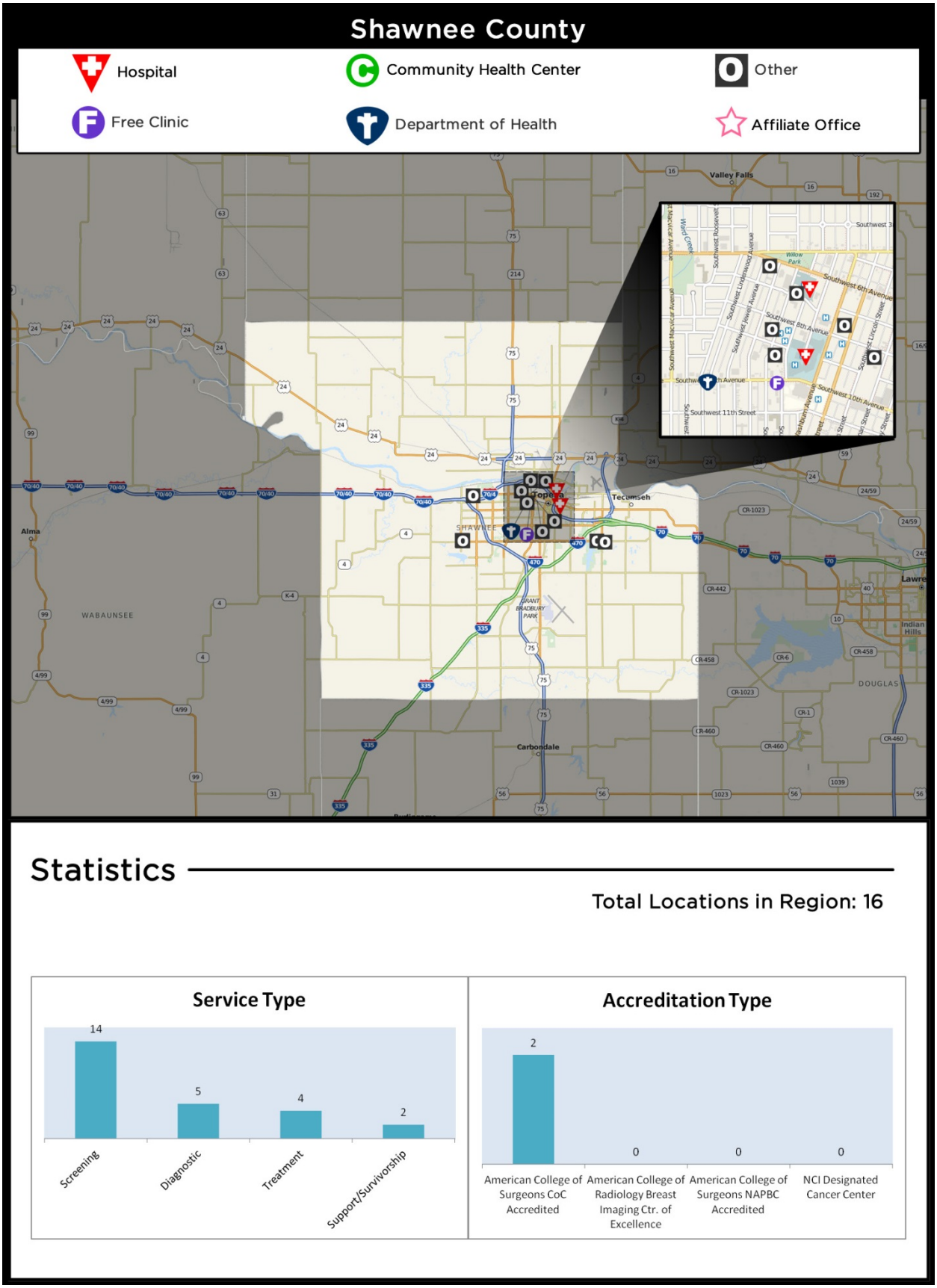


Figure 3.5. Breast cancer services available in Shawnee County

Public Policy Overview

National Breast and Cervical Cancer Early Detection Program

The National Breast and Cervical Cancer Early Detection Program (NBCCEDP) program is named the Early Detection Works (EDW) program in Kansas. The program is primarily funded by the CDC Cancer Program grant. The CDC funds breast screenings for women age 50-64. These guidelines create a gap in breast services available to women under age 50. Support from Komen Greater Kansas City and Komen Kansas has ensured that breast services are offered to women under the age of 50. In 2015, it is anticipated that funding from the local Affiliates will be able to provide services to 1,635 women across the state. EDW also receives at least $230,000 in state general funds for screening younger women.

Women are enrolled in the program through regional EDW nurses and a 1-800 phone number. Women can, on occasion, be enrolled through service providers. Once a woman is diagnosed with breast cancer they are enrolled in the state Medicaid program. Women not diagnosed through EDW but eligible for the program are enrolled in Medicaid on a case by case basis. The EDW program and Medicaid are both programs in the Kansas Department of Health and Environment. The working relationship between Komen Kansas and EDW has always been strong. The relationship dates back to its earliest days when CDC was leading capacity building efforts in 1992. Over the years, Komen Kansas has been able to provide more funding to the EDW program than any other organization, including the State of Kansas.

There has been considerable personnel change within the state Medicaid program in the past two years, but the EDW program continues to develop relationships with the new staff. During the next four years both EDW and Komen Kansas will work together to figure out the puzzle in Kansas for uninsured and underinsured women. Kansas has not elected to expand Medicaid; therefore there are approximately 300,000+ families and women still without insurance in Kansas.

State Comprehensive Cancer Control Coalition

The goal of the Kansas Cancer Partnership, Kansas' comprehensive cancer control plan, is to reduce the burden and suffering of cancer and enhance the lives of cancer survivors and their families. The Kansas comprehensive cancer plan is not designed by cancer site, but rather is designed to cross cutting issues. Many of the priorities include breast cancer issues, such as access to palliative care during and after treatment, access to survivorship care plans and quality of life planning. Developing and maintaining a healthy lifestyle is a top priority in the Kansas plan.

The State's Comprehensive Cancer Control Plan breast cancer objectives are:

- Increase the percentage of Kansas women who receive breast cancer screening based on nationally recognized guidelines.
- Increase the percentage of adults with a family history of cancer who has discussed genetic counseling.
- Decrease the time between initial visit with a suspicious finding to a definitive diagnosis and treatment plan to less than 30 days.

Komen Kansas Mission Advisory Council chair currently co-chairs the Kansas Cancer Partnership. Komen Kansas Executive Director is an active member of the partnership and. chairs the Survivorship Quality of Life team for the partnership.

The Affiliate plans to strengthen its roles with the state cancer coalition by working to establish regional coalitions of the state cancer partnership in the Affiliate's service area. One such coalition, in the South Central Region of the state, has already been established. A second regional coalition, which includes Cherokee and Montgomery Counties, is in the planning stages in southeast Kansas.

Affordable Care Act (ACA)

The Kansas Governor and Legislature have refused to seriously consider Medicaid expansion. The number of uninsured before ACA in Kansas was estimated to be about 350,000. Because of the failure of the state to expand Medicaid that number is still in question. Without Medicaid expansion the NBCCEDP program has not seen a dramatic drop in enrollment. Without Medicaid expansion many providers are still seeing large numbers of uninsured Kansans. It is unclear at this point if there will be any implications from the Affordable Care Act on the Affiliate. It was hoped with ACA and Medicaid expansion the Affiliate would be able to focus funding beyond screening. As Kansas did not expand Medicaid, it is unclear if this will happen. Each year, the governor and legislature have the option of expanding Medicaid. The Affiliate will monitor discussion accordingly.

The State of Kansas chose not to develop their own Insurance Market Place, thus leaving the state to be included in the national market. It is still unclear how this has affected those women who previously would have utilized the state NBCCEDP for lack of health insurance. As of March 2014, the number of Kansans opting to buy insurance through the exchange was approximately the same as the national average. In Kansas in 2012, 42.5 percent of Hispanics/Latinos ages 19-64 were uninsured, 21.3 percent of Blacks/African-Americans and 13.8 percent of Whites were uninsured. It is still unclear how many of those still find themselves uninsured. The Affiliate has asked for better information from the NBCCEDP if available.

Affiliate's Public Policy Activities

The Affiliate participated in the Kansas Cancer Partnership Advocacy Day in February 2014. Members of the Affiliate met with the President of the Senate and others to voice their concerns about the lack of Medicaid expansion and other issues. The Affiliate joined a statewide coalition working to expand Medicaid and maintains that relationship.

The Affiliate maintains a good relationship with US Senator Jerry Moran's office. Other members of the Kansas delegation have been harder to engage on issues important to Komen. Regardless, the Affiliate continues to work to develop relationships with elected officials.

The Affiliate will continue to maintain their relationship with EDW and will monitor the need for additional state screening funds to support the program. This will be the highest priority for next year followed by Medicaid Expansion. Komen Kansas and Komen Greater Kansas City have a good working relationship on all areas and have actively worked together on several public policy issues in the past couple of years.

Health Systems and Public Policy Analysis Findings

The continuum of care is available in all four of the Affiliate's target communities. The two more urban areas, Sedgwick and Shawnee Counties, have more services available in a smaller geographical area, but all four communities have access to the entire continuum within twenty five miles. Access to transportation is still an issue in all four communities, but by rural standards twenty five miles is not a long distance. All four communities have access to a cancer center with ACOS accreditation. Survivorship services are consistently the weakest portion of the continuum in all four communities. Survivorship services are a relatively new concept in the Affiliate service area, but they are quickly catching on. Improving survivorship services in the target communities is a tangible area that the Affiliate can have a greater impact. Partnering with EDW staff and The Midwest Cancer Alliance as well as with other nonprofits will give Komen partnership opportunities with front line professionals who have access to survivors and providers and can ensure breast cancer survivors have access to the highest quality of support throughout their lives.

In the policy arena, Komen Kansas will continue to encourage the State to expand Medicaid and will encourage the legislature to supplement the EDW program with state funding. If the state continues to refuse to expand Medicaid services to those most in need, additional supplemental funding would ensure that citizens of Kansas get the breast health services they need. Additional supplemental funding would also possibly provide advertising money for the EDW program. Advertising for the program stopped approximately five years ago when funding for the program ran out. The program now has the capacity to serve more women, but there are no funds to advertise. Thus, the program is reliant upon four outreach offices that cover 105 counties to get out the word about the program. A media campaign could spread the word of the program and help connect citizens with life-saving services.

Qualitative Data Sources and Methodology Overview

Methodology

Data compiled by the Kansas Department of Health and Environment (KDHE) epidemiologists revealed little variability across the 95 counties served by the Affiliate with regard to diagnostic and service-related discrepancies. The Affiliate chose to focus on two urban counties (Shawnee and Sedgwick) where Black/African-American women tended toward later stage diagnosis, and two rural counties (Montgomery and Cherokee) where access to care is a concern for all women.

Key assessment questions and variables such as access to health care, attitude toward health care, knowledge about breast cancer, and barriers to obtaining treatment were identified based on multiple data sources. Specific focus group questions were selected after review of data and conversations with community partners and key informants. Data gathered from the community ad hoc committee, Sister to Sister, made up of multiple organizations that serve the Black/African-American community in Sedgwick County, focused on dissemination of information to target communities. KDHE epidemiologists suggested a need to focus on late-stage diagnosis among Black/African-American women in Shawnee and Sedgwick Counties. Board members at The Witness Project, staff from the Midwest Cancer Alliance and staff from Early Detection Works all voiced concerns about education and access to care for all communities. Focus group questions and provider survey questions were reviewed by a team of survey experts and specifically tailored questions were derived to maximize the impact of information obtained.

Sampling

Sampling for focus groups targeted Black/African-American women in Shawnee and Sedgwick Counties and rural women in Montgomery and Cherokee Counties. Participants were recruited by community partners, grantees, and key informants. There were no age restrictions and women were recruited with a range of experience with breast cancer (e.g., not just survivors). It should be noted that this was not a random sampling, but rather a convenience sample of women who had connections to community partners. The rationale for using this approach included recruiting women who were willing to discuss issues of breast health access, attitudes toward screening and treatment, and potential barriers to achieving aspirational health care standards in the communities of interest. In Sedgwick County, three focus groups were conducted including six, five, and twenty participants each. In Cherokee Country, three focus groups included six, five, and six participants. In Montgomery County, three focus groups included seven, five, and sixteen participants.

A second area of focus was provider perceptions about barriers to care across the area served by the Affiliate. Accordingly, a survey was distributed to all providers participating in the Early Detection Works program in the Affiliate's area. The survey contained twenty two questions regarding providers' breast health recommendations across the continuum of care.

Ethics
Each focus group began with the reading of the consent form and each participant provided informed consent. Participant names were not collected by the recorder and participants were reassured that their names would not be included in the current qualitative report.

Responses from the provider survey that were gathered were anonymous. This survey was distributed to Early Detection Works providers across the Affiliate area and did not specifically target the communities of interest. However, four providers from Sedgwick County, four providers from Shawnee County, one provider from Cherokee County, and zero providers from Montgomery County participated in the survey.

Qualitative Data Overview

Original data include interview notes, focus group notes, use of verbatim quotes where available, and provider survey data. The rationale for using focus group notes was to identify qualitative themes that emerged in the communities of interest. Focus group notes were reviewed by the primary lead and specific themes were identified using an *a priori* determination of inclusion with at least three participants in the same community or at least two participants across different communities raising the issue. Themes from the provider survey and from particular focus groups were compared to examine discrepancies between the general public and breast health providers.

Key Informant Interviews. Information gathered from key community informants across four counties in the Affiliate area revealed a growing concern that Black/African-American women did not achieve diagnosis until later stages in the disease process and that women in rural Kansas did not have access to care. These two areas became a target for study through the use of focus groups and provider surveys. Community stakeholders and key informants identified the following themes as potential reasons for the discrepancy in screening, early diagnosis and access to care:

1) ***Low rate of adherence with screening guidelines****.* One identified reason was the tendency to receive specialty care and emergency care, rather than visiting a primary care doctor on a regular basis. It was suggested that all physicians and points of contact in the health care system should provide breast health information and personalized recommendations with regard to screening procedures. Another identified reason was that getting time off from work for screenings during work hours is difficult.

2) ***Delayed participation in screening****.* It was recommended that women who are adherent with screening guidelines become more vocal in their communities to empower other women to get screened. It was also suggested that health care providers start talking much earlier to women about breast health and consider revising guidelines to start screening prior to age 40 to promote long-term compliance. In both the urban and rural communities it was stated that there is no reason to get screened because if God has determined it is your time, there is nothing to be done. Screening won't help.

3) ***Poor assessment of personal risk****.* It was suggested that Black/African-American women believe that breast cancer is a White woman's disease and inaccurately assess their personal risk. There is also a perceived lack of social support and support by the

health care industry for understanding unique life experiences of Black/African-American women.

Provider Survey. A provider survey was selected as an efficient manner by which to target providers in the 95 counties served by Komen Kansas. The survey was distributed via email to 79 providers in the Affiliate area who were associated with the Early Detection Works program. Forty-three surveys were returned, for a response rate of 54.0 percent. Providers in three of the four target counties returned surveys; no providers from Montgomery County participated. Limitations to the data include only surveying providers affiliated with Early Detection Works and sampling bias given a relatively low response rate. There was also no mechanism by which to separate results from the communities of interest; therefore, data are aggregated. Despite these weaknesses, three common themes emerged based on provider survey responses.

1) ***Financial Concerns.*** Financial limitations were the number one concern perceived as preventing the receipt of follow-up care, identified by 60.0 percent of providers surveyed. A distant second was fear, identified by 17.0 percent of providers. As a health care system, providers surveyed indicated that financial coverage for those who fall in the "insurance gap" would be critical in improving screening compliance.

2) ***Health Care Resources for Uninsured*.** Early Detection Works was the primary referral target for uninsured women in need of mammography. Many providers felt that the availability of Early Detection Works had mitigated the financial barriers to mammogram access; however, several other respondents raised concerns for those who remain ineligible for Early Detection Works and other services.

3) ***Patient Education.*** Nearly all providers offered educational materials to patients (e.g., breast self-awareness, known risk factors, prevention), but no educational materials included information on navigating the health care system. Nearly 90 percent of providers offered materials provided by Early Detection Works and 60.0 percent offered materials supplied by Komen. Providers varied in their belief about whether education was effective. A number of providers felt that their communities were sufficiently educated about the risk of breast cancer and the benefit of screening, but felt that women in their communities were unmotivated to comply with screening guidelines. Other providers responded that education had been couched as "awareness" and women were missing critical points about personal needs for screening. Still other providers raised concerns about the health literacy in their communities.

Targeted Focus Groups. Focus groups were identified as the best means by which to gather community-based information from a broad sample of women with various levels of breast cancer experience. Specific focus group questions were provided to group facilitators, although time constraints limited the use of all questions in all groups. Affiliate staff and community partners conducted focus groups in three of the target communities, including Cherokee County, Montgomery County, and Sedgwick County. The primary target for discussion was access to care, with special attention to access for Black/African-American women in Sedgwick County.

The Affiliate did not have success establishing focus groups in Shawnee County. Historically, Komen Kansas has not worked inside Shawnee County, as they have an organization that mirrors some of Komen's programs. Twenty years ago there was a "gentleman's agreement"

made between volunteers that the local organization would cover Shawnee County and Komen would cover the other 94 counties in the Affiliate's service area. When the KDHE epidemiologist reviewed the quantitative data for Kansas, however, the number of late-stage diagnoses for Black/African-American women raised a red flag. Affiliate staff contacted a board member for the organization in Shawnee County and it was determined that they had not done outreach for Black/African-American women specifically. Affiliate staff contacted three grantees who had connections in the community to attempt to establish focus groups. This was initially asked in June 2014. Contact was attempted on a biweekly basis through mid-December, but focus groups could not be scheduled. Thus, part of the Affiliate's Mission Action Plan will involve building relationships with residents of Shawnee County to determine the best avenues to provide breast health opportunities to the Black/African-American community.

According to the methodology above, a "theme" was considered if it was voiced by at least three women in the same county. Primary themes identified in each set of focus groups are as follows:

Sedgwick County

1) Concerns about health insurance including changes related to ACA, changing doctors/laboratories to fit with benefits, and how to secure insurance after a breast cancer diagnosis
2) Fear about cost of screenings and ultimate cost of treatment if cancer is detected, to the extent that some women may not get screened at all
3) Families/communities not talking about breast cancer or breast health
4) The need for providers to send reminders and communicate about screening guidelines
5) Fear of what will happen if mammography reveals cancer (e.g., losing breasts, effect on marriage, being ostracized at church)

Montgomery County

1) Concerns about a lack of insurance or high costs of screening and treatment
2) Problems with transportation to appointments
3) Education and outreach in the community provided by doctors regarding screening guidelines, procedures for mammography, and expectations about health care services
4) Encouraging friends and family to share their experiences to help other women know what to expect

Cherokee County

1) Concerns about cost for screenings and treatment services if cancer is found
2) Problems obtaining health insurance and using health insurance in small communities
3) Difficulty accessing services due to poor transportation/need for mobile mammography
4) Need to improve education for younger women
5) Importance of hearing experiences from friends to encourage screening

After conducting focus group discussions in a number of communities, it was notable that in all three counties, regardless of target demographic, similar themes emerged that need to be

addressed statewide. Chief among them across all communities were concerns about health care cost, financial resources, and understanding of insurance coverage for breast cancer screening and subsequent breast cancer care.

1) ***Financial Concerns.*** The theme of cost for health care access and navigation of the various resources available was raised in every focus group conducted. One group member had recently lost her insurance when she was laid off and was attempting to navigate the charity care system. She stated, “If they will not make it so difficult for women – bring your last year's tax statement and all that." Another group member stated "She is already battling on the emotional side – don’t make her battle on the financial side, too. She’s paid her dues."

   Reduced cost or free mammograms were identified in every focus group as a way to make it easier for women to get mammograms. Financial concerns were also raised in every focus group as a reason that women would not seek follow-up care after an abnormal mammogram.

2) ***Navigation of the Health Care and Insurance System****.* Another theme that emerged was a lack of understanding about how to navigate the health care system with regard to breast care. One focus group began with an impromptu discussion of applying for Medicare and the differences between commercial insurance, Medicaid, and the effects of the Affordable Healthcare Act on breast health care. It was noted that, “If I hadn’t had cancer, I’d have crossed my fingers and prayed for the six months” to cover the gap between commercial insurance coverage and Medicare eligibility. Despite this, a cancer diagnosis prompts a specific need to maintain coverage, and communities with volatile industries (e.g., the aircraft industry in Sedgwick County) promote fear about losing coverage and highlight a lack of understanding about how to proceed when coverage lapses.

   Early Detection Works was cited several times as a resource, although many women indicated they do not know how to navigate the system and their doctors’ offices do not provide adequate information. There was some belief that individuals diagnosed outside of Early Detection Works had to begin the process again if they wished to use their services post-diagnosis.

   Participants were also unclear about navigating post-mammography follow-up care. They did not know which provider to follow up with and indicated that some of them had no follow-up response from their providers to concerning mammograms.

3) ***Geographic Access.*** Another theme that emerged was geographic access to screening care. Many group members in multiple locations indicated that the use of mobile mammography had been prevalent in the past, but access has been limited more recently. It was suggested that mobile mammography would be considerably more beneficial than the current brick-and-mortar clinics that patients are using. It was suggested that mobile mammography be made available after hours and targeted to appropriate locations that are accessible to minority and low income communities.

4) ***Community Education.*** The need for ongoing community-based education emerged as a need across all focus groups, although more specific examples of avenues for education were discussed in Sedgwick County, where reaching the Black/African-American community was a special target of the focus groups. A number of suggested locations in which to provide this outreach include libraries, businesses and restaurants, health fairs, festivals, and ballgames. Youth ballgames in particular were identified as a target-rich environment to reach Black/African-American families and provide education to multiple generations at one location. It was suggested that communities would like qualified professionals such as physicians or nurse practitioners to provide this type of outreach, rather than community-based volunteers, as they want expert information.

   It was also suggested that community-based education should target younger ages, as some women may make lifestyle changes in response to known risk factors. Particularly in the Black/African-American community, it was felt that a family history of breast cancer was shameful and younger women may not have the benefit of knowing their genetic risk.

Qualitative Data Findings

Across multiple data methods, financial concerns are a clear issue that will require ongoing intervention. Monetary concerns were identified as a primary barrier to receiving screenings, but even more concerning, to receiving follow-up care after a positive mammogram. A related and growing concern is navigation of health insurance, the health care industry, and community programs available to support women in their pursuit of breast care. An important finding is the discrepancy between the provider survey and focus groups, where many providers feel that they are adequately educating patients about programs such as Early Detection Works, while community members do not feel that they have sufficient information about these programs to use them as they are intended. Bridging this gap will be an ongoing target for intervention.

Another important theme that emerged across all sources of information was community and patient education. Some excellent ideas were generated by focus groups with regard to venues that would more adequately target Black/African-American communities, and the suggestion for multi-generational education and information targeting younger audiences has merit. It also appears that there are regional differences with regard to health literacy and providers will need ongoing assistance in assessing the needs and understanding of their patients, with adapted educational materials to target those needs.

Finally, the focus groups invariably voiced a concern about access to mobile mammography. This was a much more prevalent service in the past and based on community responses, it would appear that resuming and expanding this service in the Affiliate area would encourage enhanced screening behaviors. Important suggestions with regard to the hours this service is made available (e.g., after 2:30 when shift workers are able to claim an entire day's work) and the location (e.g., community grocery stores, large industry employer parking lots) offer valuable insight into services that would make screening behaviors more palatable. It should be noted that these suggestions were made regardless of the targeted group – that is, both the urban Black/African-American community and rural participants felt they would benefit from these strategies to make screening more accessible.

Limitations to the methodology include the use of focus groups recruited by community partners and key informants. As a result, data may be skewed toward those who have a particular interest in breast cancer advocacy and may not reflect the feelings and concerns of the population at large. Komen Kansas were unable to secure a focus group in one of the urban counties (Shawnee County) that was targeted, which limits the sample to a single urban area. A more diverse sample may alter results regarding the delay in seeking treatment seen among Black/African-American women in urban areas in Kansas.

In summary, there is agreement about a number of needs in the Affiliate area, and these can be broken down into a few recurrent themes. These themes did not differ based on rural/urban setting or Black/White demographic distinctions, but rather, were raised with almost equal frequency across all focus groups conducted. Excellent suggestions were provided across data sources for strategies the Affiliate could use to improve access to and utilization of breast care resources, particularly in rural communities and urban Black/African-American communities.

Breast Health and Breast Cancer Findings of the Target Communities

Exploratory data provided Komen Kansas the opportunity to determine the most appropriate target communities for the Community Profile. Based on review of the Quantitative Data Report and additional quantitative data provided by the Kansas Department of Health and Environment, the Affiliate chose Cherokee County, Montgomery County, Sedgwick County and Shawnee County as the four target areas for this document. The Affiliate will focus outreach efforts on these four areas with the idea of replicating successful outreach practices in other areas of the 95 county service area. The target communities were identified as regions that were experiencing gaps in breast health services and where the Affiliate could focus efforts in order to be the most efficient stewards of resources.

The continuum of care is available in all four of the Affiliate's target communities. The two more urban areas, Sedgwick and Shawnee Counties, have more services available in a smaller geographical area, but all four communities have access to the entire continuum within twenty five miles. Access to transportation is an issue in all four communities. Additionally, survivorship services are consistently the weakest portion of the continuum in all four communities. All four communities have access to accredited cancer centers. Improving survivorship services in the target communities is a tangible area that Komen Kansas can have a great impact. Collaborating with state entities and other nonprofits will give Komen Kansas opportunities to partner with professionals who have daily contact with survivors and providers and can ensure breast cancer survivors have access to the highest quality of support throughout their lives.

In the policy arena Komen Kansas will continue to encourage the state to expand Medicaid and will encourage the legislature to supplement the Early Detection Works (EDW) program with state funding. If the state continues to refuse to expand Medicaid services, additional supplemental funding would ensure that citizens of Kansas get the breast health services they need.

After collecting data from using multiple qualitative methods, it is clear that financial concerns are an issue that will require ongoing intervention. Monetary concerns were identified as a primary barrier to receiving screenings, but even more concerning, to receiving follow-up care after a positive mammogram. A related and growing concern is navigation of health insurance, the health care industry, and community programs available to support women in their pursuit of breast care. An important finding is the discrepancy between the provider survey and focus groups, where many providers feel that they are adequately educating patients about programs such as Early Detection Works, while community members do not feel that they have sufficient information about these programs to use them as they are intended. Bridging this gap will be an ongoing target for intervention.

Mission Action Plan

PROBLEM STATEMENT: The Community Profile Team reviewed the findings from the data to determine the overarching priority of increasing early detection and access to services across the continuum of care for women in the State of Kansas, with a focus on Black women in Sedgwick and Shawnee Counties and women in Cherokee and Montgomery Counties in rural Southeast Kansas.

Priority One- Actionable Education:

Effectively educate women on breast health and services available to them in language and culturally appropriate methods leading to increased screening and knowledge of survivorship services.

- **Objective 1**: By the end of April 2016, partner with the Early Detection Works program to host a minimum of a day-long workshop in Sedgwick or Shawnee County focusing on evidence-based educational programs with emphasis on health literacy and cultural awareness. Ensure part of this includes "Train the Trainer" methodology so attendees can train providers and other constituents in target communities.
- **Objective 2**: By December 2016, partner with at least two community-based outreach/health organizations in each region to identify at least three leaders in target communities who are willing to be champions for breast health and educate them on Komen messaging and resources available. Champions will be expected to share knowledge and resources during at least two community events.
- **Objective 3**: By December 2015, coordinate and sponsor, with the AIS Steering Committee, a Komen research event in Sedgwick County focusing on survivorship. A Komen Scholar will be the main speaker. Telemedicine technology will be utilized to make the presentation available to Midwest Cancer Alliance partner cancer centers across the state.
- **Objective 4**: By October 2015, implement the Pink Sunday program in at least two churches in all four target counties.

Priority Two- Addressing Barriers to Accessing Care:

Decrease the difficulty of getting screened by addressing barriers identified in the Community Profile, such as finances, transportation, clinic hours, and cultural norms, to therefore increase screening.

- **Objective 1**: By the end of March 2017, revise Community Grant RFA to indicate after-work screening events are a funding priority for Cherokee, Montgomery, Sedgwick and Shawnee Counties.
- **Objective 2**: From November 2015 to March 2017, Community Grant RFA funding priorities will include breast cancer screenings for the uninsured, transportation assistance, patient navigation and mobile mammography programs for Cherokee, Montgomery, Sedgwick and Shawnee Counties.
- **Objective 3**: By May 2016, become a member of the Kansas Rural Health Association to enhance the health and well-being of rural Kansans through united advocacy, leadership, education, collaboration and resource development.

References

American College of Radiology Centers of Excellence. (2014). Retrieved from http://www.acr.org/Quality-Safety/Accreditation/Accredited-Facility-Search

American College of Surgeons Commission on Cancer - Approved Hospital Search. (2014). Retrieved from http://datalinks.facs.org/cpm/CPMApprovedHospitals_Search.htm

Cancer | Healthy People 2020. (2014). Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives

Directory of Local Health Departments | NACCHO. (2014). Retrieved from http://www.naccho.org/about/lhd/

Find a Cancer Center - National Cancer Institute. (2014). Retrieved from http://www.cancer.gov/researchandfunding/extramural/cancercenters/find-a-cancer-center

Find a Free or Charitable Clinic | The National Association of Free & Charitable Clinics. (2014). Retrieved from http://www.nafcclinics.org/clinics/search

Health Services and Services Administrations - Find a Health Center - Search Page. (2014). Retrieved from http://findahealthcenter.hrsa.gov/Search_HCC.aspx

Hospitals registered with Medicare (2014). Retrieved from https://data.medicare.gov/

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).

Kaiser Family Foundation - Health Policy Research, Analysis, Polling, Facts, Data and Journalism. (2014). Retrieved from http://kff.org/

Kansas Department of Health and Environment: Cancer Partnership - Cancer Control and Prevention Plan. (2014). Retrieved from http://www.cancerkansas.org/cancer_plan.htm

Kansas Department of Health and Environment: Early Detection Works Where Do I Go? (2014). Retrieved from http://www.kdheks.gov/edw/ks_women_where_do_i_go.html

Kansas Department of Health and Environment. (2014). Incidence data in the Kansas Quantitative Report: Kansas Cancer Registry (KCR) 2001-2010 dataset.

Kansas Department of Health and Environment. (2014). Population data in the Kansas Quantitative Report: National Center for Health Statistics 2006-2010.

Local Health Departments. (2014). Retrieved from http://naccho.org/about/lhd

Mammography Facilities. (2014). Retrieved from http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfMQSA/mqsa.cfm

National Accreditation Program for Breast Centers. (2014). Retrieved from http://napbc-breast.org/resources/find.html

QuickFacts from the US Census Bureau. (2014). Retrieved from http://quickfacts.census.gov/qfd/states/29000.html

SEER Summary Stage. Young JL Jr, Roffers SD, Ries LAG, Fritz AG, Hurlbut AA (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). *Susan G. Komen Kansas quantitative data report: 2014.* Dallas, TX.