

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

Quantitative Data Report

Introduction

The purpose of the quantitative data report for the Greater New York City Affiliate of Susan G. Komen® 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 mortality (<http://www.healthypeople.gov/2020/default.aspx>).

The following is a summary of the Komen Greater New York City Affiliate's Quantitative Data Report. For a full report please contact the Affiliate.

Breast Cancer Statistics

Incidence rates

The breast cancer incidence rate shows the frequency of new cases of breast cancer among women living in an area during a certain time period (Table 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 1). Like incidence rates, death rates may be calculated for all women or for specific groups of women (e.g. Black 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 diagnosis

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 [SEER Summary Stage]. 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 1). Late-stage incidence rates are often shown in terms of 100,000 women and adjusted for age.

Table 1. Female breast cancer incidence rates and trends, death rates and trends, and late-stage rates and trends.

Population Group	Incidence Rates and Trends				Death Rates and Trends			Late-stage Rates and Trends		
	Female Population (Annual Average)	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of Deaths (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	Trend (Annual Percent Change)
US	154,540,194	182,234	122.1	-0.2%	40,736	22.6	-1.9%	64,590	43.8	-1.2%
HP2020	-	-	-	-	-	20.6	-	-	41.0	-
New York	9,929,239	14,604	127.7	-0.4%	2,704	22.3	-2.6%	5,026	44.6	-1.6%
Komen Greater New York City Affiliate Service Area	6,328,769	8,943	126.1	0.3%	1,667	22.4	NA	3,174	45.2	-1.8%
White	3,996,282	6,480	136.4	0.6%	1,205	23.0	NA	2,176	46.6	-1.8%
Black	1,575,347	1,749	108.0	-0.3%	404	25.2	NA	755	46.4	-1.8%
AIAN	75,001	4	6.8	-11.1%	SN	SN	SN	SN	SN	SN
API	682,139	571	83.1	0.6%	56	9.1	NA	199	28.6	1.6%
Non-Hispanic/ Latina	4,831,521	7,664	132.4	0.3%	1,470	23.6	NA	2,671	46.8	-2.0%
Hispanic/ Latina	1,497,248	1,279	99.1	0.3%	190	15.6	NA	503	38.4	-0.1%
Bronx County - NY	725,871	777	107.4	0.0%	174	23.6	-2.8%	310	42.9	-0.1%
Kings County - NY	1,305,362	1,501	110.0	0.1%	330	23.4	-2.6%	605	44.6	-0.9%
Nassau County - NY	686,503	1,253	146.2	-0.1%	204	21.8	-3.3%	399	47.2	-2.7%
New York County - NY	839,136	1,261	137.0	-0.2%	222	22.4	-2.9%	410	45.0	-4.4%
Queens County - NY	1,135,835	1,478	114.1	0.3%	277	20.4	-3.1%	545	42.4	-1.2%
Richmond County - NY	238,781	362	131.1	-1.3%	69	24.4	-2.4%	120	43.8	-1.8%
Rockland County - NY	155,930	239	134.1	2.3%	37	19.8	-4.1%	80	46.0	6.6%
Suffolk County - NY	753,581	1,235	139.8	1.9%	216	23.6	-3.2%	442	50.3	-1.8%
Westchester County - NY	487,770	836	141.5	-1.0%	137	21.5	-2.6%	263	45.4	-4.7%

NA – data not available.

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

Data are for years 2006-2010.

Rates are in cases or deaths per 100,000.

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

Source of incidence and late-stage data: NAACCR – CINA Deluxe Analytic File.

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

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

Incidence rates and trends summary

Overall, the breast cancer incidence rate in the Komen Greater New York City Affiliate service area was slightly higher than that observed in the US as a whole and the incidence trend was higher than the US as a whole. The incidence rate and trend of the Affiliate service area were not significantly different than that observed for the State of New York.

For the United States, breast cancer incidence in Blacks is lower than in Whites overall. The most recent estimated breast cancer incidence rates for APIs and AIANs were lower than for Non-Hispanic Whites and Blacks. The most recent estimated incidence rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks. For the Affiliate service area as a whole, the incidence rate was lower among Blacks than Whites, lower among APIs than Whites, and lower among AIANs than Whites. The incidence rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

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

- Nassau County
- New York County
- Suffolk County
- Westchester County

The incidence rate was significantly lower in the following counties:

- Bronx County
- Kings County
- Queens County

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

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

Death rates and trends summary

Overall, the breast cancer death rate in the Komen Greater New York City Affiliate service area was similar to that observed in the US as a whole and the death rate trend was not available for comparison with the US as a whole. The death rate of the Affiliate service area was not significantly different than that observed for the State of New York.

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

The death rate was significantly lower in the following county:

- Queens County

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

- Rockland County

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

Late-stage incidence rates and trends summary

Overall, the breast cancer late-stage incidence rate in the Komen Greater New York City Affiliate service area was slightly higher than that observed in the US as a whole and the late-stage incidence trend was lower than the US as a whole. The late-stage incidence rate and trend of the Affiliate service area were not significantly different than that observed for the State of New York.

For the United States, late-stage incidence rates in Blacks 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 about the same among Blacks and Whites and lower among APIs than Whites. There were not enough data available within the Affiliate service area to report on AIANs so comparisons cannot be made for this racial group. The late-stage incidence rate among Hispanics/Latinas was lower than among Non-Hispanics/Latinas.

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

- Suffolk County

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

- Queens County

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

Mammography Screening

Getting regular screening mammograms (and treatment if diagnosed) lowers the risk of dying from breast cancer. Screening mammography can find breast cancer early, when the chances of survival are highest. Table 2 shows some screening recommendations among major organizations for women at average risk.

Table 2. Breast cancer screening recommendations for women at average risk.

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

Because having mammograms lowers the chances of dying from breast cancer, it’s important to know whether women are having mammograms when they should. This information can be used to identify groups of women who should be screened who need help in meeting the current recommendations for screening mammography. The Centers for Disease Control and Prevention’s (CDC) Behavioral Risk Factors Surveillance System (BRFSS) collected the data on mammograms that are used in this report. The data come from interviews with women age 50 to 74 from across the United States. During the interviews, each woman was asked how long it has been since she has had a mammogram. BRFSS is the best and most widely used source available for information on mammography usage among women in the United States, although it does not collect data matching Komen screening recommendations (i.e. from women age 40 and older). The proportions in Table 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 Latina, but only 10.0 percent of the total women in the area are Latina, weighting is used to account for this difference.

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

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

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

Because the screening proportions come from samples of women in an area and are not exact, Table 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 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%
New York	2,020	1,568	79.7%	77.4%-81.7%
Komen Greater New York City Affiliate Service Area	769	605	80.6%	77.2%-83.6%
White	598	465	79.1%	75.1%-82.6%
Black	118	94	77.4%	67.8%-84.7%
AIAN	SN	SN	SN	SN
API	17	14	93.8%	77.9%-98.5%
Hispanic/ Latina	82	72	89.9%	79.6%-95.3%
Non-Hispanic/ Latina	683	529	79.0%	75.3%-82.3%
Bronx County - NY	56	46	72.7%	57.9%-83.8%
Kings County - NY	85	68	79.2%	68.1%-87.1%
Nassau County - NY	149	125	87.7%	80.3%-92.5%
New York County - NY	83	66	84.4%	74.1%-91.2%
Queens County - NY	94	69	80.3%	70.8%-87.3%
Richmond County - NY	25	22	92.3%	74.4%-98.0%
Rockland County - NY	25	18	67.3%	43.9%-84.5%

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Suffolk County - NY	152	110	75.6%	65.7%-83.3%
Westchester County - NY	100	81	79.4%	67.0%-88.0%

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 Greater New York City Affiliate 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 New York.

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

None of the counties in the Affiliate service area had substantially different screening proportions 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 4 and 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 4. Population characteristics – demographics.

Population Group	White	Black	AIAN	API	Non-Hispanic /Latina	Hispanic /Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
US	78.8 %	14.1 %	1.4 %	5.8 %	83.8 %	16.2 %	48.3 %	34.5 %	14.8 %
New York	71.7 %	19.0 %	1.1 %	8.3 %	82.4 %	17.6 %	49.5 %	35.4 %	15.5 %
Komen Greater New York City Affiliate Service Area	62.5 %	24.8 %	1.3 %	11.4 %	75.5 %	24.5 %	48.2 %	34.0 %	14.9 %
Bronx County - NY	45.9 %	46.2 %	3.3 %	4.6 %	46.3 %	53.7 %	43.5 %	29.5 %	12.6 %
Kings County - NY	48.5 %	39.2 %	1.2 %	11.1 %	80.7 %	19.3 %	44.2 %	31.1 %	13.2 %
Nassau County - NY	77.9 %	13.0 %	0.5 %	8.5 %	85.6 %	14.4 %	54.2 %	38.9 %	17.4 %
New York County - NY	65.7 %	20.0 %	1.4 %	12.9 %	74.5 %	25.5 %	45.8 %	33.2 %	15.4 %
Queens County - NY	50.4 %	23.0 %	1.5 %	25.2 %	73.2 %	26.8 %	48.6 %	34.3 %	14.9 %
Richmond County - NY	78.5 %	12.6 %	0.7 %	8.2 %	82.8 %	17.2 %	50.4 %	35.6 %	14.7 %
Rockland County - NY	78.5 %	13.8 %	0.6 %	7.1 %	84.7 %	15.3 %	48.7 %	34.9 %	15.5 %
Suffolk County - NY	86.6 %	8.8 %	0.6 %	4.0 %	83.7 %	16.3 %	52.3 %	36.2 %	15.6 %
Westchester County - NY	75.5 %	17.2 %	0.9 %	6.4 %	78.7 %	21.3 %	52.6 %	37.3 %	16.8 %

Data are for 2011.

Data are in the percentage of women in the population.

Source: US Census Bureau – Population Estimates

Table 5. Population characteristics – socioeconomics.

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un-employed	Foreign Born	Linguistically Isolated	In Rural Areas	In Medically Underserved Areas	No Health Insurance (Age: 40-64)
US	14.6 %	14.3 %	33.3 %	8.7 %	12.8 %	4.7 %	19.3 %	23.3 %	16.6 %
New York	15.4 %	14.5 %	32.3 %	8.2 %	21.8 %	8.3 %	12.1 %	20.3 %	12.1 %
Komen Greater New York City Affiliate Service Area	17.5 %	15.1 %	33.7 %	8.6 %	31.0 %	12.3 %	0.6 %	25.6 %	13.3 %
Bronx County - NY	30.8 %	28.5 %	56.1 %	13.0 %	33.0 %	18.1 %	0.0 %	61.0 %	15.6 %
Kings County - NY	22.0 %	22.1 %	47.2 %	9.5 %	37.3 %	17.4 %	0.0 %	46.0 %	15.4 %
Nassau County - NY	10.1 %	5.2 %	15.9 %	6.4 %	20.9 %	5.2 %	0.2 %	0.0 %	9.0 %
New York County - NY	15.0 %	17.6 %	35.1 %	8.4 %	28.6 %	10.2 %	0.0 %	45.5 %	10.9 %
Queens County - NY	19.9 %	13.7 %	39.0 %	9.0 %	47.8 %	18.4 %	0.0 %	9.9 %	19.4 %
Richmond County - NY	12.6 %	11.0 %	25.5 %	6.8 %	20.9 %	6.2 %	0.0 %	4.0 %	8.8 %
Rockland County - NY	12.1 %	11.6 %	21.5 %	6.5 %	22.0 %	7.8 %	0.7 %	2.4 %	10.3 %
Suffolk County - NY	10.5 %	5.7 %	18.8 %	6.4 %	14.2 %	4.2 %	2.6 %	0.4 %	10.1 %
Westchester County - NY	12.7 %	8.9 %	18.9 %	7.2 %	24.6 %	7.3 %	3.3 %	18.2 %	10.2 %

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 Greater New York City Affiliate service area has a substantially smaller White female population than the US as a whole, a substantially larger Black female population, a substantially larger Asian and Pacific Islander (API) female population, a slightly smaller American Indian and Alaska Native (AIAN) female population, and a substantially larger 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 lower than and income level is slightly lower than those of the US as a whole. There is a slightly smaller percentage of people who are unemployed in the Affiliate service area. The Affiliate service area has a substantially larger percentage of people who are foreign born and a substantially larger percentage of people who are linguistically isolated. There is a substantially smaller percentage of people living in rural areas, a slightly smaller percentage of people without health insurance, and a slightly larger percentage of people living in medically underserved areas.

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

- Bronx County
- Kings County

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

- Queens County

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

- Bronx County

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

- Bronx County

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

- Bronx County
- Kings County

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

- Bronx County

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

- Kings County
- Queens County

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

- Queens 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 20.6 per 100,000 women).
- Reducing the number of breast cancers that are found at a late-stage (Target: 41.0 cases per 100,000 women).

To see how well counties in the Komen Greater New York City Affiliate service area are progressing toward this target, 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 it 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 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 6. Needs/priority classification based on the projected time to achieve HP2020 breast cancer targets.

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

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

Affiliate Service Area Healthy People 2020 Forecasts and Priority Areas

The results presented in Table 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 these tables should be considered together with other information on factors that affect breast cancer death rates such as screening rates and key breast cancer death determinants such as poverty and linguistic isolation.

Table 7. Intervention priorities for Komen Greater New York City Affiliate 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
Bronx County - NY	Medium High	5 years	13 years or longer	%Black, %Hispanic, education, poverty, employment, language, medically underserved
Kings County - NY	Medium	5 years	10 years	%Black, poverty, foreign, language, medically underserved
Richmond County - NY	Medium	7 years	4 years	
Rockland County - NY	Medium	Currently meets target	13 years or longer	
Suffolk County - NY	Medium	5 years	12 years	
Nassau County - NY	Medium Low	2 years	6 years	
New York County - NY	Medium Low	3 years	3 years	Medically underserved
Westchester County - NY	Medium Low	2 years	3 years	
Queens County - NY	Low	Currently meets target	3 years	%API, foreign, language, insurance

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 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.

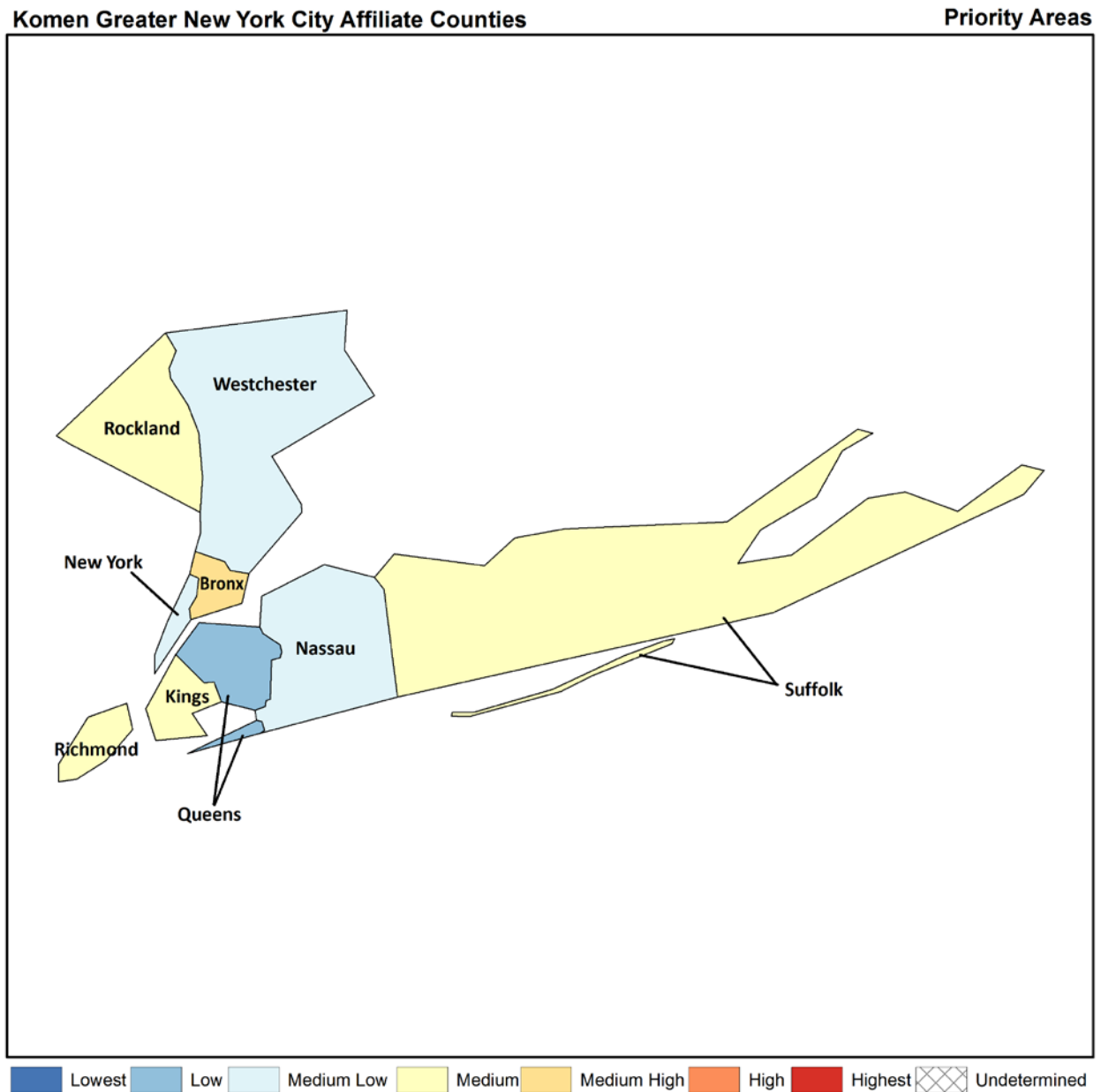


Figure 1. Intervention priorities.

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 mortality, 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

Medium high priority areas

One county in the Komen Greater New York City Affiliate service area is in the medium high priority category. Bronx County is not likely to meet the late-stage incidence rate HP2020 target.

Bronx County has a relatively large Black population, a relatively large Hispanic/Latina population, low education levels, high poverty rates, high unemployment and a relatively large number of households with little English.

Medium priority areas

Four counties in the Komen Greater New York City Affiliate service area are in the medium priority category. One of the four, Rockland County is not likely to meet the late-stage incidence rate HP2020 target. One of the four, Richmond County is expected to take seven years to reach the death rate HP2020 target. Two of the four, Kings County and Suffolk County, are expected to take from ten to twelve years to reach the late-stage incidence rate HP2020 target.

The incidence rates in Suffolk County (139.8 per 100,000) are significantly higher than the Affiliate service area as a whole (126.1 per 100,000). The late-stage incidence rates in Suffolk County (50.3 per 100,000) are significantly higher than the Affiliate service area as a whole (45.2 per 100,000).

Kings County has a relatively large Black population, high poverty rates, a relatively large foreign-born population and a relatively large number of households with little English.

Additional Quantitative Data Exploration

Justification: The purpose of the quantitative data report is to combine data from credible sources and to use said data to identify the highest priority areas for evidence-based breast cancer programs. The Greater New York City Affiliate of Susan G Komen consists of 9 counties. Of these 3 counties are contiguous to the US mainland- these are 2 counties of the lower Hudson Valley: Rockland county and Westchester county. The Bronx is the only mainland county of New York City. The 4 other New York City counties/boroughs are New York/Manhattan, Brooklyn/Kings, Queens, Staten Island/Richmond. Finally, Suffolk county and Nassau county are 2 counties of the Greater Service area that are located on the most eastern portion of Long Island. Because the Greater New York City Affiliate of Susan G Komen includes some of the most populous, diverse, and well-studied counties in the country, we requested and received additional in depth and up to date data from relevant sources on the nine Greater NYC counties served by the Affiliate.

Methods: Where possible we used the same data sources as contained in the QDR. Table 1 compares the sources for this data exploration to the QDR. We obtained additional quantitative data from other agencies as described below.

New York State Cancer Registry (NYSCR)- Through the New York State Cancer Registry, the NY State Department of Health collects, processes and reports information about all New Yorkers diagnosed with cancer. The New York State Cancer Registry participates in the North American Association of Central Cancer Registries (NAACCR) and uses SEER and NAACCR coding.

New York City Bureau of Vital Statistics (NYC Vital Statistics). The Bureau of Vital Records collects all birth and death events that occurred in New York City, basing underlying cause of death on National Center for Health Statistics definitions.

New York City Community Health Survey (NYC CHS)- The New York City Community Health Survey (CHS) is a telephone survey annually conducted by the Department of Health and Mental Hygiene (DOHMH). Like the Behavioral Risk Factor Surveillance Systems (BRFSS), the CHS collects information from nearly 125 questions providing robust data on the general health of New Yorkers. The survey is used to generate neighborhood, borough, and citywide estimates on a range of chronic diseases and behavioral risk factors including mammography screening.

Table 1 Comparison Between Quantitative Data Report and Additional Quantitative Data Exploration Sources

	QDR Data Sources	Additional Data Exploration Data Sources
Incidence	NAACCR 2006-2010	NYS Cancer Registry 2007-2011
Mortality	NCHS Mortality data from SEER Stat 2006-2010	NYS Cancer Registry 2007-2011 NYC Vital Statistics 2008-2012
Late Stage Diagnosis	NAACCR 2006-2010	NYS Cancer Registry 2007-2011
Screening Mammography	BRFSS 2012	NYC Community Health Survey 2012
Demographic Measures	US Census Estimates 2011	US Census Estimates 2012

<ul style="list-style-type: none"> • Race/Ethnicity • Age • Sex 		
Socioeconomic Measures <ul style="list-style-type: none"> • Education • Income • Unemployment • Immigration/Foreign Born • Language Proficiency 	US Census American Community Survey 2007-2011	US Census American Community Survey 2012 NYC Community Health Survey 2012
Socioeconomic Measures <ul style="list-style-type: none"> • Insurance 	US Census Small Area Health Insurance Estimates (SAHIE) 2011	US Census Small Area Health Insurance Estimates (SAHIE) 2012

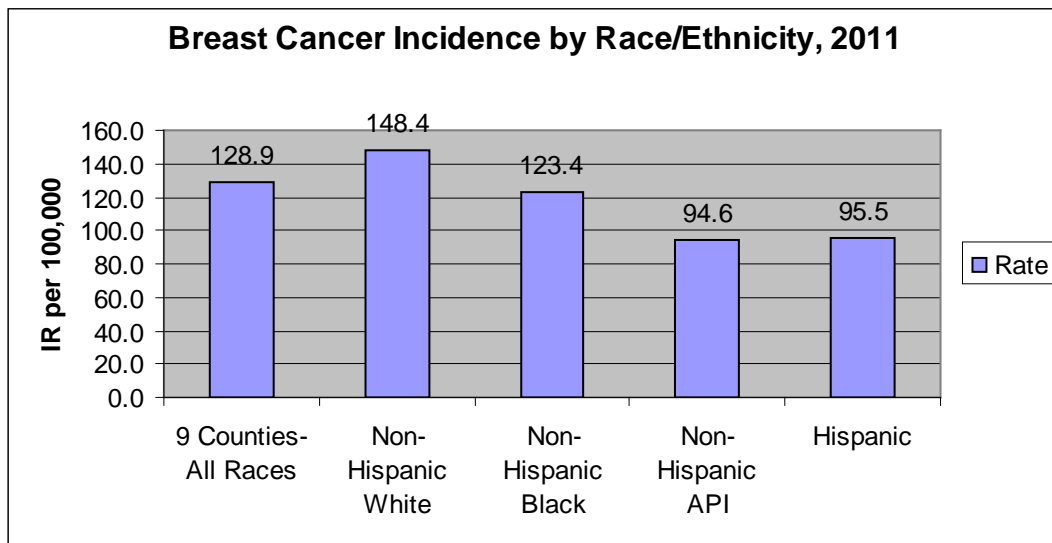


Fig 3 Breast Cancer Incidence in the Service Area in 2011 by Race/Ethnicity. Source: NYSCR

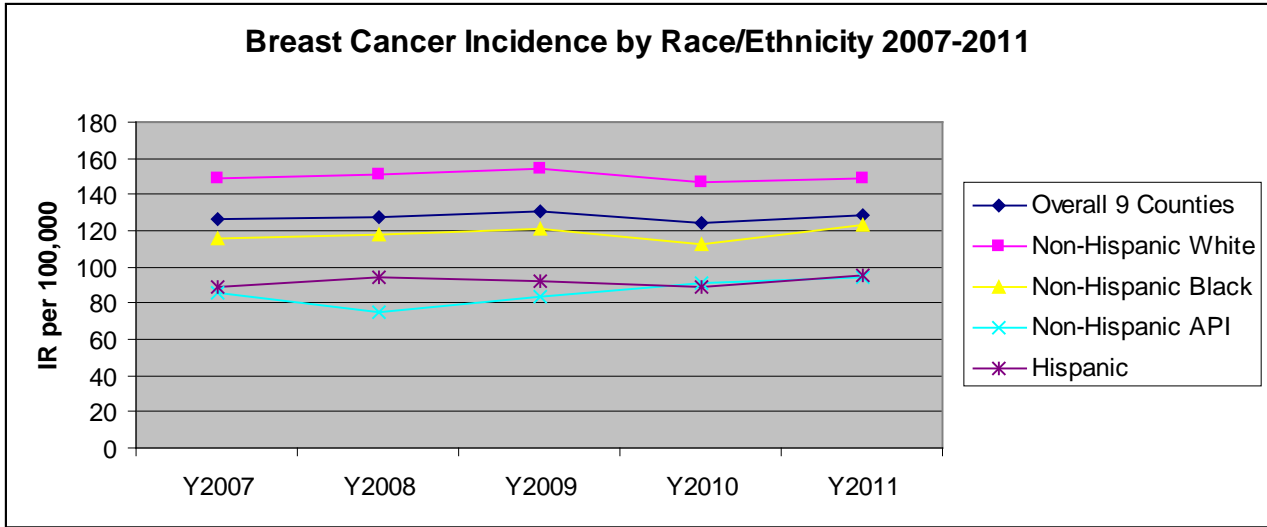


Fig 4 Breast Cancer Incidence 2007-2011 by Race/Ethnicity Source: NYSCR

As they do in most populations, cancer incidence rates in our service area for 2011 increased with age. The cancer incidence overall was 128.9 but the rate for women younger than 50 years was 49.7 per 100,000; for women 50 years and older it was 336 per 100,000. Between 2007 and 2011 rates have remained stable see Fig 5 Breast Cancer Incidence 2007-2011 by Age below.

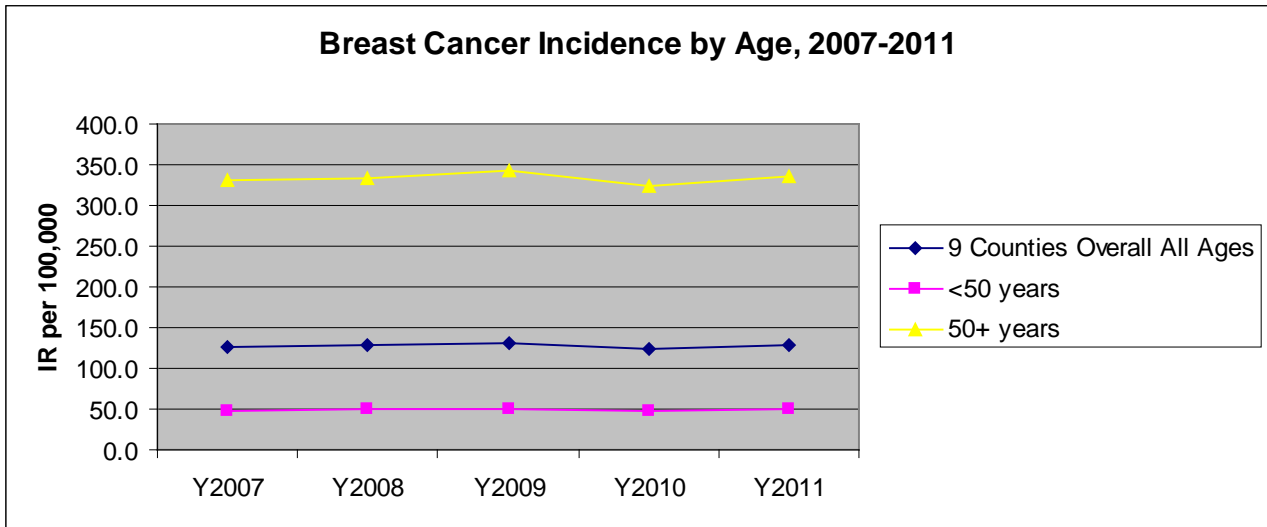


Fig 5 Breast Cancer Incidence 2007-2011 by Age . Source: NYSCR

Early Stage Diagnosis

In this section we will review the percentage distribution of breast cancer cases in the service area by stage at diagnosis for each geographic area, race/ethnicity and age group.

In the period 2007-2011, 63.7% of breast cancers cases in the Komen Greater New York City service area were diagnosed at early or localized stage see Fig 6. Statewide 65.6 % of cancers were diagnosed at localized stage in 2011 compared to 60.8% nationwide for the period 2004-2010.

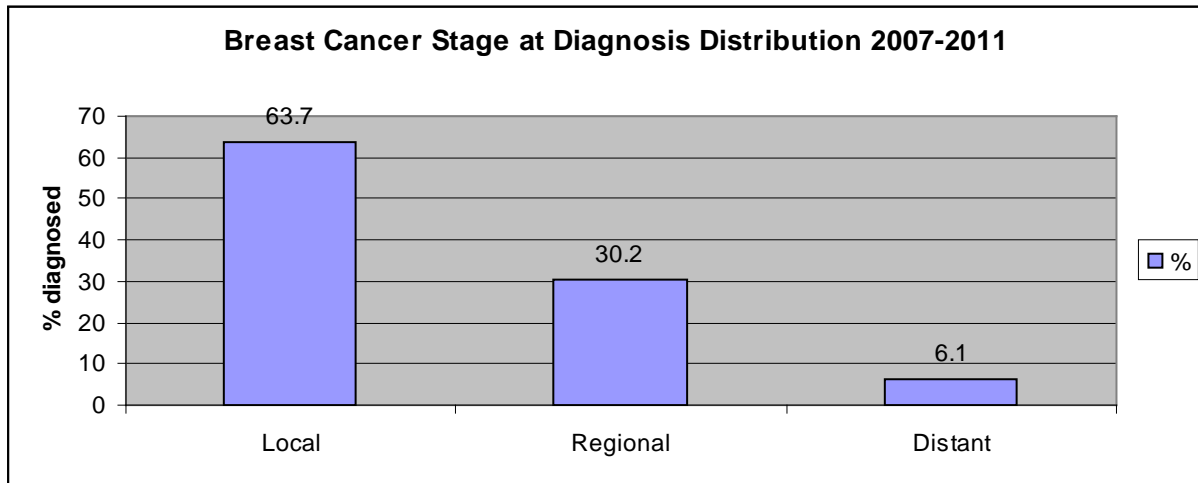


Fig 6 Breast Cancer Stage at Diagnosis Distribution 2007-2011. Source NYSCR

Over the period, there was a trend toward a slight increase in diagnosis at early stage from 62.2% in 2007 to 64.6% in 2011 as shown in Figure 7.

Fig 7 Breast Cancer Stage at Diagnosis 2007-2011. Source: NYSCR

Stage at diagnosis varied by county for the period 2007-2011; Westchester had the highest proportion of cases diagnosed at early stage (69.3%) see Figure 8, followed by Nassau (67.5%), Rockland and Manhattan (66.7% each), Richmond (65.4%), Suffolk (64.1%), Queens (61.8%), the Bronx (59.7%), and Brooklyn (57.9%).

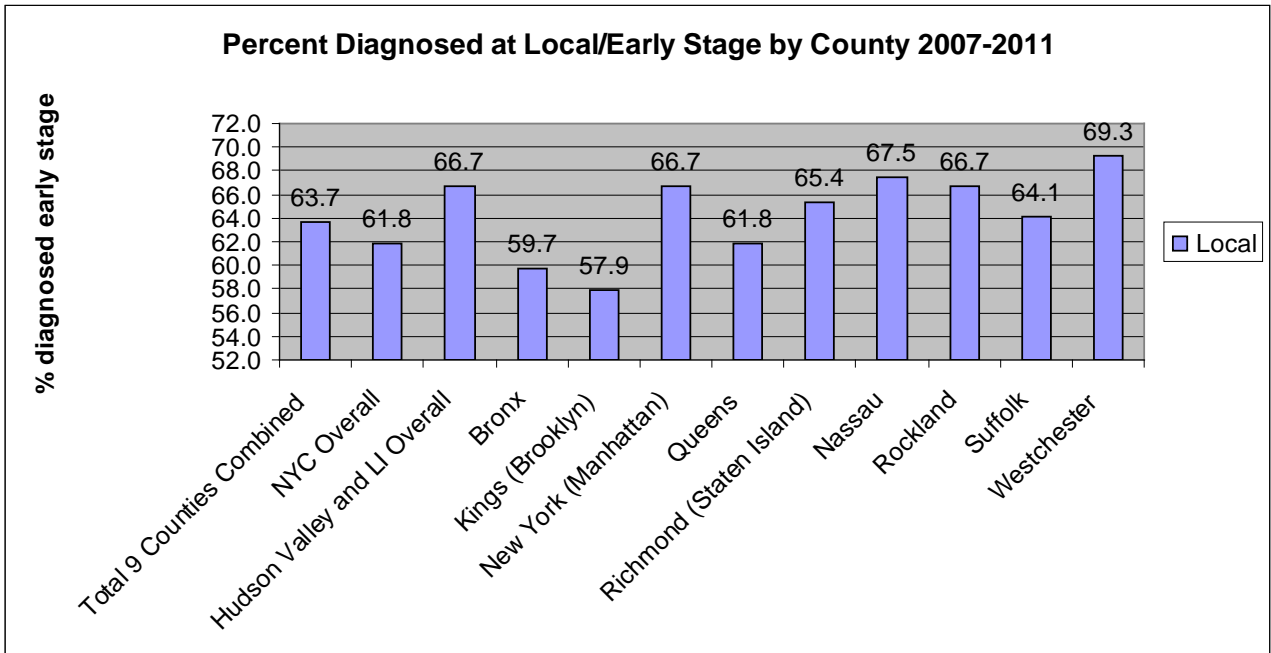
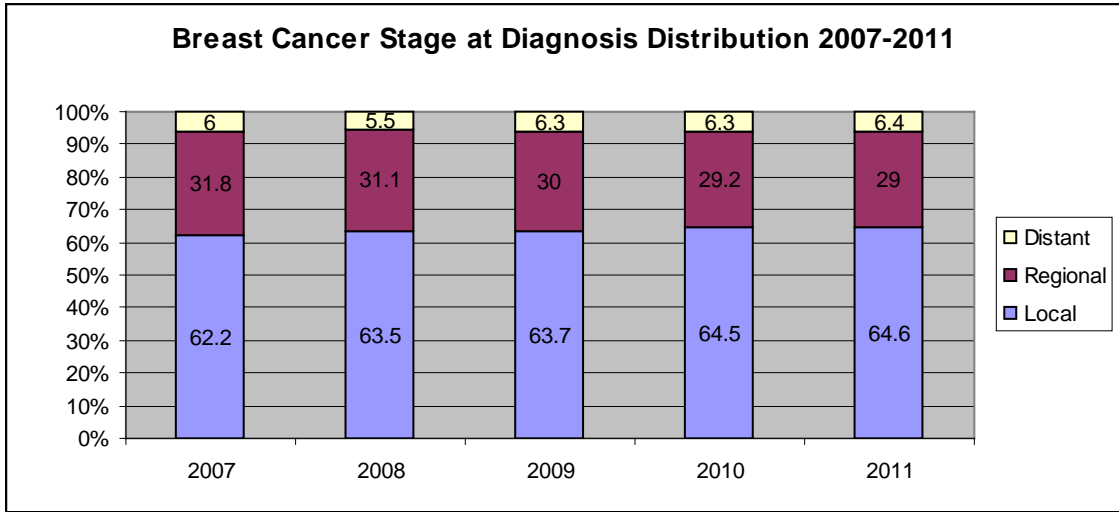


Fig 8 Percent Diagnosed at Local/Early Stage 2007-2011 by County. Source: NYSCR

Early stage diagnosis varied by race/ethnicity as shown below in Fig 9; 55.7% of Blacks were diagnosed at an early stage, followed by Hispanics (59.4%), Asians/Pacific Islanders (63.1%), and Whites (67.1%).

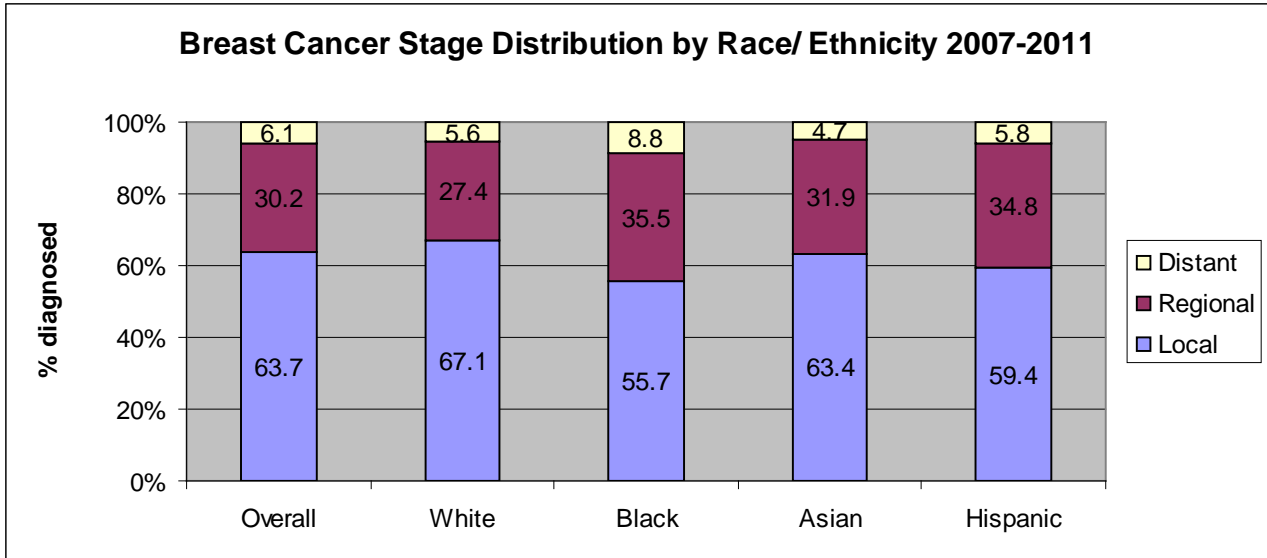


Fig 9 Breast Cancer Stage Distribution 2007-2011 by Race/Ethnicity. Source: NYSCR.

A similar trend was repeated between 2007 and 2011: whites and Asians had the highest proportion of early stage cancers diagnosed followed by Hispanics and Blacks (see Fig 10 below).

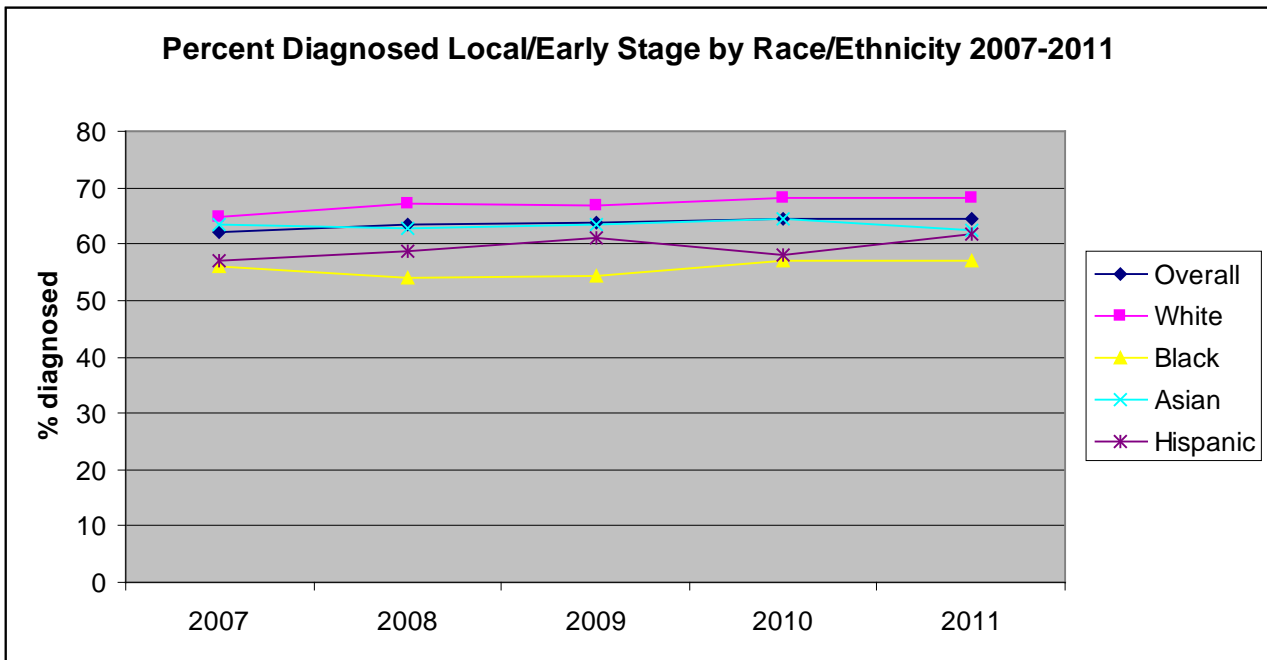


Fig 10 Percent Diagnosed Local/Early State 2007-2011 by Race/Ethnicity. Source: NYSCR

Finally, more women 50 years and older were diagnosed with early stage disease (65.8%) than women under 50 years of age (57.1%). The trend of proportions of women diagnosed with early stage disease remained stable between 2007 and 2011 (not shown).

Mammography Screening

In this section, we will review mammography screening in women 40 years old and over for the service area by geographic area, race/ethnicity and age group.

The proportion of women who reported having a screening mammography in the past 2 years was 78.4% in New York State and 74% in the United States overall in 2012. Per the QDR, in the Komen Greater New York City service area the proportion of women who reported having mammographic screening was 80.6%. For the 5 New York City counties we requested data from the NYC Community Health Survey for 2012. Using this data, 74.5% of women reported having had a mammogram in the past 2 years citywide. Mammography prevalence was variable between 2007 and 2012 in New York City (see Fig 11). Between 2007 and 2012 the net change was small (nearly half a percentage point from 73.9% prevalence in 2007 to 74.5% in 2012).

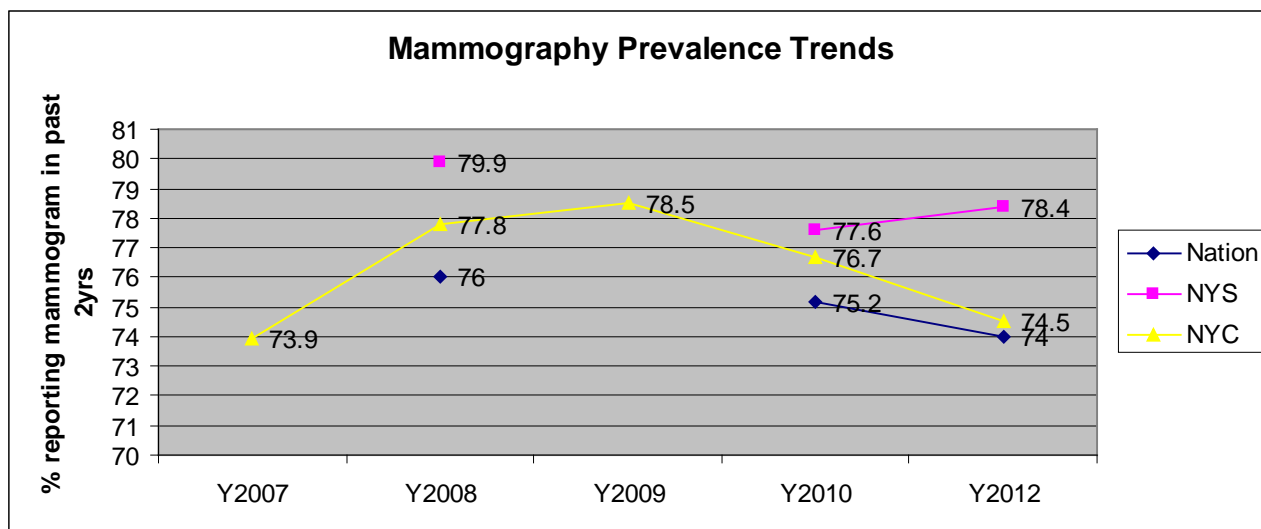


Fig 11 Percentage Reporting Mammographic Screening 2007-2012. Sources: CDC, BRFSS, CHS

Mammography use varied by county. The QDR reports mammography use for the service area with the highest percentage of self report in Nassau, Manhattan, Queens and Westchester county. A comparison of the two data sources (QDR and CHS) shows some differences in mammography use by county which probably reflects the different methodology and sampling of BRFSS versus CHS. From CHS,(see Fig 12) the proportion of women who reported having had a mammogram was highest in Bronx (78.8%) followed by Brooklyn (76.9%), Staten Island (77.1%), Queens (72.7%) and Manhattan (69.5%).

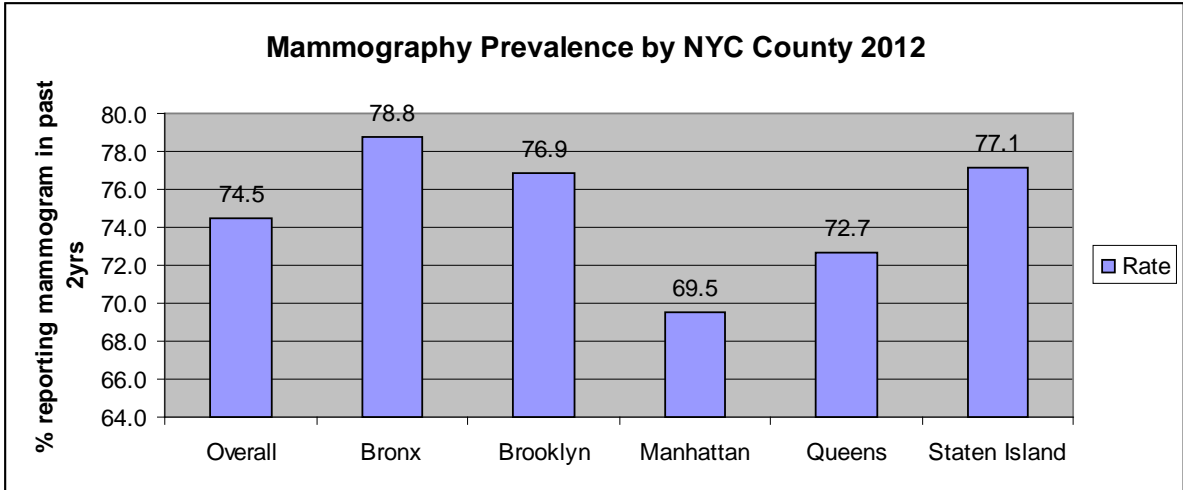


Fig 12 Percentage reporting mammographic screening 2012 by county. Source: NYC CHS

Mammography use also varied by race/ethnicity. The highest proportion of women reporting a mammogram in the past 2 years were Black women (78.8%) followed by Hispanic (78.8%), White (70.4%) and Asian (68.5%) women (see Fig 13).

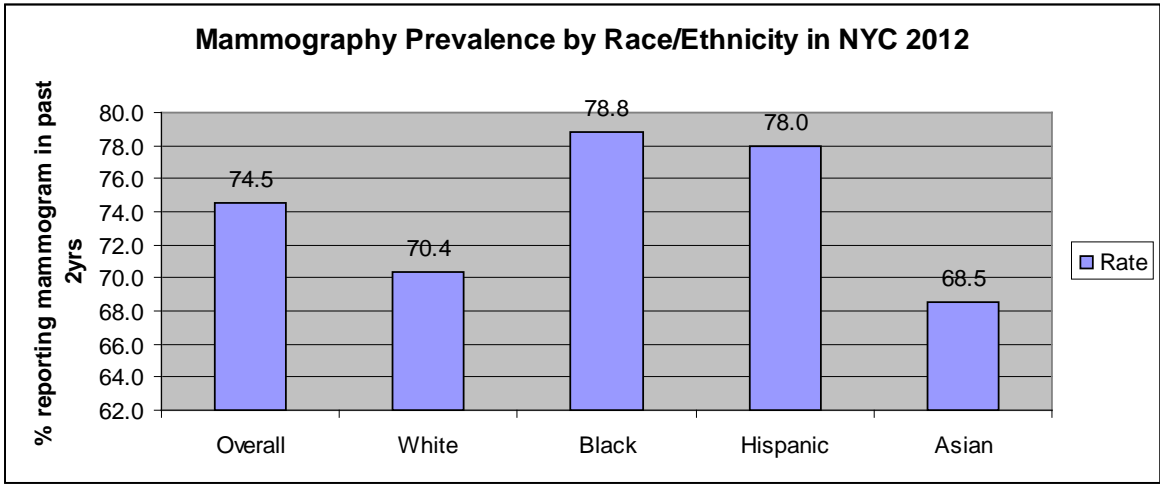


Fig 13 Percentage Reporting Mammographic Screening 2012 by Race. Source NYC CHS

This trend has remained stable between 2007 and 2012 (see Fig 14). In the 2011 Community Profile, we noted that White and Asian women had lower screening prevalence as compared to Black and Hispanic women. The persistence of this lower prevalence might indicate a need for increased interventions to combat low mammography use in these groups.

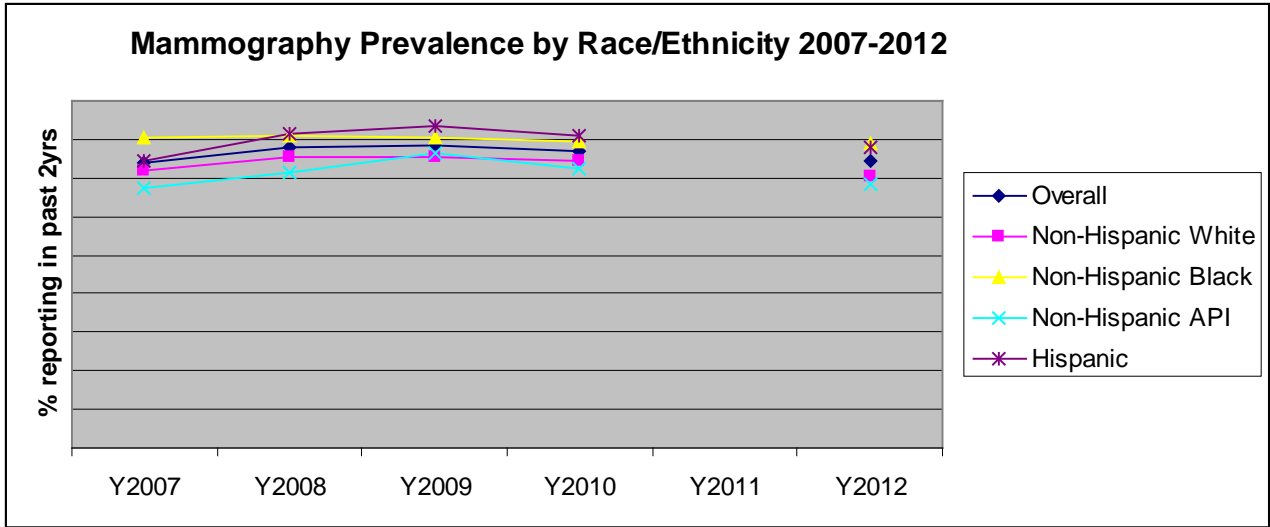


Fig 14 Percentage reporting mammographic screening in 2007-2012 by race/ethnicity. Source: NYC CHS

Given the data on early stage diagnosis and mortality for Black and Hispanic women, the high rates of mammography screening via self report seem counterintuitive. This may reflect processes after the screening mammogram takes place that constitute some sort of breakdown in care which promotes a delay in diagnosis. Or there could be a differential distribution of risk factors that increase the speed of tumor growth or that increase mortality from cancer. On the other hand, the high self reported rates of mammography use among nonwhite women could reflect a reporting bias by women of color survey respondents. More optimistically, these elevated numbers might reflect the success of breast cancer prevention, education and outreach efforts of Komen, non profit organizations and health care providers.

Mammography use does not seem to have varied with nativity within New York City in 2012; 74.3% of US-born women and 74.8% of foreign-born women reported having a mammogram. Mammogram use varied with insurance status such that 77.6% of women with insurance reported having had a mammogram as compared to 51.1% in women without insurance.

Mortality

In this section we will review breast cancer mortality rates for the service area by geographic area, race/ethnicity and age group.

The overall breast cancer mortality rate in the Komen Greater New York City service area was 21.5 per 100,000 for 2007-2011, which was the last period for which data was available. This mortality rate was lower than the mortality for the state (21.7 per 100,000) and nation (22.6 per 100,000) for the period 2006-2010).

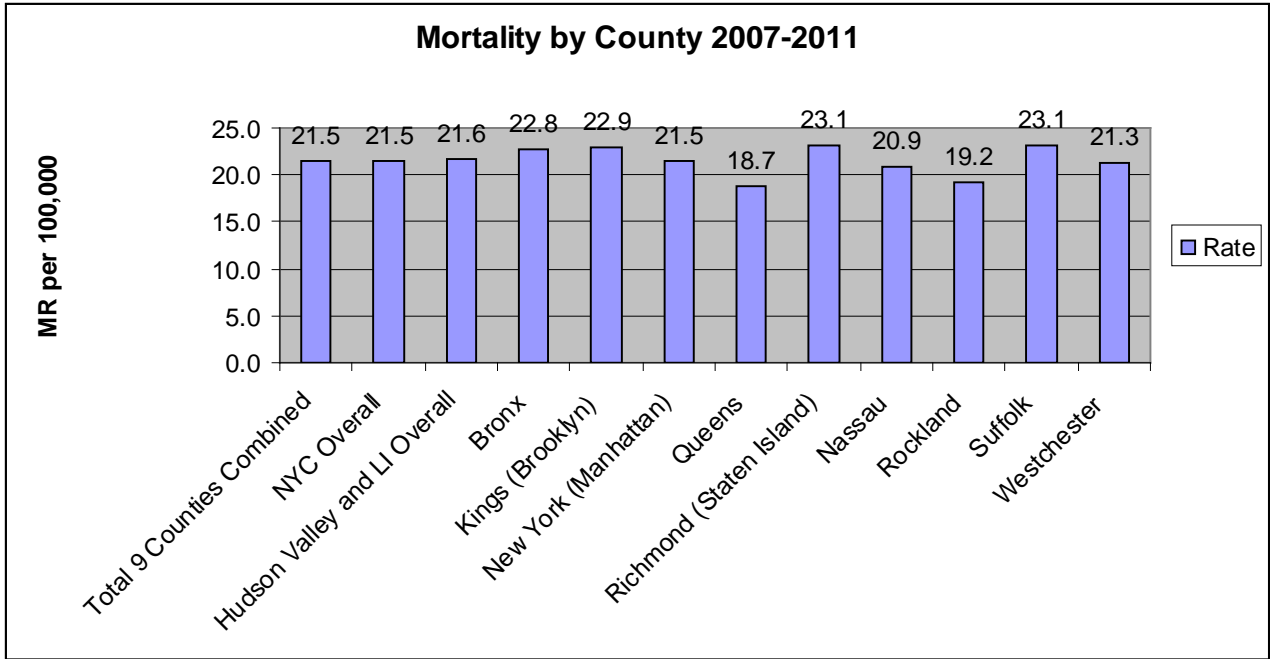


Fig 15 Breast Cancer Mortality Rates in 2007-2011 by County. Source: NYSCR

Mortality rates varied by geographic area or county (see Fig 15 Breast Cancer Mortality 2007-2010 by county). Six counties in the service area had rates higher than the state mortality rate for the period 2007-2011: Richmond (23.1/100,000), Rockland (23.1/100,000), Brooklyn (22.9/100,000), the Bronx (22.8/100,000), Westchester (21.3/100,000) and Nassau (20.9/100,000). Three counties had rates lower than the state; the county with the lowest rate was Queens (18.7/100,000,) followed by Rockland (19.2/100,000) and Manhattan (21.5/100,000).

As shown in Fig 16, the pattern of mortality rates in 2011 only had Brooklyn (23.8/100,000), Suffolk (22.4/100,000), Westchester (21.4/100,000) the Bronx (21.3/100,000) and Richmond (20.7/100,000) with the five highest rates followed by Manhattan (20.6/100,000), Rockland (20.5/100,000) Nassau (19/100,000) and Queens (17.8/100,000).

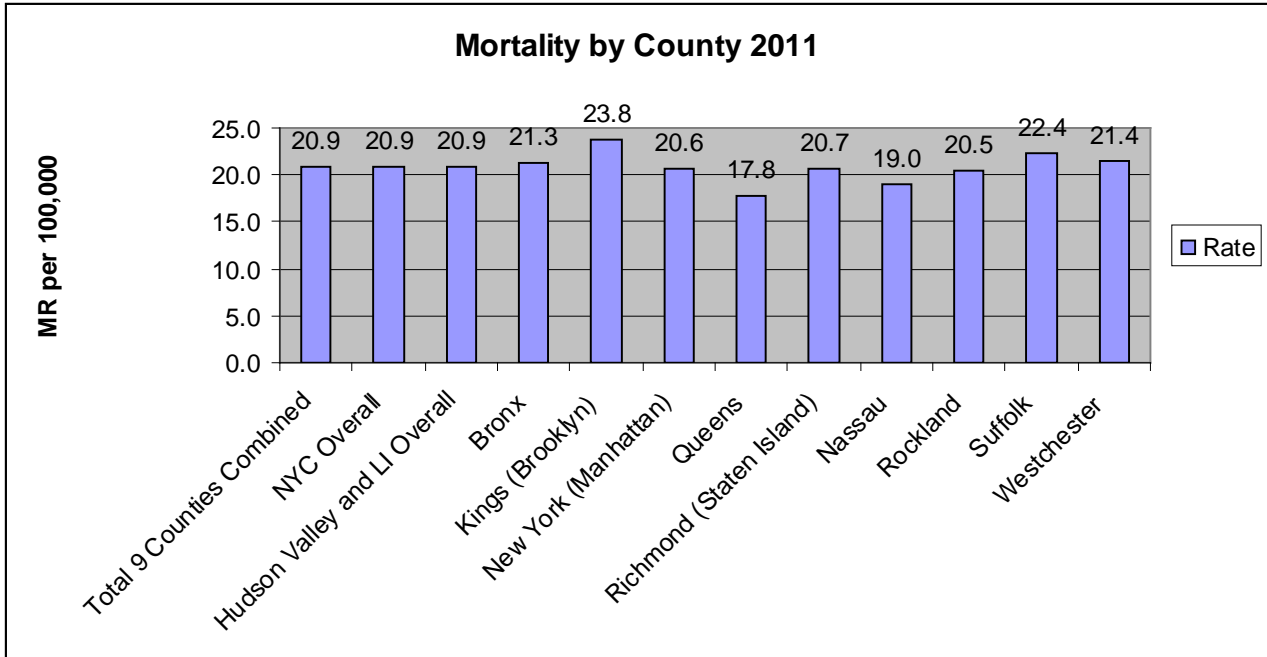


Fig 16 Breast Cancer Mortality in 2011 Only by County. Source: NYSCR

Mortality rates also varied by race/ethnicity (see Fig 17 Breast Cancer Mortality 2011 by Race/Ethnicity) in the service area. Blacks had the highest mortality rates at (29.2/100,000), followed by Whites (21/100,000) Hispanics (15.6/100,000), and Asian/Pacific Islanders (9.7/100,000). Rates remained relatively stable between 2007 and 2011 (not shown).

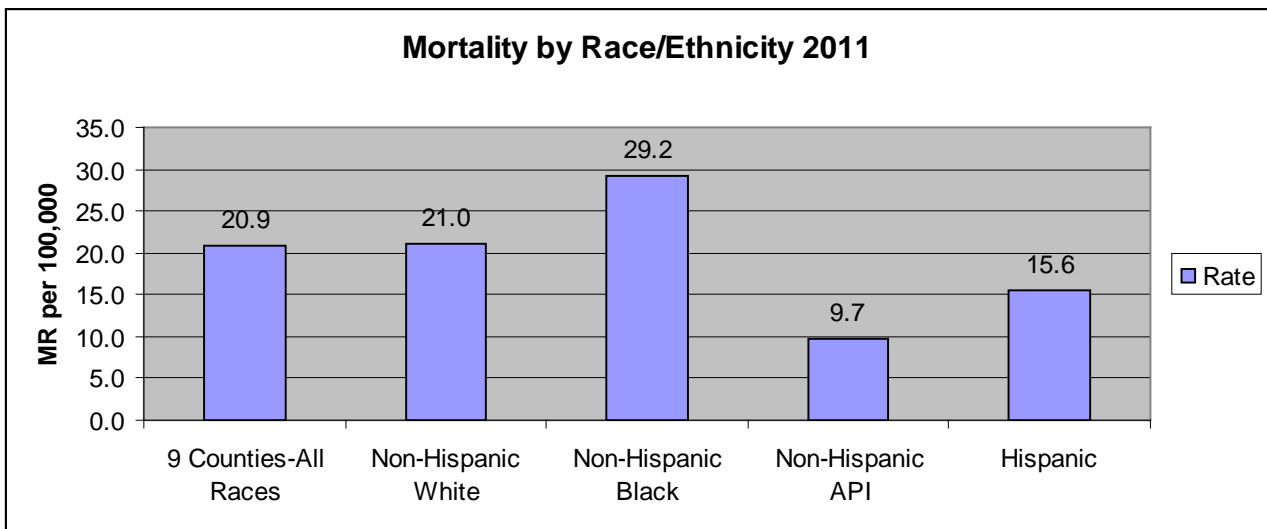


Figure 17 Mortality Rates in 2011 by Race/Ethnicity. Source: NYSCR

We also requested data from New York City Vital Statistics Bureau for the period 2008-2012 and found a slightly different pattern than the service area. Citywide mortality was 20.5/100,000, quite close to the rate overall for the service area (see Fig 18). Mortality rates were nearly identical in the Bronx and Staten

Island (22.4 /100,000 each), Brooklyn (22.3/100,000), and Manhattan (22.0/100,000). Queens had the lowest mortality rate at 16/100,000.

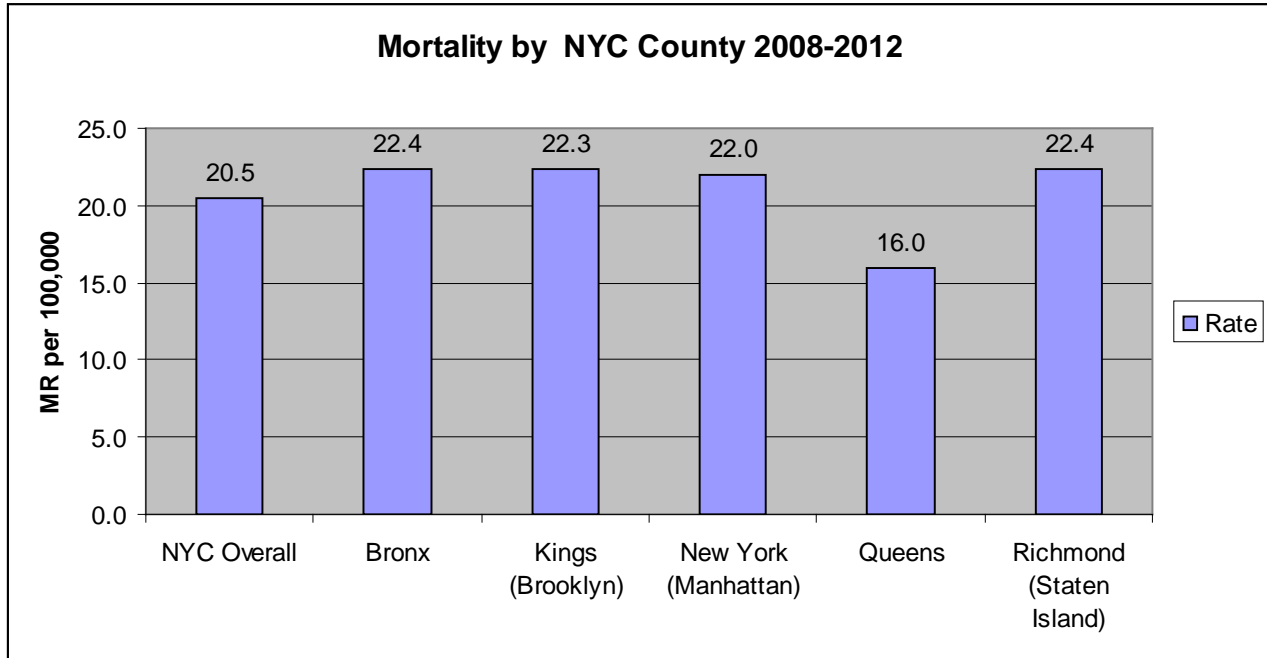


Fig 18 Mortality by NYC County 2008-2012. Source: NYC Vital Statistics

Mortality also varied by race/ethnicity in the city. Blacks had a mortality rate of 26.9/100,000, followed by Whites (23.7/100,000), Hispanics (14.7/100,000) and Asians (7.9/100,000) as shown in Fig 19 below.

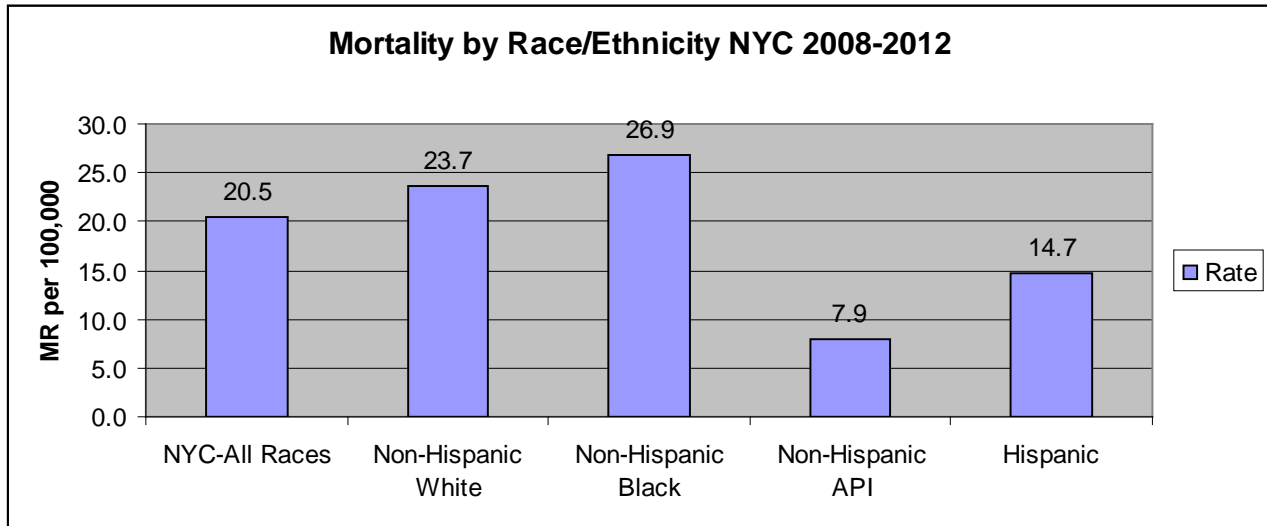


Fig 19 Mortality by Race/Ethnicity NYC 2008-2012. Source: NYC Vital Statistics

As it does in most other populations, breast cancer mortality rates also increased with age in our service area. In 2011, the mortality rate for women younger than 50 years was 4.5 per 100,000; for women 50 years and older it was 63.7 per 100,000. The mortality rates remained stable in these age groups between 2007 and 2011.

Population Characteristics

The Komen Greater New York City service area comprises 9 counties with a total population in 2012 estimated to be 12,082,160 people (see Table 2 below). Of this population, approximately 6.3 million are women (see Table 3 below). The Komen Greater NYC service area includes some of the most populous counties in the country as well as the more rural county of Suffolk in Long Island. Seven of the nine counties in the Komen Greater NYC region are ranked in the top ten most populous in the state. Brooklyn is the most populous county in the region, Manhattan is the most densely populated, while Queens is consistently rated the most diverse county in the country.

Table 2 Population in the Komen Greater NYC Service Area by Race/Ethnicity
Source: 2012 Census Data Estimates

	Bronx	Brooklyn	Manhattan	Nassau	Queens	Staten Island	Rockland	Suffolk	Westchester
Total Population	1,386,364	2,465,467	1,596,735	1,338,712	2,235,008	460,730	311,687	1,493,350	949,113
White	312,055 (22.5%)	1,119,881 (44.6%)	909,145(56.9%)	973,573 (72.7%)	950,264 (42.5%)	341,677 (72.9%)	228,295 (73.2%)	1,206,297 (80.8%)	646,471 (68.1%)
Black or African American	481,739 (34.7%)	859,622 (34.2%)	247,743 (15.5%)	148,771 (11.1%)	421,540 (18.9%)	49,857 (10.6%)	37,058 (11.9%)	111,224 (7.4%)	138,118 (14.6%)
American Indian/ Alaska Native	7,196 (0.5%)	8,247 (0.3%)	5,012 (0.3%)	2,310 (0.2%)	9,475 (0.4%)	1,695 (0.4%)	911 (0.3%)	5,366 (0.4%)	3,965 (0.4%)
Asian	49,489 (3.6%)	266,557 (10.6%)	178,673 (11.2%)	103,765 (7.8%)	522,638 (23.4%)	35,164 (7.5%)	19,293 (6.2%)	50,972 (3.4%)	51,716 (5.4%)
Asian Indian	13,741 (1%)	24,290 (1%)	24,364 (1.5%)	39,259 (2.9%)	134,656 (6.0%)	6,793 (1.4%)	7,028 (2.3%)	15,975 (1.1%)	17,798 (1.9%)
Chinese	8,189 (0.6%)	180,888 (7.2%)	96,527 (6.0%)	24,705 (1.8%)	199,472 (8.9%)	13,321 (2.8%)	2,781 (0.9%)	12,052 (0.8%)	10,758 (1.1%)
Filipino	5,614 (0.4%)	9,389 (0.4%)	11,081 (0.7%)	11,383 (0.9%)	41,248 (1.8%)	5,224 (1.1%)	4,482 (1.4%)	5,202 (0.3%)	6,441 (0.7%)
Japanese	564 (0.0%)	4,356 (0.2%)	13,931 (0.9%)	1,887 (0.1%)	6,658 (0.3%)	201 (0.0)	277 (0.1%)	904 (0.1%)	5,719 (0.6%)
Korean	2,829 (0.2%)	7,940 (0.3%)	18,860 (1.2%)	12,385 (0.9%)	63,219 (2.8%)	3,207 (0.7%)	2,199 (0.7%)	5,627 (0.4%)	5,440 (0.6%)
Vietnamese	3,560 (0.3%)	3,692 (0.1%)	2,721 (0.2%)	1,070 (0.1%)	4,271 (0.2%)	468 (0.1%)	402 (0.1%)	1,565 (0.1%)	501 (0.1%)
Other Asian*	14,992 (1.1%)	36,002 (1.4%)	11,189 (0.7%)	13,076 (1%)	73,114 (3.3%)	5,950 (1.3%)	2,124 (0.7%)	9,647 (0.6%)	5,059 (0.5%)
Native Hawaiian/Other Pacific Islander	308 (0.0%)	1,372 (0.1%)	804 (0.1%)	81 (1%)	1,356 (0.1%)	213 (0.0)	130 (0.0)	495 (0.0)	387 (0.0)
Some Other Race	488,156 (35.2%)	225,107 (9.0%)	192,325 (12%)	81,435 (6.1%)	260,286 (11.6%)	28,006 (6.0%)	18,159 (5.8%)	82,965 (5.6%)	78,503 (8.3%)
	Bronx	Brooklyn	Manhattan	Nassau	Queens	Staten Island	Rockland	Suffolk	Westchester
Total Pop.		2,465,467	1,596,735	1,338,712	2,235,008	46,730	311,687	1,493,350	949,113
Hispanic or Latino		497,620 (19.8%)	409,298 (25.6%)	195,287 (14.6%)	614,147 (27.5%)	81,051 (17.3%)	48,783 (15.7%)	246,239	207,032 (21.8%)

								(16.5%)	
Mexican		93,124 (3.7%)	42,606 (2.7%)	10,883 (0.8%)	87,644 (3.9%)	18,684 (4.0%)	5,358 (1.7%)	15,663 (1.0%)	44,060 (4.6%)
Puerto Rican		181,136 (7.2%)	113,269 (7.1%)	30,865 (2.3%)	116,277 (5.2%)	37,517 (8.0%)	12,650 (4.1%)	58,549 (3.9%)	41,836 (4.4%)
Cuban		7,764 (0.3%)	10,461 (0.7%)	6,506 (0.5%)	12,408 (0.6%)	1,831 (0.4%)	1,191 (0.4%)	4,310 (0.3%)	5,287 (0.6%)
Other Hispanic		215,596 (8.6%)	242,962 (15.2%)	147,033 (11%)	397,818 (17.8%)	23,019 (4.9%)	29,584 (9.5%)	167,717 (11.2%)	115,849 (12.2%)

Table 3. Female Population of the Service Area by County

<i>County</i>	<i>Number of Women</i>
Bronx	735,475
Kings	1,323,322
Nassau	691,554
New York	841,432
Queens	1,150,919
Rockland	158,808
Staten Island	241,441
Suffolk	758,682
Westchester	492,452
<i>Total</i>	6,394,085

*US 2010 Census Data

In our service area overall, Whites and Hispanics are the largest racial/ethnic groups, followed by Blacks, but the Asian population continues to grow rapidly and shows the highest percentage increase since 2000. Some 3 million residents of the service area are foreign-born, and an estimated **775,000** are undocumented. In New York City alone, 41% of residents are foreign-born (U.S. Census, American Community Survey, 2012 estimates). Of the NYC foreign-born population, 32.1% hail from Latin America, 27.5% from Asia, 19.4% from the non-Hispanic Caribbean, 15.9% from Europe and 4.2% from Africa (New New Yorkers, NYC Planning, 2013). The country of birth and relative contribution to the city's foreign born population is shown in Table 4. Given this diversity throughout the Komen Greater New York City service area and linguistic isolation figures referenced in the QDR, culturally appropriate and linguistically appropriate services are required to adequately serve the needs of the population. This great need is underlined by the fact that NYC Planning estimates that there are 1.8 million New Yorkers who can't communicate effectively with their healthcare providers in English.

Table 4 Foreign Born Population Rank and Percentage by Country of Birth, 2011

Country	Rank Number	% Foreign Born Population
Dominican Republic	1	12.4
China	2	11.4
Mexico	3	6.1
Jamaica	4	5.5
Guyana	5	4.6
Ecuador	6	4.5
Haiti	7	3.17
Trinidad and Tobago	8	2.9
India	9	2.5
Russia	10	2.5

Source: Adapted from New New Yorkers 2013, NYC Planning

The Hispanic population is increasingly heterogeneous; 90 percent of Hispanics in the service area come from Puerto Rico, Dominican Republic, Mexico, Ecuador or Colombia (CLACS, 2008). Of these, the four Latin American countries (the Dominican Republic, Mexico, Ecuador, and Colombia) were among the city's top sources of immigrants: (New New Yorkers, NYC Planning, 2013). In fact, most of the population of the Bronx (54%) is Hispanic, predominantly Puerto Ricans and Other Hispanic or Latino individuals, but a growing number of Mexicans as well. (U.S. Census, American Community Survey, 2012 estimates).

The Black population of the service area is also more diverse than US Census categories fully capture. Nearly, 1 in 4 Black New York City residents is foreign born (Center for American Progress 2012). An even larger but hard to quantify proportion are first-generation Americans of Caribbean or African origin. Four Caribbean countries (Jamaica, Guyana, Haiti and Trinidad and Tobago) were among New York City's top sources of immigrants: (New New Yorkers, NYC Planning, 2013). In Brooklyn, foreign-born individuals from the Caribbean comprise 30% of the borough's foreign-born population, while Africans comprise 3%. In the Bronx, people from the Caribbean comprise 19% of the foreign-born population, while Africans comprise 10%. Finally, in Queens- 17% and 2% of foreign born are from the Caribbean and Africa respectively (New New Yorkers, NYC Planning, 2013).

In addition, more than a million Asians, also heterogeneous in national origin, live in our service area (Asian Americans for Equality 2011). Among Asians, the Chinese are the largest single subgroup. In parts of Queens and Brooklyn, the Asian American communities have grown since the 2009 Census estimates.

Household income varies tremendously across the service area. While Manhattan, Westchester, Nassau, Suffolk and Rockland counties reported higher household incomes, nearly 25 percent of households in the service area had incomes under \$25,000 annually (U.S. Census, 2010; 2012 estimates). Large numbers of individuals in the five boroughs/counties of New York City live below the poverty line.

Limitations:

The quantitative data presented in this exploration are the latest available data. One key limitation is that the population of our service area is mobile, and that data may therefore change during the five-year planning period for this report. Further, although we gathered the most complete data available, for some measures our sources had only limited data on some population subgroups. Lack of information on ethnic subgroups or counties with small populations of certain subgroups may make comparisons difficult. Differences in cancer data sources can also exacerbate the problem of comparing population subgroups across cancer variables.

However, the combination of the data from the QDR and this quantitative data exploration provide a rich and nuanced picture of the burden of breast cancer in our service area. As such the data help to identify the populations with the highest priority needs evidence-based breast cancer interventions.

Selection of Target Communities

Justification:

We selected our target communities based on the data on which population subgroups were most affected by breast cancer (priority populations) and which geographic areas were most affected with a high burden of disease (priority areas). This overlap between priority population and priority area pinpoints those target communities most in need of evidence-based cancer interventions.

Conclusions from data:

According to both the QDR and this quantitative data exploration, across the Komen Greater New York City service area higher proportions of Black and Hispanic women than of women in other groups are diagnosed at late stages and more Black women experience higher mortality rates. As a result our

priority population (s) are :

- Black women
- Hispanic women

The QDR highlights the Bronx as a medium-high priority area, followed by Kings County, Richmond County, Rockland County and Suffolk County which were classified as medium priority. This data exploration echoes this pattern; the Bronx, Kings, Richmond and Rockland counties had the highest mortality rates in the service area. In addition this exploration also highlighted Suffolk County for its elevated mortality rates and high proportion of late stage diagnosis. The exploration also highlighted Westchester County for its elevated breast cancer mortality. As a result our priority area(s) are:

- the Bronx/ Bronx County
- Brooklyn/ Kings County
- Staten Island/Richmond County
- Lower Hudson Valley: Rockland County and Westchester County
- Suffolk County

Based on the overlap of priority populations and priority areas our target communities are:

- Black and Hispanic women in
 - the Bronx/ Bronx County
 - Brooklyn/ Kings County
 - Staten Island/Richmond County
 - Lower Hudson Valley: Rockland County and Westchester County
 - Suffolk County

Next Steps:

The goal of the Community Profile is to highlight the needs of women in the Komen Greater New York City service area. Toward this end, we will perform an environmental scan to explore the health system as it currently exists. Particularly, we will explore the health system infrastructure and its ability to serve the unique cultural, linguistic and social needs of Black and Hispanic women in the service area.

Some questions to explore:

- Why are the mortality and late-stage diagnosis rates so high if screening rates are more than adequate?
- What are the specific barriers that prevent a patient from moving from screening to diagnosis, from diagnosis to treatment, and from starting to completing treatment? Are some of these barriers unique to women of certain demographic backgrounds (e.g., race/ethnicity, country of origin)?
- Whose responsibility is it to ensure that a patient completes the diagnostic or treatment plan? Primary care provider? Radiologist? Oncologist? Surgeon?
- What systems are used by hospitals and providers to prevent loss to follow up and failure to adhere to the diagnostic or treatment plan?
- Do the institutions that purport to serve women in the target communities provide the full range of diagnostic, treatment, and other services that breast cancer patients may need?
- Do those services meet generally accepted standards of quality?
- What barriers, if any, do patients in those communities face in accessing those services in a timely and culturally appropriate fashion?

We will use qualitative information and stakeholder interviews and focus groups to answer these questions and to describe the challenges faced by Black and Hispanic women in accessing screening and treatment for breast cancer.