

susan G. Komen.  **COMMUNITY**
PROFILE REPORT 2015



FLORIDA

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Introduction

About Susan G. Komen®

Susan G. Komen is the world's largest breast cancer organization, funding more breast cancer research than any other nonprofit while providing real-time help to those facing the disease. Since 1982, Komen has funded more than \$889 million in research and provided \$1.95 billion in funding to screening, education, treatment and psychosocial support programs serving millions of people in more than 30 countries worldwide. Komen was founded by Nancy G. Brinker, who promised her sister, Susan G. Komen, that she would end the disease that claimed Suzy's life.

Since 1982, Komen has contributed to many of the advances made in the fight against breast cancer and transformed how the world treats and talks about this disease and have helped turn millions of breast cancer patients into breast cancer survivors:

- **More early detection and effective treatment.** Currently, about 70 percent of women 40 and older receive regular mammograms, the single most effective screening tool to find breast cancer early. Since 1990, early detection and effective treatment have resulted in a 34 percent decline in breast cancer death in the US.
- **More hope.** In 1980, the five-year relative survival rate for women diagnosed with early stage breast cancer was about 74 percent. Today, it's 99 percent.
- **More research.** The federal government now devotes more than \$850 million each year to breast cancer research, treatment and prevention, compared to \$30 million in 1982.
- **More survivors.** Today, there are more than three million breast cancers survivors in the US.

Visit komen.org or call 1-877 GO KOMEN. Connect with us on social at ww5.komen.org/social.

Susan G. Komen Affiliate Network

Thanks to survivors, volunteers and activists dedicated to the fight against breast cancer, the Komen Affiliate Network is working to better the lives of those facing breast cancer in the local community. Through events like the Komen Race for the Cure® series, the local Komen Affiliates invest funds raised locally into community health programs to provide evidence-based breast health education and breast cancer screening, diagnostic and treatment programs, and contribute to the more than \$889 million invested globally in research.

For more information or to connect with a local Affiliate, contact the following Komen Affiliate(s) that are located in the State of Florida as of February 2017:

Susan G Komen® Central Florida
1755 Oviedo Mall Boulevard
Oviedo, FL 32765
321-972-5534
www.komencentralflorida.org

Susan G Komen® Florida Suncoast
205 Dr. Martin Luther King Jr. Street North
St. Petersburg, FL 33701
727-823-0728
www.komensuncoast.org

Susan G Komen® Miami/Ft. Lauderdale
1333 S. University Drive, Suite 206
Plantation, Florida 33324
Broward Office: 954-909-0454
Miami-Dade Office: 305-383-7116
www.komenmiaftl.org

Susan G Komen® North Florida
2950 Halcyon Lane #501
Jacksonville, Florida 32223
904-448-7446
www.komennorthflorida.org

Susan G. Komen® South Florida
At Good Samaritan Medical Center
1309 N. Flagler Drive, 5th Floor
West Palm Beach, Florida 33401
561-514-3020
www.komensouthflorida.org

Susan G. Komen® Southwest Florida
4061 Bonita Beach Road
Bonita Springs, Florida 34134
239-498-0016
www.komenswfl.org

Purpose of the State Community Profile Report

The purpose of the Florida Community Profile is to assess breast cancer burden within the state by identifying areas at highest risk of negative breast cancer outcomes. Through the Community Profile, populations most at-risk of dying from breast cancer and their demographic and socioeconomic characteristics can be identified; as well as, the needs and disparities that exist in availability, access and utilization of quality care.

The Community Profile consists of the following three sections:

- **Quantitative Data:** This section provides secondary data on breast cancer rates and trends that include incidence, deaths and late-stage diagnosis along with mammography screening proportions. This section also explores demographic, social and geographic characteristics that influence breast cancer outcomes such as race/ethnicity, socioeconomic status, educational attainment and insurance status.

- **Health System Analysis:** This section tells the story of the breast cancer continuum of care and the delivery of quality health care in the community. Key to this section is the observation of potential strengths and weaknesses in the health care system that could compromise a women's health as she works her way through the continuum of care (e.g., screening, diagnosis, treatment and follow-up/survivorship services).
- **Public Policy Overview:** This section provides an overview of key breast cancer policies that affect the ability of at-risk women in accessing and utilizing quality care. This section covers the state's National Breast and Cervical Cancer Early Detection Program, the state's National Comprehensive Cancer Control Program and the Affordable Care Act.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

The purpose of the quantitative data report for the State of Florida is to provide quantitative data from many credible sources and use the data to identify the highest priority areas in the state for evidence-based breast cancer programs.

The quantitative data report provides the following data at the state and county-level as well as for the United States:

- Female breast cancer incidence (new cases)
- Female breast cancer death rates
- Late-stage diagnosis
- Screening mammography proportions
- Population demographics (e.g. age, race/ethnicity)
- Socioeconomic indicators (e.g. income and education level)

The data provided in the report can be used to identify priorities within the state 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 (Healthy People 2020, 2010).

Quantitative Data

This section of the report provides specific information on the major types of data that are included in the report.

Incidence Rates

“Incidence” means the number of new cases of breast cancer that develop in a specific time period.

If the breast cancer incidence rate increases, it may mean that more women are getting breast cancer. However, it could also mean that more breast cancers are being found because of an increase in screening.

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. 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).

How incidence rates are calculated

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.

Adjusting for age

Breast cancer becomes more common as women grow older. 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. This is done by calculating the breast cancer rates for each age group (such as 45- to 49-year-olds) separately, and then figuring out what the total breast cancer rate would have been if the proportion of people in each age group in the population that's being studied was the same as that of the standard population. 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.

Trends over time

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.

Confidence intervals

Because numbers for breast cancer rates and trends are not exact, this report 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 a breast cancer incidence rate was reported as 120 per 100,000 women, with a confidence interval of 105 to 135, the real rate might not be exactly 120 per 100,000, but it's very unlikely that it's less than 105 or more than 135.

Breast cancer incidence rates and trends

Breast cancer incidence rates and trends are shown in Table 2.1 for:

- United States
- State of Florida
- Each county of Florida

For the State of Florida, rates are also shown by race for Whites, Blacks/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, rates are shown by ethnicity for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race).

The rates in Table 2.1 are shown per 100,000 females from 2006 to 2010.

Table 2.1. Female breast cancer incidence rates and trends

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age-adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
US (states with available data)	145,332,861	198,602	122.1	121.9 : 122.4	-0.2%	-2.0% : 1.7%
Florida	9,457,566	13,724	114.3	113.4 : 115.1	-0.5%	-2.1% : 1.1%
White	7,543,101	11,899	114.9	114.0 : 115.9	-0.7%	-2.2% : 0.8%
Black/African-American	1,596,613	1,461	105.4	103.0 : 107.9	-0.2%	-4.6% : 4.4%
AIAN	45,732	15	43.0	33.2 : 54.8	2.7%	-14.9% : 23.9%
API	272,120	151	56.9	52.7 : 61.3	1.2%	-1.8% : 4.4%
Non-Hispanic/ Latina	7,442,786	11,845	118.0	117.0 : 119.0	-0.1%	-1.6% : 1.6%
Hispanic/ Latina	2,014,780	1,879	96.5	94.6 : 98.5	-2.3%	-4.9% : 0.4%
Alachua County	125,773	155	132.5	123.1 : 142.3	5.6%	-0.5% : 12.1%
Baker County	12,686	14	106.9	82.9 : 135.8	17.8%	-7.3% : 49.8%
Bay County	84,228	117	115.2	105.9 : 125.1	-0.5%	-15.6% : 17.4%
Bradford County	12,453	13	78.4	60.1 : 101.0	5.4%	NA
Brevard County	275,679	461	117.0	112.1 : 122.1	-3.5%	-9.0% : 2.2%
Broward County	893,482	1,258	119.1	116.2 : 122.2	0.7%	-4.1% : 5.8%
Calhoun County	6,598	6	74.4	50.2 : 106.8	18.0%	-17.3% : 68.3%
Charlotte County	81,953	146	97.9	89.6 : 106.9	-2.9%	-16.2% : 12.5%
Citrus County	72,601	149	113.2	104.0 : 123.2	4.9%	-4.1% : 14.7%
Clay County	94,787	122	118.2	108.9 : 128.1	-1.8%	-15.5% : 14.2%
Collier County	160,073	235	96.4	90.5 : 102.6	0.4%	-7.2% : 8.7%
Columbia County	32,293	38	90.8	78.1 : 105.1	3.5%	-16.7% : 28.6%
DeSoto County	14,978	21	110.0	88.9 : 134.8	-3.1%	-23.3% : 22.3%
Dixie County	7,482	12	105.4	78.8 : 139.2	4.9%	-30.0% : 57.1%
Duval County	440,291	612	132.7	128.0 : 137.6	-1.3%	-5.4% : 2.9%
Escambia County	150,391	214	119.4	112.2 : 126.9	-0.9%	-9.4% : 8.4%
Flagler County	47,529	81	112.3	100.8 : 124.8	-6.6%	-27.7% : 20.6%
Franklin County	4,934	6	87.6	58.8 : 127.4	-1.6%	-33.4% : 45.4%
Gadsden County	23,617	32	114.7	97.3 : 134.5	-1.1%	-30.6% : 40.9%
Gilchrist County	8,037	12	114.7	86.7 : 149.6	-3.3%	-21.8% : 19.5%
Glades County	5,383	6	76.4	49.7 : 113.7	15.6%	-44.0% : 138.6%
Gulf County	6,433	10	101.8	74.0 : 137.8	1.4%	-15.1% : 21.1%

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age-adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Hamilton County	6,025	6	87.5	59.0 : 125.5	8.9%	-21.7% : 51.3%
Hardee County	12,737	9	65.5	47.6 : 87.9	27.7%	6.0% : 53.9%
Hendry County	17,836	17	97.1	77.3 : 120.3	-1.7%	-30.1% : 38.4%
Hernando County	88,807	145	103.9	95.9 : 112.5	-5.0%	NA
Highlands County	50,488	78	87.9	77.8 : 99.0	2.5%	-6.9% : 12.8%
Hillsborough County	614,521	808	124.9	121.1 : 128.9	2.4%	-1.0% : 5.9%
Holmes County	9,358	7	55.9	38.4 : 79.2	-1.4%	-29.6% : 38.1%
Indian River County	69,880	126	111.5	102.2 : 121.5	-10.0%	-18.0% : -1.3%
Jackson County	22,586	16	51.3	40.3 : 64.6	-8.6%	-25.4% : 12.2%
Jefferson County	6,940	11	119.6	89.7 : 157.2	-18.3%	-38.2% : 7.9%
Lafayette County	3,291	SN	SN	SN	SN	SN
Lake County	150,053	278	122.4	115.6 : 129.5	-1.3%	-4.7% : 2.2%
Lee County	308,021	467	105.8	101.2 : 110.5	1.2%	-8.6% : 12.1%
Leon County	141,701	150	118.6	110.1 : 127.6	-0.1%	-18.1% : 22.0%
Levy County	20,567	29	97.7	82.1 : 115.8	-5.1%	-32.6% : 33.5%
Liberty County	3,223	4	109.9	67.8 : 169.8	3.6%	-32.6% : 59.2%
Madison County	9,238	8	68.3	47.6 : 95.2	8.2%	-26.3% : 58.9%
Manatee County	164,227	260	107.8	101.6 : 114.2	4.9%	-1.5% : 11.7%
Marion County	169,620	311	117.9	111.7 : 124.5	1.5%	-4.3% : 7.5%
Martin County	72,853	138	116.2	106.8 : 126.3	3.8%	-4.7% : 13.0%
Miami-Dade County	1,262,184	1,537	105.3	103.0 : 107.7	-2.6%	-5.8% : 0.7%
Monroe County	34,107	53	108.5	95.4 : 123.2	11.7%	-3.5% : 29.2%
Nassau County	35,997	63	136.8	121.8 : 153.2	7.1%	-15.4% : 35.6%
Okaloosa County	90,456	134	127.1	117.5 : 137.2	-7.7%	-16.3% : 1.9%
Okeechobee County	18,474	25	116.6	96.5 : 139.6	3.6%	-0.6% : 8.1%
Orange County	565,771	633	117.1	113.1 : 121.3	-1.5%	NA
Osceola County	131,569	142	105.5	97.8 : 113.6	4.6%	-1.5% : 11.1%
Palm Beach County	670,031	1,126	118.7	115.5 : 122.1	0.9%	-3.5% : 5.5%
Pasco County	234,542	353	108.8	103.5 : 114.2	0.0%	-4.7% : 4.9%
Pinellas County	477,657	852	121.5	117.7 : 125.5	-3.9%	-7.9% : 0.2%
Polk County	300,298	414	108.4	103.6 : 113.3	2.0%	-3.2% : 7.6%
Putnam County	37,602	58	111.9	98.9 : 126.3	-0.5%	NA
St. Johns County	92,714	149	127.5	118.3 : 137.2	-2.6%	-11.7% : 7.5%
St. Lucie County	137,432	188	102.5	95.8 : 109.6	0.0%	-13.0% : 14.9%
Santa Rosa County	73,286	101	123.4	112.7 : 134.8	-1.0%	NA
Sarasota County	196,512	426	124.6	118.7 : 130.9	0.5%	-6.4% : 7.8%
Seminole County	214,660	269	112.7	106.7 : 119.0	-3.0%	-7.4% : 1.7%
Sumter County	40,708	95	108.9	95.3 : 124.2	-6.2%	NA

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age-adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Suwannee County	20,408	27	98.2	82.0 : 117.1	5.8%	NA
Taylor County	9,913	15	113.0	87.9 : 143.6	10.8%	-17.8% : 49.2%
Union County	5,390	10	188.1	139.8 : 247.6	-10.5%	-40.1% : 33.8%
Volusia County	253,451	405	110.8	105.8 : 116.0	-1.0%	-7.1% : 5.6%
Wakulla County	13,510	16	107.6	85.1 : 134.4	0.0%	-16.9% : 20.5%
Walton County	26,084	32	90.8	76.7 : 106.8	-4.4%	-28.6% : 28.2%
Washington County	11,156	8	51.0	36.0 : 70.8	13.9%	NA

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.

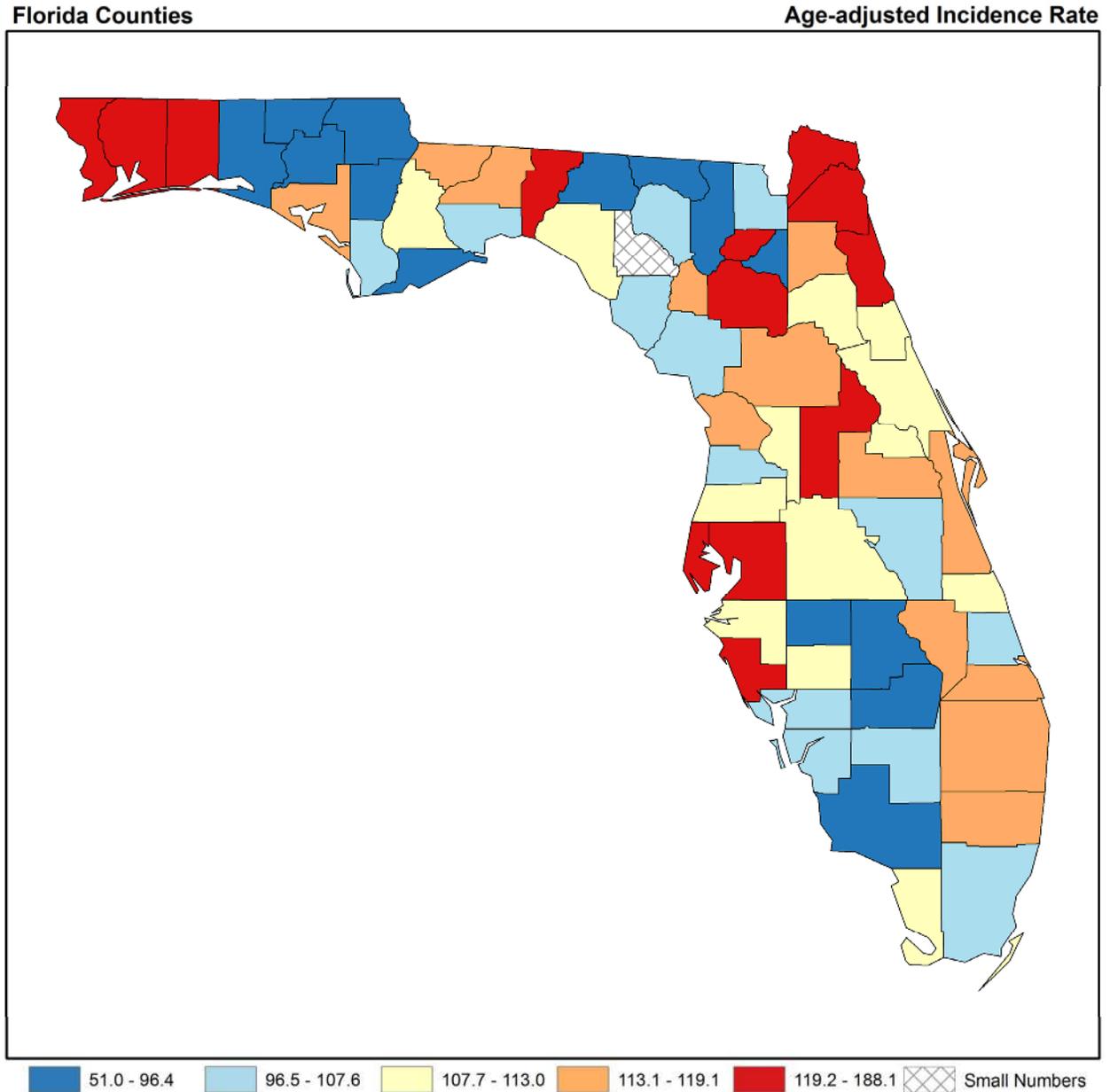
Rates are in cases per 100,000.

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

Source: NAACCR – CINA Deluxe Analytic File.

Map of incidence rates

Figure 2.1 shows a map of breast cancer incidence rates for the counties in Florida. When the numbers of cases used to compute the rates are small (15 cases or fewer for the five-year data period), those rates are unreliable and are shown as “small numbers” on the map.



*Map with counties labeled is available in Appendix.
Data are for years 2006-2010.
Rates are in cases per 100,000.
Age-adjusted rates are adjusted to the 2000 US standard population.
Source: NAACCR – CINA Deluxe Analytic File.

Figure 2.1. Female breast cancer age-adjusted incidence rates

Conclusions: Breast cancer incidence rates and trends

Overall, the breast cancer incidence rate in the State of Florida was lower than that observed in the US as a whole and the incidence trend was slightly lower than the US as a whole.

For the United States, breast cancer incidence in Blacks/African-Americans is lower than in Whites overall. The most recent estimated breast cancer incidence rates for APIs and AIANs were lower than for Non-Hispanic Whites and Blacks/African-Americans. The most recent estimated incidence rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks/African-Americans. For the State of Florida, the incidence rate was significantly lower among Blacks/African-Americans than Whites, significantly lower among APIs than Whites, and significantly 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 state as a whole:

- Alachua County
- Broward County (Komen Miami/Ft. Lauderdale)
- Duval County (Komen North Florida)
- Hillsborough County (Komen Florida Suncoast)
- Lake County (Komen Central Florida)
- Nassau County (Komen North Florida)
- Okaloosa County
- Palm Beach County (Komen South Florida)
- Pinellas County (Komen Florida Suncoast)
- St. Johns County (Komen North Florida)
- Sarasota County (Komen Florida Suncoast)
- Union County

The incidence rate was significantly lower in the following counties:

- Bradford County
- Calhoun County
- Charlotte County (Komen Southwest Florida)
- Collier County (Komen Southwest Florida)
- Columbia County
- Hardee County
- Hernando County
- Highlands County
- Holmes County
- Jackson County
- Lee County (Komen Southwest Florida)
- Madison County
- Miami-Dade County (Komen Miami/Ft. Lauderdale)
- Polk County (Komen Florida Suncoast)
- St. Lucie County (Komen South Florida)
- Walton County

- Washington County

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

- Hardee County

The rest of the counties had incidence rates and trends that were not significantly different than the state 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

A fundamental goal is to reduce the number of women dying from breast cancer.

Death rate trends should always be negative: death rates should be getting lower over time.

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. Like incidence rates, death rates may be calculated for all women or for specific groups of women (e.g. Black/African-American women).

How death rates are calculated

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.

Like incidence rates, death rates are often shown in terms of 100,000 women and adjusted for age.

Death rate trends

As with incidence rates, 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.

Confidence intervals

As with incidence rates, this report includes the confidence interval of the age-adjusted breast cancer death rates and trends because the numbers are not exact. The confidence interval is 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.

Breast cancer death rates and trends

Breast cancer death rates and trends are shown in Table 2.2 for:

- United States
- State of Florida
- Each county of Florida

For the state, rates are also shown by race for Whites, Blacks/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, rates are shown by ethnicity for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race).

The rates in Table 2.2 are shown per 100,000 females from 2006 to 2010. The HP2020 death rate target is included for reference.

Table 2.2. Female breast cancer death rates and trends

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age-adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
US	154,540,194	40,736	22.6	22.5 : 22.7	-1.9%	-2.0% : -1.8%
HP2020	-	-	20.6*	-	-	-
Florida	9,457,566	2,723	21.3	20.9 : 21.6	-1.4%	-2.2% : -0.6%
White	7,543,101	2,310	20.4	20.0 : 20.8	-1.5%	-2.0% : -1.1%
Black/African-American	1,596,613	389	29.1	27.8 : 30.5	-1.1%	-1.6% : -0.7%
AIAN	45,732	SN	SN	SN	SN	SN
API	272,120	22	9.2	7.4 : 11.1	0.4%	-2.1% : 2.9%
Non-Hispanic/ Latina	7,442,786	2,434	22.5	22.1 : 22.9	-1.3%	-1.7% : -0.9%
Hispanic/ Latina	2,014,780	289	15.0	14.2 : 15.8	-2.3%	-2.8% : -1.8%
Alachua County	125,773	28	22.9	19.2 : 27.1	-1.1%	-2.4% : 0.2%
Baker County	12,686	SN	SN	SN	SN	SN
Bay County	84,228	25	23.9	19.9 : 28.6	-1.6%	-2.9% : -0.2%
Bradford County	12,453	3	20.7	11.8 : 34.1	-2.1%	-5.1% : 1.0%
Brevard County	275,679	96	22.7	20.7 : 24.9	0.3%	-2.5% : 3.2%
Broward County	893,482	254	22.3	21.0 : 23.6	-2.4%	-2.9% : -1.9%
Calhoun County	6,598	SN	SN	SN	SN	SN
Charlotte County	81,953	36	21.4	17.9 : 25.6	-0.8%	-2.3% : 0.8%
Citrus County	72,601	33	23.9	19.8 : 28.7	-1.1%	-2.7% : 0.4%
Clay County	94,787	25	25.2	20.9 : 30.1	-1.8%	-3.9% : 0.3%
Collier County	160,073	45	16.5	14.3 : 19.0	-2.6%	-4.0% : -1.2%
Columbia County	32,293	10	23.8	17.5 : 31.9	-1.7%	-3.8% : 0.4%

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age-adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
DeSoto County	14,978	5	25.3	16.2 : 38.1	NA	NA
Dixie County	7,482	SN	SN	SN	SN	SN
Duval County	440,291	126	27.4	25.3 : 29.6	-1.0%	-1.6% : -0.3%
Escambia County	150,391	45	23.9	20.9 : 27.3	-1.5%	-2.5% : -0.4%
Flagler County	47,529	14	18.0	13.9 : 23.2	13.3%	-10.8% : 43.8%
Franklin County	4,934	SN	SN	SN	SN	SN
Gadsden County	23,617	7	23.2	15.9 : 32.9	-1.7%	-4.3% : 1.0%
Gilchrist County	8,037	SN	SN	SN	SN	SN
Glades County	5,383	SN	SN	SN	SN	SN
Gulf County	6,433	SN	SN	SN	SN	SN
Hamilton County	6,025	SN	SN	SN	SN	SN
Hardee County	12,737	SN	SN	SN	SN	SN
Hendry County	17,836	3	19.2	10.9 : 31.1	NA	NA
Hernando County	88,807	33	21.6	18.2 : 25.5	-2.5%	-3.9% : -1.0%
Highlands County	50,488	19	20.5	16.0 : 26.0	-2.9%	-5.2% : -0.6%
Hillsborough County	614,521	153	23.4	21.8 : 25.2	-1.9%	-2.5% : -1.3%
Holmes County	9,358	SN	SN	SN	SN	SN
Indian River County	69,880	26	18.4	15.2 : 22.2	-2.1%	-4.5% : 0.3%
Jackson County	22,586	8	23.6	16.7 : 32.7	-0.5%	-2.8% : 1.8%
Jefferson County	6,940	4	33.9	20.0 : 55.7	0.5%	-2.9% : 4.0%
Lafayette County	3,291	SN	SN	SN	SN	SN
Lake County	150,053	51	20.9	18.3 : 23.8	-2.3%	-3.6% : -0.9%
Lee County	308,021	85	18.1	16.3 : 20.0	-2.7%	-3.5% : -1.8%
Leon County	141,701	26	20.9	17.4 : 24.9	-3.4%	-4.9% : -1.9%
Levy County	20,567	7	26.4	17.9 : 37.8	-0.7%	-3.6% : 2.2%
Liberty County	3,223	SN	SN	SN	SN	SN
Madison County	9,238	3	23.2	13.2 : 39.0	NA	NA
Manatee County	164,227	47	17.4	15.1 : 20.0	-3.3%	-4.5% : -2.0%
Marion County	169,620	51	18.5	16.1 : 21.2	-2.1%	-3.6% : -0.4%
Martin County	72,853	27	20.4	16.8 : 24.7	-0.2%	-4.1% : 3.8%
Miami-Dade County	1,262,184	305	20.2	19.2 : 21.2	-2.7%	-3.1% : -2.3%
Monroe County	34,107	12	25.1	18.9 : 33.0	-0.8%	-3.1% : 1.5%
Nassau County	35,997	10	20.9	15.4 : 28.0	-1.4%	-4.3% : 1.6%
Okaloosa County	90,456	25	24.0	19.9 : 28.6	-1.4%	-2.7% : -0.1%

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age-adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Okeechobee County	18,474	5	23.1	14.9 : 34.4	1.0%	-1.8% : 3.9%
Orange County	565,771	123	23.1	21.3 : 25.0	-2.3%	-3.2% : -1.4%
Osceola County	131,569	31	24.1	20.4 : 28.2	-0.6%	-2.1% : 1.0%
Palm Beach County	670,031	226	21.3	20.0 : 22.7	-2.5%	-3.2% : -1.8%
Pasco County	234,542	71	20.0	17.9 : 22.3	-2.5%	-3.6% : -1.3%
Pinellas County	477,657	157	20.0	18.5 : 21.5	-2.4%	-3.2% : -1.7%
Polk County	300,298	82	20.9	18.8 : 23.1	-1.7%	-2.7% : -0.6%
Putnam County	37,602	11	19.3	14.3 : 25.7	-1.7%	-3.6% : 0.3%
Santa Rosa County	73,286	17	21.4	17.0 : 26.6	-0.2%	-2.3% : 1.9%
Sarasota County	196,512	82	21.1	18.9 : 23.7	-2.0%	-3.2% : -0.8%
Seminole County	214,660	54	22.6	20.0 : 25.5	-2.3%	-3.3% : -1.3%
St. Johns County	92,714	27	21.5	17.9 : 25.6	-1.5%	-3.5% : 0.6%
St. Lucie County	137,432	40	20.2	17.4 : 23.4	-2.4%	-3.6% : -1.2%
Sumter County	40,708	17	17.3	12.7 : 23.7	-3.0%	-5.2% : -0.8%
Suwannee County	20,408	7	23.2	16.0 : 33.0	-0.6%	-4.0% : 2.9%
Taylor County	9,913	5	38.2	24.0 : 58.2	0.1%	-3.6% : 4.0%
Union County	5,390	SN	SN	SN	SN	SN
Volusia County	253,451	83	20.2	18.2 : 22.3	-2.1%	-2.8% : -1.3%
Wakulla County	13,510	SN	SN	SN	SN	SN
Walton County	26,084	10	27.6	20.2 : 37.1	1.1%	-1.6% : 3.8%
Washington County	11,156	3	21.2	12.3 : 35.1	SN	SN

*Target as of the writing of this report.

NA – data not available.

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

Data are for years 2006-2010.

Rates are in deaths per 100,000.

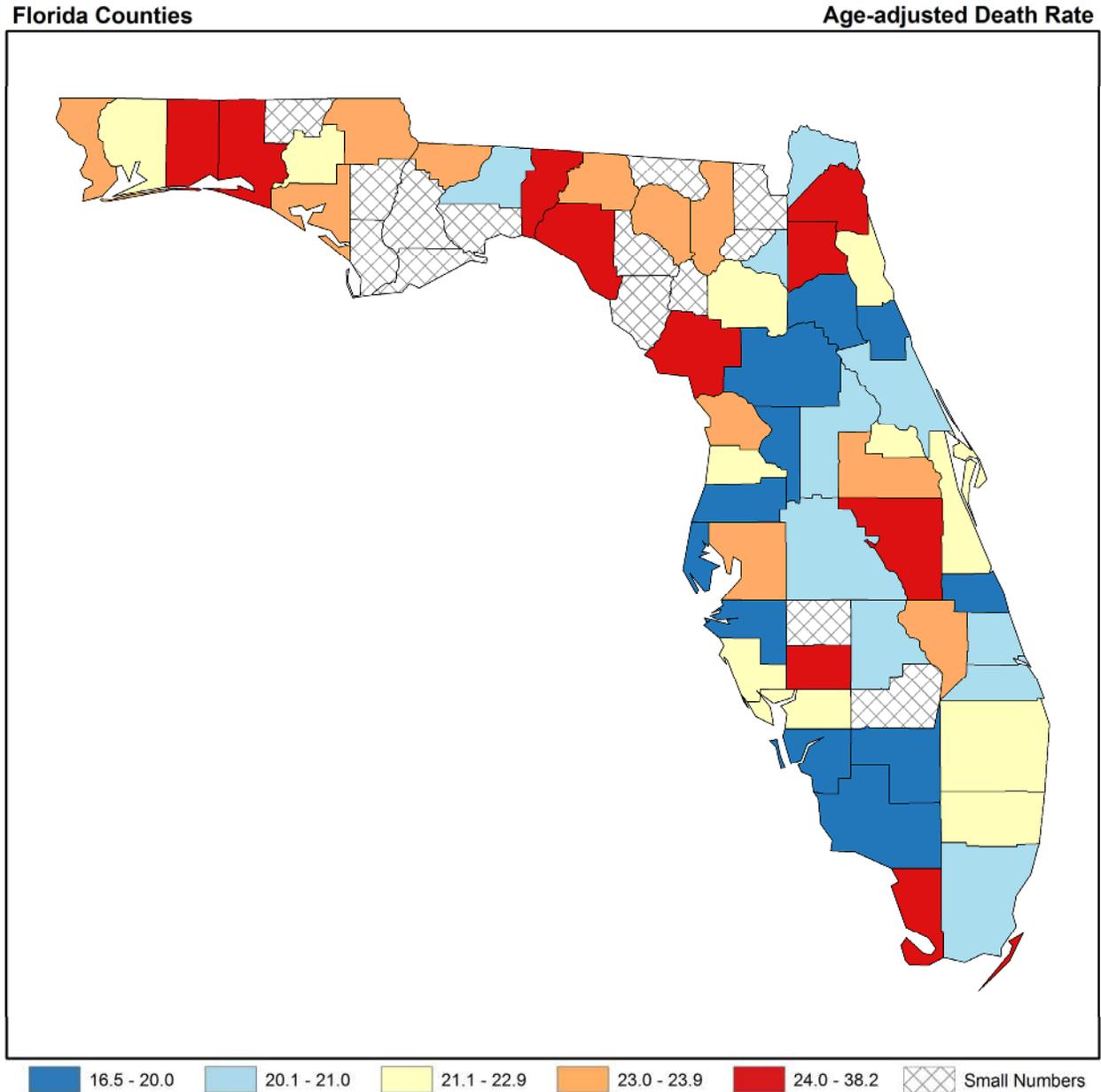
Age-adjusted rates are adjusted to the 2000 US standard population.

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

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

Map of death rates

Figure 2.2 shows a map of breast cancer death rates for the counties in Florida. When the numbers of deaths used to compute the rates are small (15 cases or fewer for the 5-year data period), those rates are unreliable and are shown as “small numbers” on the map.



*Map with counties labeled is available in Appendix.
Data are for years 2006-2010.
Rates are in deaths per 100,000.
Age-adjusted rates are adjusted to the 2000 US standard population.
Source: CDC – NCHS death data in SEER*Stat.

Figure 2.2. Female breast cancer age-adjusted death rates

Conclusions: Breast cancer death rates and trends

Overall, the breast cancer death rate in the State of Florida was slightly lower than that observed in the US as a whole and the death rate trend was higher than the US as a whole. 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 State of Florida, the death rate was higher among Blacks/African-Americans than Whites and significantly lower among APIs than Whites. There were not enough data available within the state to report on AIANs so comparisons cannot be made for this racial group. The death rate among Hispanics/Latinas was significantly lower than among Non-Hispanics/Latinas.

The following counties had a death rate **significantly higher** than the state as a whole:

- Duval County (Komen North Florida)
- Hillsborough County (Komen Florida Suncoast)
- Taylor County

The death rate was significantly lower in the following counties:

- Collier County (Komen Southwest Florida)
- Lee County (Komen Southwest Florida)
- Manatee County (Komen Florida Suncoast)

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

- Miami-Dade County (Komen Miami/Ft. Lauderdale)

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

Late-Stage Diagnosis

People with breast cancer have a better chance of survival if their disease is found early and treated.

The stage of cancer indicates the extent of the disease within the body. Most often, the higher the stage of the cancer, the poorer the chances for survival will be.

If a breast cancer is determined to be regional or distant stage, it's considered a late-stage diagnosis.

Medical experts agree that it's best for breast cancer to be detected early. Women whose breast cancers are found at an early stage usually need less aggressive treatment and do better

overall than those whose cancers are found at a late-stage (US Preventive Services Task Force, 2009).

How late-stage breast cancer incidence rates are calculated

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, 2001). 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.

Like incidence and death rates, late-stage incidence rates are often shown in terms of 100,000 women and adjusted for age.

Proportion of late-stage diagnoses

Another way to assess the impact of late-stage breast cancer diagnosis on a community is to look at the proportion (percentage) of breast cancers that are diagnosed at late-stage. By lowering the proportion of female breast cancer cases that are diagnosed at late-stage in a given community, it is reasonable to expect that the community will observe a lower breast cancer death rate.

A change in the proportion of late-stage breast cancer cases can be a good indicator of the direction the breast cancer death rate will move over time. In addition, the proportion of late-stage breast cancer is an indicator of the success of early detection efforts (Taplin et al., 2004). So, in addition to the late-stage breast cancer incidence rate, this report includes the late-stage breast cancer proportion (the ratio of late-stage cases to total cases). Note that the late-stage incidence rate may go down over time yet the late-stage proportion may not if the overall incidence rate is declining as well.

How late-stage breast cancer proportions are calculated

The late-stage breast cancer proportion is the ratio between the number of cases diagnosed at regional or distant stages and the total number of breast cancer cases that have been diagnosed and staged in a particular geographic area. It is important to note that cases with unknown stage are excluded from this calculation. However, assuming the size and distribution of cases with unknown stage does not change significantly, the late-stage proportion can be a very good indicator of the need for or effectiveness of early detection interventions.

Confidence intervals

As with incidence and death rates, this report includes the confidence interval of the late-stage incidence rates and trends, and the late-stage proportions and trends because the numbers are not exact. The confidence interval is 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.

Late-stage breast cancer incidence, proportions and trends

Late-stage breast cancer incidence rates, proportions and trends are shown in Tables 2.3 and 2.4 for:

- United States
- State of Florida
- Each county of Florida

For the State of Florida, rates are also shown by race for Whites, Blacks/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, rates are shown by ethnicity for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race).

The rates in Table 2.3 are shown per 100,000 females from 2006 to 2010. The HP2020 late-stage incidence rate target is included for reference.

Table 2.3. Female breast cancer late-stage incidence rates and trends

Population Group	Female Population (Annual Average)	# of New Late-stage Cases (Annual Average)	Age-adjusted Late-stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
US (states with available data)	145,332,861	70,218	43.7	43.5 : 43.8	-1.2%	-3.1% : 0.8%
HP2020	-	-	41.0*	-	-	-
Florida	9,457,566	4,844	41.8	41.2 : 42.3	-0.8%	NA
White	7,543,101	4,036	40.8	40.2 : 41.4	-1.0%	-2.7% : 0.8%
Black/African-American	1,596,613	680	48.2	46.6 : 49.9	-1.0%	-6.3% : 4.6%
AIAN	45,732	6	15.3	9.9 : 22.5	11.2%	-45.7% : 127.9%
API	272,120	60	22.2	19.6 : 24.9	1.1%	-9.5% : 13.0%
Non-Hispanic/ Latina	7,442,786	4,085	42.5	41.9 : 43.2	-0.3%	-1.2% : 0.6%
Hispanic/ Latina	2,014,780	759	38.8	37.5 : 40.0	-2.3%	-6.6% : 2.2%
Alachua County	125,773	51	45.0	39.5 : 51.0	1.0%	-3.8% : 6.1%
Baker County	12,686	5	34.4	21.9 : 51.7	43.9%	-6.3% : 120.9%
Bay County	84,228	44	43.5	37.8 : 49.8	-3.3%	-25.5% : 25.4%
Bradford County	12,453	6	36.8	24.6 : 53.4	-1.6%	-29.9% : 38.2%
Brevard County	275,679	154	41.2	38.2 : 44.4	-1.0%	-6.3% : 4.6%
Broward County	893,482	468	45.1	43.2 : 47.0	1.4%	-6.2% : 9.6%
Calhoun County	6,598	SN	SN	SN	SN	SN
Charlotte County	81,953	44	33.5	28.3 : 39.5	-5.9%	-30.8% : 28.0%
Citrus County	72,601	55	46.1	39.9 : 53.2	8.9%	2.4% : 15.8%
Clay County	94,787	43	40.7	35.4 : 46.7	5.1%	-12.2% : 25.7%
Collier County	160,073	66	29.9	26.5 : 33.7	2.5%	-9.7% : 16.2%
Columbia County	32,293	11	27.7	20.8 : 36.2	4.5%	-35.9% : 70.3%
DeSoto County	14,978	7	37.3	25.2 : 53.2	17.4%	NA

Population Group	Female Population (Annual Average)	# of New Late-stage Cases (Annual Average)	Age-adjusted Late-stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Dixie County	7,482	4	41.9	24.7 : 67.2	13.4%	-45.6% : 136.6%
Duval County	440,291	235	51.0	48.1 : 54.1	-0.2%	-7.8% : 7.9%
Escambia County	150,391	74	41.9	37.6 : 46.5	-2.6%	-14.8% : 11.5%
Flagler County	47,529	35	51.5	43.6 : 60.5	-4.5%	-29.3% : 29.0%
Franklin County	4,934	3	50.2	28.3 : 84.1	-10.8%	-39.5% : 31.7%
Gadsden County	23,617	14	49.7	38.4 : 63.5	0.8%	-36.4% : 59.8%
Gilchrist County	8,037	4	44.7	27.7 : 68.9	-23.5%	-60.8% : 49.1%
Glades County	5,383	SN	SN	SN	SN	SN
Gulf County	6,433	3	37.3	21.1 : 62.5	27.1%	-34.3% : 145.9%
Hamilton County	6,025	SN	SN	SN	SN	SN
Hardee County	12,737	4	30.4	18.4 : 47.1	55.7%	1.5% : 138.8%
Hendry County	17,836	5	31.5	20.7 : 45.8	-18.6%	-36.9% : 4.9%
Hernando County	88,807	53	39.5	34.5 : 45.2	-4.1%	-12.9% : 5.6%
Highlands County	50,488	31	38.4	31.5 : 46.5	-4.9%	-15.5% : 7.0%
Hillsborough County	614,521	304	47.3	44.9 : 49.8	0.8%	-3.5% : 5.2%
Holmes County	9,358	3	25.6	14.4 : 42.7	-15.3%	-41.2% : 21.8%
Indian River County	69,880	32	30.8	25.8 : 36.5	-13.7%	-37.7% : 19.8%
Jackson County	22,586	8	25.2	17.7 : 34.9	-2.7%	-43.0% : 66.3%
Jefferson County	6,940	4	46.9	29.0 : 72.9	-23.9%	NA
Lafayette County	3,291	SN	SN	SN	SN	SN
Lake County	150,053	99	46.6	42.2 : 51.2	1.3%	-6.9% : 10.2%
Lee County	308,021	150	37.2	34.4 : 40.1	0.8%	-6.8% : 9.1%
Leon County	141,701	51	39.9	35.1 : 45.2	3.8%	-20.3% : 35.2%
Levy County	20,567	13	45.6	34.8 : 59.0	-10.0%	-33.0% : 20.9%
Liberty County	3,223	SN	SN	SN	SN	SN
Madison County	9,238	SN	SN	SN	SN	SN
Manatee County	164,227	87	39.0	35.2 : 43.2	-1.1%	NA
Marion County	169,620	95	38.8	35.1 : 42.9	6.4%	-1.8% : 15.3%
Martin County	72,853	49	42.9	37.1 : 49.4	5.8%	-19.6% : 39.4%
Miami-Dade County	1,262,184	615	42.8	41.3 : 44.4	-3.2%	-8.0% : 1.8%
Monroe County	34,107	16	32.7	25.7 : 41.4	0.5%	-28.2% : 40.7%
Nassau County	35,997	22	47.2	38.6 : 57.3	-0.2%	-17.5% : 20.8%
Okaloosa County	90,456	42	40.4	35.0 : 46.4	-13.1%	-32.3% : 11.7%
Okeechobee County	18,474	10	51.0	37.6 : 67.6	9.6%	-20.1% : 50.2%
Orange County	565,771	240	44.2	41.7 : 46.8	-0.8%	-4.0% : 2.6%
Osceola County	131,569	57	42.0	37.2 : 47.2	2.9%	-14.5% : 23.8%
Palm Beach County	670,031	370	41.5	39.5 : 43.6	-2.1%	-11.1% : 7.8%

Population Group	Female Population (Annual Average)	# of New Late-stage Cases (Annual Average)	Age-adjusted Late-stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Pasco County	234,542	117	37.5	34.4 : 40.9	0.7%	NA
Pinellas County	477,657	289	43.3	41.0 : 45.8	-0.6%	-4.5% : 3.5%
Polk County	300,298	146	39.4	36.5 : 42.5	1.9%	-7.7% : 12.6%
Putnam County	37,602	19	39.5	31.7 : 48.7	-1.0%	-6.6% : 4.8%
St. Johns County	92,714	47	41.4	36.2 : 47.3	-0.1%	NA
St. Lucie County	137,432	65	37.8	33.6 : 42.3	-2.0%	-24.1% : 26.5%
Santa Rosa County	73,286	32	39.2	33.3 : 45.9	-4.3%	-19.3% : 13.5%
Sarasota County	196,512	122	39.8	36.3 : 43.7	-2.1%	-6.5% : 2.5%
Seminole County	214,660	96	40.6	37.0 : 44.5	-3.9%	-9.5% : 2.0%
Sumter County	40,708	28	39.4	30.6 : 50.4	-20.3%	-43.4% : 12.2%
Suwannee County	20,408	8	29.4	20.9 : 40.4	-3.5%	-27.8% : 28.9%
Taylor County	9,913	5	45.1	29.2 : 67.0	-7.2%	-38.3% : 39.6%
Union County	5,390	4	65.5	38.4 : 104.4	10.1%	-40.2% : 102.8%
Volusia County	253,451	147	42.5	39.3 : 45.9	-0.2%	-7.7% : 8.0%
Wakulla County	13,510	6	39.4	26.3 : 56.9	6.2%	-29.5% : 60.0%
Walton County	26,084	8	23.9	17.0 : 32.9	-18.8%	-44.8% : 19.5%
Washington County	11,156	4	29.2	18.1 : 45.3	16.5%	-36.9% : 115.1%

* Target as of the writing of this report.

NA – data not available.

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

Data are for years 2006-2010.

Rates are in cases per 100,000.

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

Source: NAACCR – CINA Deluxe Analytic Files

Table 2.4. Female breast cancer late-stage proportion and trends and distant-stage proportion for women age 50-74

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late-stage (Annual Average)	Proportion Diagnosed at Late-stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant-stage
US	111,487	39,543	35.5%	35.3% : 35.6%	-1.4%	-1.7% : -1.1%	5.6%
Florida	7,656	2,724	35.6%	35.1% : 36.1%	-0.7%	-3.1% : 1.8%	5.5%
White	6,661	2,287	34.3%	33.8% : 34.8%	-0.7%	-3.1% : 1.7%	5.1%
Black/African-American	796	372	46.7%	45.2% : 48.3%	-1.5%	-7.6% : 4.9%	9.6%
AIAN	9	3	37.0%	23.0% : 50.9%	-4.2%	-50.4% : 84.9%	SN
API	81	30	37.2%	32.5% : 41.9%	4.2%	NA	4.2%
Non-Hispanic/Latina	6,657	2,316	34.8%	34.3% : 35.3%	-0.8%	-2.7% : 1.2%	5.5%
Hispanic/Latina	999	408	40.9%	39.5% : 42.2%	0.0%	-6.2% : 6.6%	5.6%

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late-stage (Annual Average)	Proportion Diagnosed at Late-stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant-stage
Alachua County	87	27	31.4%	27.1% : 35.8%	-3.5%	NA	5.0%
Baker County	9	4	40.9%	26.4% : 55.4%	6.7%	-23.0% : 48.0%	SN
Bay County	68	26	38.4%	33.3% : 43.6%	-4.9%	-19.6% : 12.5%	6.7%
Bradford County	9	4	45.5%	30.7% : 60.2%	-6.5%	-27.4% : 20.5%	SN
Brevard County	252	84	33.4%	30.8% : 36.0%	1.6%	-7.1% : 11.3%	5.6%
Broward County	644	248	38.5%	36.8% : 40.2%	-0.2%	-7.6% : 7.9%	7.1%
Calhoun County	SN	SN	SN	SN	SN	SN	SN
Charlotte County	84	24	29.2%	24.8% : 33.5%	-3.7%	-22.3% : 19.5%	2.4%
Citrus County	92	33	36.0%	31.6% : 40.4%	1.3%	-15.4% : 21.2%	4.8%
Clay County	75	26	34.8%	29.9% : 39.6%	2.2%	-9.6% : 15.7%	5.3%
Collier County	139	39	28.4%	25.0% : 31.7%	-5.1%	NA	4.5%
Columbia County	25	8	31.5%	23.4% : 39.6%	1.8%	-20.1% : 29.6%	6.3%
DeSoto County	11	4	31.6%	19.5% : 43.6%	9.3%	-9.7% : 32.2%	SN
Dixie County	8	3	31.7%	17.5% : 46.0%	3.9%	-27.0% : 48.0%	SN
Duval County	344	132	38.5%	36.2% : 40.8%	-1.1%	-7.0% : 5.3%	6.5%
Escambia County	127	45	35.2%	31.5% : 39.0%	-2.3%	-19.9% : 19.1%	6.2%
Flagler County	47	24	51.3%	44.9% : 57.6%	-3.1%	-28.1% : 30.5%	6.8%
Franklin County	4	2	50.0%	29.1% : 70.9%	SN	SN	SN
Gadsden County	19	8	42.3%	32.4% : 52.1%	-6.6%	-30.6% : 25.6%	5.2%
Gilchrist County	7	3	45.7%	29.2% : 62.2%	SN	SN	SN
Glades County	4	1	31.6%	10.7% : 52.5%	SN	SN	SN
Gulf County	6	2	40.0%	22.5% : 57.5%	SN	SN	SN
Hamilton County	3	2	50.0%	25.5% : 74.5%	SN	SN	SN
Hardee County	4	2	47.6%	26.3% : 69.0%	SN	SN	SN
Hendry County	10	3	30.0%	17.3% : 42.7%	-1.8%	-44.7% : 74.4%	8.0%
Hernando County	82	30	36.4%	31.8% : 41.1%	0.5%	-11.0% : 13.6%	3.2%
Highlands County	43	17	38.8%	32.3% : 45.3%	-5.6%	-14.0% : 3.7%	6.5%
Hillsborough County	440	162	36.8%	34.8% : 38.9%	-0.9%	-4.5% : 2.9%	6.1%
Holmes County	4	2	52.6%	30.2% : 75.1%	SN	SN	SN
Indian River County	69	18	25.5%	20.9% : 30.1%	1.1%	NA	4.3%
Jackson County	10	5	54.0%	40.2% : 67.8%	0.8%	-27.3% : 39.9%	18.0%
Jefferson County	6	3	51.6%	34.0% : 69.2%	2.9%	-26.0% : 43.0%	12.9%
Lafayette County	SN	SN	SN	SN	SN	SN	SN
Lake County	165	61	36.8%	33.5% : 40.1%	-0.3%	-6.5% : 6.3%	6.9%
Lee County	273	89	32.5%	30.0% : 35.0%	-0.5%	-9.3% : 9.2%	4.6%
Leon County	88	31	35.1%	30.6% : 39.5%	-0.3%	-9.5% : 9.9%	6.6%
Levy County	21	8	40.4%	31.0% : 49.8%	-2.9%	-21.7% : 20.3%	9.6%

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late-stage (Annual Average)	Proportion Diagnosed at Late-stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant-stage
Liberty County	SN	SN	SN	SN	SN	SN	SN
Madison County	4	1	26.3%	6.5% : 46.1%	SN	SN	SN
Manatee County	153	50	32.6%	29.3% : 36.0%	-5.0%	-26.9% : 23.5%	4.0%
Marion County	180	54	30.1%	27.1% : 33.1%	4.3%	-4.0% : 13.4%	4.7%
Martin County	75	27	36.1%	31.2% : 41.0%	-3.2%	-22.4% : 20.6%	5.6%
Miami-Dade County	826	338	40.9%	39.4% : 42.4%	-1.1%	-7.7% : 6.0%	6.4%
Monroe County	34	11	32.9%	25.9% : 40.0%	-16.8%	-32.0% : 1.9%	4.1%
Nassau County	40	15	37.2%	30.5% : 43.9%	-1.8%	-20.9% : 21.9%	4.0%
Okaloosa County	75	24	31.7%	27.0% : 36.4%	-3.7%	-17.0% : 11.8%	4.3%
Okeechobee County	14	6	42.0%	30.4% : 53.7%	22.3%	0.5% : 48.7%	SN
Orange County	362	134	37.1%	34.9% : 39.3%	-0.8%	NA	6.4%
Osceola County	78	29	37.5%	32.7% : 42.3%	2.8%	-17.9% : 28.9%	6.9%
Palm Beach County	575	193	33.5%	31.8% : 35.2%	-3.2%	-12.4% : 6.9%	4.9%
Pasco County	194	64	32.8%	29.9% : 35.8%	3.9%	NA	5.8%
Pinellas County	469	160	34.1%	32.2% : 36.0%	5.4%	-2.3% : 13.7%	4.3%
Polk County	246	87	35.5%	32.9% : 38.2%	2.9%	-5.9% : 12.6%	5.6%
Putnam County	38	12	32.5%	25.8% : 39.1%	-5.4%	-23.3% : 16.6%	4.7%
St. Johns County	90	27	30.2%	25.9% : 34.4%	1.0%	-18.5% : 25.3%	3.3%
St. Lucie County	108	41	37.9%	33.8% : 42.0%	-1.3%	-20.4% : 22.3%	5.9%
Santa Rosa County	58	17	29.2%	24.0% : 34.4%	-12.1%	-32.0% : 13.5%	1.4%
Sarasota County	229	66	28.9%	26.3% : 31.5%	-2.0%	-9.4% : 6.0%	2.9%
Seminole County	154	56	36.1%	32.7% : 39.5%	-3.0%	-10.0% : 4.6%	5.3%
Sumter County	65	19	29.3%	24.4% : 34.3%	-10.1%	-28.3% : 12.8%	6.8%
Suwannee County	19	6	31.2%	21.8% : 40.6%	-20.6%	-37.0% : 0.2%	SN
Taylor County	9	3	34.1%	20.1% : 48.1%	17.1%	-19.5% : 70.4%	SN
Union County	4	1	28.6%	9.2% : 47.9%	SN	SN	SN
Volusia County	234	88	37.4%	34.7% : 40.2%	1.2%	-1.7% : 4.1%	6.0%
Wakulla County	11	4	36.4%	23.7% : 49.1%	17.1%	NA	SN
Walton County	20	6	28.7%	19.9% : 37.5%	-22.1%	-29.1% : -14.5%	SN
Washington County	5	3	56.0%	36.5% : 75.5%	SN	SN	SN

NA – data not available.

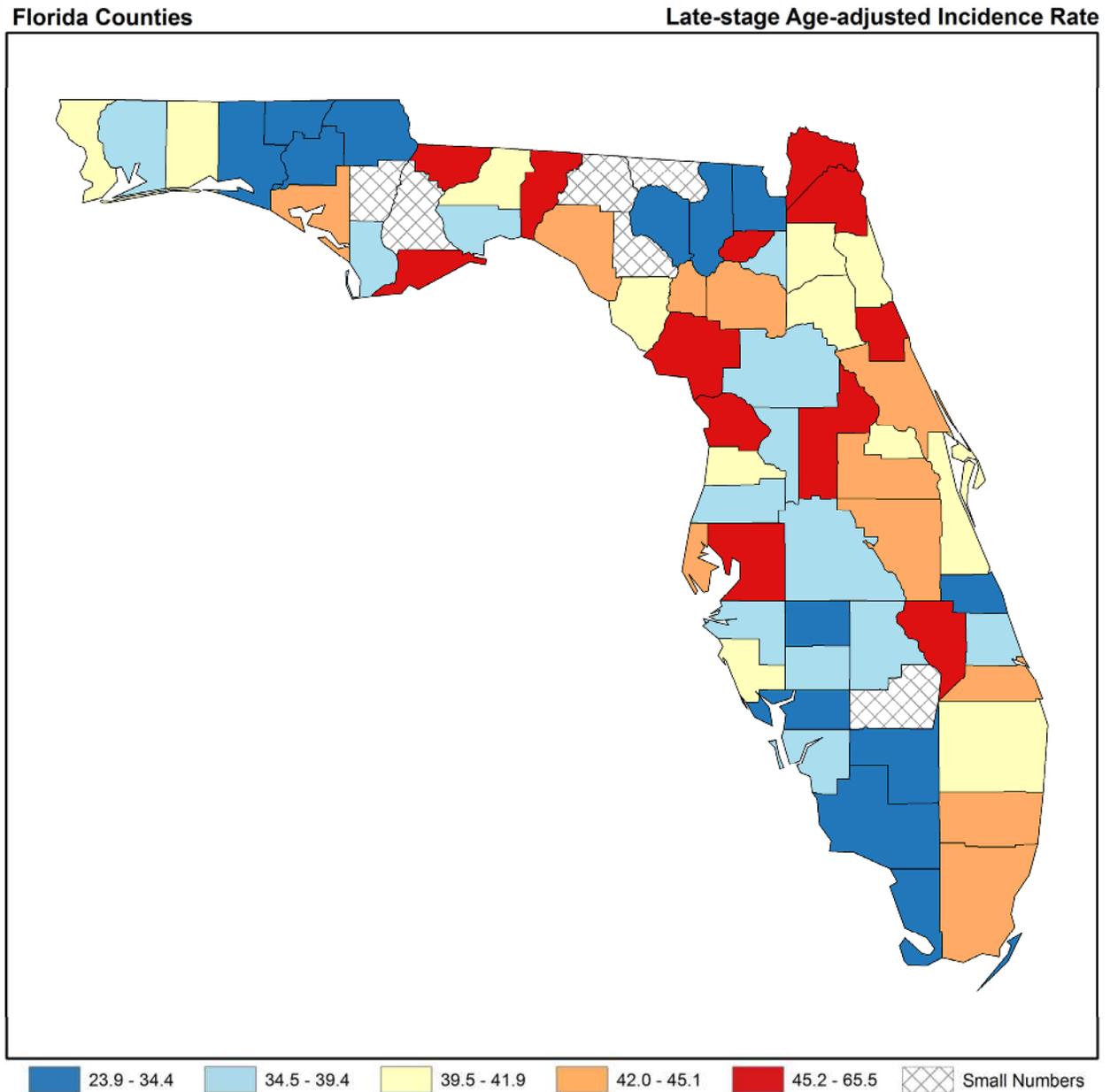
SN – data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

Data are for years 2006-2010.

Source: NAACCR – CINA Deluxe Analytic File.

Map of late-stage incidence rates

Figure 2.3 shows a map of late-stage incidence rates for the counties in Florida. When the numbers of cases used to compute the rates are small (15 cases or fewer for the five-year data period), those rates are unreliable and are shown as “small numbers” on the map.



*Map with counties labeled is available in Appendix.
Data are for years 2006-2010.
Rates are in cases per 100,000.
Age-adjusted rates are adjusted to the 2000 US standard population.
Source: NAACCR – CINA Deluxe Analytic File.

Figure 2.3. Female breast cancer age-adjusted late-stage incidence rates

Conclusions: Breast cancer late-stage rates, proportions and trends

Late-stage incidence rates and trends

Overall, the breast cancer late-stage incidence rate in the State of Florida was slightly lower than that observed in the US as a whole and the late-stage incidence trend was slightly higher than the US as a whole.

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 State of Florida, the late-stage incidence rate was significantly higher among Blacks/African-Americans than Whites, significantly lower among APIs than Whites, and significantly lower among AIANs than Whites. The late-stage incidence rate among Hispanics/Latinas was slightly lower than among Non-Hispanics/Latinas.

The following counties had a late-stage incidence rate **significantly higher** than the state as a whole:

- Broward County (Komen Miami/Ft. Lauderdale)
- Duval County (Komen North Florida)
- Flagler County (Komen Central Florida)
- Hillsborough County (Komen Florida Suncoast)

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

- Charlotte County (Komen Southwest Florida)
- Collier County (Komen Southwest Florida)
- Columbia County
- Indian River County
- Jackson County
- Lee County (Komen Southwest Florida)
- Pasco County (Komen Florida Suncoast)
- Suwannee County
- Walton County

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

Late-stage proportions and trends

Overall, the breast cancer late-stage proportion in the State of Florida was similar to that observed in the US as a whole and the late-stage proportion trend was higher than the US as a whole.

For the State of Florida, the late-stage proportion was significantly higher among Blacks/African-Americans than Whites, slightly higher among APIs than Whites, and slightly higher among AIANs than Whites. The late-stage proportion among Hispanics/Latinas was significantly higher than among Non-Hispanics/Latinas.

The following counties had a late-stage proportion **significantly higher** than the state as a whole:

- Broward County (Komen Miami/Ft. Lauderdale)
- Duval County (Komen North Florida)
- Flagler County (Komen Central Florida)
- Jackson County
- Miami-Dade County (Komen Miami/Ft. Lauderdale)
- Washington County

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

- Charlotte County (Komen Southwest Florida)
- Collier County (Komen Southwest Florida)
- Indian River County
- Lee County (Komen Southwest Florida)
- Marion County (Komen Central Florida)
- St. Johns County (Komen North Florida)
- Santa Rosa County
- Sarasota County (Komen Florida Suncoast)
- Sumter County (Komen Central Florida)

Significantly more favorable trends in breast cancer late-stage proportions were observed in the following county:

- Walton County

The rest of the counties had late-stage proportions and trends that were not significantly different than the state as a whole or did not have enough data available.

Mammography Screening

Getting regular screening mammograms (along with treatment if diagnosed) lowers the risk of dying from breast cancer.

Knowing whether or not women are getting regular screening mammograms as recommended by their health care providers can be used to identify groups of women who need help in meeting screening recommendations.

Why mammograms matter

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. The US Preventive Services Task Force found that having screening mammograms reduces the breast cancer death rate for women age 40 to 74. The benefit of mammograms is greater for women age 50 to 74. It's especially high for women age 60 to 69 (Nelson et al., 2009). 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.

Mammography recommendations

Table 2.5 shows some screening recommendations among major organizations for women at average risk.

Table 2.5. Breast cancer screening recommendations for women at average risk.*

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

*As of October 2015

Where the data come from

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).

For some counties, data about mammograms are not shown because not enough women were included in the survey (less than 10 survey responses).

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 percent of the women interviewed are Hispanic/Latina, but only 10 percent of the total women in the area are Hispanic/Latina, weighting is used to account for this difference.

Calculating the mammography screening proportion

This 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.

Confidence intervals

As with incidence and death rates, this report includes the confidence interval of the screening proportions because numbers are not exact. The confidence interval is 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.

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.

Breast cancer screening proportions

Breast cancer screening proportions are shown in Table 2.6 for:

- United States
- State of Florida
- Each county in Florida

For the State of Florida, proportions are also shown for Whites, Blacks/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, proportions are shown for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race).

The proportions in Table 2.6 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 source is the BRFSS, which only surveys women in this age range for mammography usage. The data on the proportion of women who had a mammogram in the last two years 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.

Table 2.6. 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%
Florida	3,120	2,374	76.6%	74.6% : 78.4%
White	2,679	2,030	77.0%	75.0% : 78.9%
Black/African-American	309	251	75.7%	67.9% : 82.1%
AIAN	24	13	73.7%	47.1% : 89.8%
API	35	26	77.8%	58.3% : 89.8%
Hispanic/ Latina	268	217	82.2%	75.5% : 87.3%
Non-Hispanic/ Latina	2,817	2,133	75.5%	73.4% : 77.4%
Alachua County	39	33	84.0%	63.7% : 94.0%
Baker County	26	18	71.0%	44.4% : 88.2%
Bay County	27	18	67.7%	38.3% : 87.6%
Bradford County	27	20	86.7%	67.0% : 95.4%
Brevard County	45	32	64.3%	46.7% : 78.8%
Broward County	199	165	79.8%	71.8% : 86.0%
Calhoun County	16	14	74.2%	46.1% : 90.7%
Charlotte County	30	22	72.2%	52.0% : 86.1%
Citrus County	31	21	70.1%	51.3% : 84.0%
Clay County	17	15	84.7%	57.3% : 95.8%
Collier County	48	39	81.9%	63.3% : 92.2%
Columbia County	SN	SN	SN	SN
DeSoto County	28	21	75.1%	54.9% : 88.2%
Dixie County	17	8	44.0%	21.7% : 69.0%
Duval County	84	62	68.2%	54.1% : 79.6%
Escambia County	36	26	76.9%	55.1% : 90.0%
Flagler County	120	97	79.3%	70.8% : 85.9%
Franklin County	SN	SN	SN	SN
Gadsden County	20	20	100%	75.4% : 100%
Gilchrist County	15	9	67.2%	31.4% : 90.2%
Glades County	SN	SN	SN	SN
Gulf County	31	25	75.8%	57.1% : 88.1%
Hamilton County	14	8	40.9%	20.5% : 65.1%
Hardee County	17	8	36.9%	18.2% : 60.6%
Hendry County	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Hernando County	26	20	55.5%	33.3% : 75.8%
Highlands County	31	19	60.6%	38.0% : 79.4%
Hillsborough County	134	93	75.0%	65.0% : 82.8%
Holmes County	27	19	72.2%	51.0% : 86.6%
Indian River County	30	22	73.5%	51.0% : 88.0%
Jackson County	15	10	68.6%	35.1% : 89.8%
Jefferson County	15	11	69.2%	40.8% : 88.0%
Lafayette County	SN	SN	SN	SN
Lake County	47	41	89.4%	73.7% : 96.2%
Lee County	65	51	79.8%	65.9% : 89.0%
Leon County	48	40	89.3%	72.0% : 96.5%
Levy County	56	35	62.3%	48.0% : 74.8%
Liberty County	SN	SN	SN	SN
Madison County	23	18	69.7%	40.0% : 88.8%
Manatee County	59	44	74.0%	58.4% : 85.3%
Marion County	84	66	80.8%	67.6% : 89.4%
Martin County	33	21	74.3%	52.6% : 88.2%
Miami-Dade County	254	200	78.3%	71.1% : 84.0%
Monroe County	SN	SN	SN	SN
Nassau County	17	9	42.0%	21.5% : 65.7%
Okaloosa County	37	32	84.1%	67.4% : 93.1%
Okeechobee County	36	25	69.2%	48.7% : 84.2%
Orange County	94	71	74.7%	61.8% : 84.3%
Osceola County	39	31	88.0%	69.6% : 95.9%
Palm Beach County	127	104	82.9%	73.0% : 89.7%
Pasco County	52	38	67.6%	49.9% : 81.4%
Pinellas County	95	80	85.6%	74.7% : 92.3%
Polk County	58	50	86.3%	72.2% : 93.8%
Putnam County	13	8	43.2%	18.6% : 71.7%
Santa Rosa County	21	18	89.7%	64.6% : 97.7%
Sarasota County	68	56	76.0%	62.4% : 85.9%
Seminole County	32	24	73.8%	55.3% : 86.6%
St. Johns County	37	31	69.8%	50.5% : 84.0%
St. Lucie County	35	26	78.6%	55.2% : 91.7%
Sumter County	29	25	88.4%	70.3% : 96.1%

Population Group	# of Women Interviewed (Sample Size)	# w/ Self-Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Suwannee County	62	43	66.4%	51.0% : 79.0%
Taylor County	33	26	81.2%	62.8% : 91.7%
Union County	13	7	48.5%	23.7% : 74.1%
Volusia County	51	33	63.9%	45.9% : 78.7%
Wakulla County	25	15	57.7%	32.8% : 79.2%
Walton County	63	47	75.9%	62.6% : 85.6%
Washington County	35	23	62.5%	36.8% : 82.7%

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

Data are for 2012.

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

Conclusions: Breast cancer screening proportions

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

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 State of Florida, the screening proportion was not significantly different among Blacks/African-Americans and Whites, not significantly different among APIs and Whites, and not significantly different among AIANs and Whites. The screening proportion among Hispanics/Latinas was not significantly different from the proportion among Non-Hispanics/Latinas.

The following counties had a screening proportion **significantly lower** than the state as a whole:

- Dixie County
- Hamilton County
- Hardee County
- Nassau County (Komen North Florida)
- Putnam County
- Union County

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

Demographic and Socioeconomic Measures

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.

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.

Demographic measures in the report include:

- Age
- Race
- Ethnicity (whether or not a woman is Hispanic/Latina – can be of any race)

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.

Socioeconomic measures for the areas covered in this report include:

- Education level
- Income
- Unemployment
- Immigration (how many of the people living in an area were born in another country)
- Use of the English language
- Proportion of people who have health insurance
- Proportion of people who live in rural areas
- Proportion of people who in areas that don't have enough doctors or health care facilities (medically underserved areas)

Why these data matter

Demographic and socioeconomic data can be used to identify which groups of women need the most help and to figure out the best ways to help them.

Important details about these data

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 of 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.

Where the data come from

The demographic and socioeconomic sources of data are:

- Race/ethnicity, age, and sex data come from the US Census Bureau estimates for July 1, 2011.
- Most of the other data come from the US Census Bureau’s American Community Survey program. The most recent data for counties are for 2007 to 2011.
- Health insurance data come from the US Census Bureau’s Small Area Health Insurance Estimates program. The most recent data are for 2011.
- Rural population data come from the US Census Bureau’s 2010 population survey.
- Medically underserved area information comes from the US Department of Health and Human Services, Health Resources and Services Administration. The most recent data are for 2013.

Population characteristics

Race, ethnicity, and age data for the US, the state, and each of the counties in the state is presented in Table 2.7:

- Race percentages for four race groups: White, Black/African-American, American Indian and Alaska Native (AIAN), and Asian and Pacific Islander (API).
- Percentages of women of Hispanic/Latina ethnicity (who may be of any race).
- Percentages of women in three age-groups: 40 and older, 50 and older, and 65 and older.

Table 2.8 shows socioeconomic data for the US, the state, and each of the counties in the state:

- Educational attainment as the percentage of the population 25 years and over that did not complete high school
- Income relative to the US poverty level. Two levels are shown – the percentage of people with income less than the poverty level (below 100 percent) and less than 2.5 times the poverty level (below 250 percent).
- Percentage of the population who are unemployed
- Percentage of the population born outside the US
- Percentage of households that are linguistically isolated (all adults in the household have difficulty with English)
- Percentage living in rural areas
- Percentage living in medically underserved areas as determined by the Health Resources and Services Administration (HRSA)
- Percentage between ages 40 and 64 who have no health insurance

Table 2.7. 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 %
Florida	79.1 %	17.3 %	0.5 %	3.1 %	77.4 %	22.6 %	53.2 %	39.6 %	19.1 %
Alachua County	71.9 %	21.9 %	0.4 %	5.9 %	91.1 %	8.9 %	39.8 %	29.5 %	12.2 %
Baker County	87.3 %	11.7 %	0.3 %	0.7 %	98.0 %	2.0 %	46.3 %	33.0 %	13.0 %
Bay County	84.2 %	12.0 %	0.8 %	3.0 %	95.2 %	4.8 %	51.3 %	37.3 %	16.2 %
Bradford County	82.1 %	16.3 %	0.5 %	1.1 %	97.4 %	2.6 %	53.4 %	41.2 %	19.2 %
Brevard County	85.4 %	11.2 %	0.5 %	2.9 %	91.6 %	8.4 %	59.4 %	45.5 %	22.3 %
Broward County	66.6 %	29.0 %	0.4 %	4.0 %	74.2 %	25.8 %	51.3 %	35.9 %	16.0 %
Calhoun County	86.6 %	11.1 %	1.4 %	0.9 %	96.4 %	3.6 %	52.0 %	39.1 %	18.9 %
Charlotte County	91.9 %	6.1 %	0.3 %	1.7 %	94.2 %	5.8 %	72.0 %	61.5 %	35.7 %
Citrus County	94.5 %	3.2 %	0.4 %	1.9 %	95.3 %	4.7 %	69.4 %	58.2 %	33.1 %
Clay County	84.2 %	11.2 %	0.6 %	4.0 %	92.1 %	7.9 %	49.1 %	33.5 %	13.2 %
Collier County	90.8 %	7.1 %	0.5 %	1.6 %	75.5 %	24.5 %	60.9 %	48.9 %	28.1 %
Columbia County	80.7 %	17.2 %	0.6 %	1.5 %	95.3 %	4.7 %	52.6 %	39.6 %	17.6 %
DeSoto County	86.2 %	11.8 %	1.1 %	0.9 %	75.1 %	24.9 %	51.6 %	40.7 %	22.0 %
Dixie County	92.5 %	6.3 %	0.6 %	0.6 %	97.2 %	2.8 %	58.5 %	46.2 %	21.9 %
Duval County	62.9 %	31.8 %	0.5 %	4.9 %	92.5 %	7.5 %	46.6 %	32.7 %	13.0 %
Escambia County	70.3 %	25.0 %	1.0 %	3.7 %	95.6 %	4.4 %	49.8 %	37.3 %	16.5 %
Flagler County	84.5 %	12.5 %	0.3 %	2.7 %	91.1 %	8.9 %	61.4 %	49.2 %	25.4 %
Franklin County	89.5 %	9.4 %	0.6 %	0.5 %	97.0 %	3.0 %	58.6 %	46.3 %	21.2 %
Gadsden County	40.4 %	58.2 %	0.6 %	0.9 %	90.7 %	9.3 %	50.4 %	37.2 %	15.9 %
Gilchrist County	94.7 %	4.1 %	0.7 %	0.6 %	95.5 %	4.5 %	55.5 %	42.4 %	20.0 %
Glades County	84.9 %	8.6 %	5.8 %	0.7 %	80.8 %	19.2 %	56.5 %	44.9 %	24.3 %
Gulf County	86.6 %	12.2 %	0.5 %	0.7 %	97.7 %	2.3 %	59.3 %	46.2 %	21.9 %
Hamilton County	66.3 %	31.6 %	1.1 %	1.0 %	91.9 %	8.1 %	53.6 %	41.0 %	18.0 %
Hardee County	89.8 %	7.4 %	1.3 %	1.5 %	59.5 %	40.5 %	43.1 %	31.1 %	14.9 %
Hendry County	81.9 %	14.5 %	2.3 %	1.2 %	53.2 %	46.8 %	42.2 %	29.0 %	12.9 %
Hernando County	91.9 %	5.9 %	0.5 %	1.7 %	89.5 %	10.5 %	61.2 %	48.9 %	26.9 %
Highlands County	87.0 %	10.5 %	0.6 %	1.8 %	83.9 %	16.1 %	64.3 %	54.4 %	33.8 %
Hillsborough County	76.5 %	18.6 %	0.6 %	4.3 %	75.4 %	24.6 %	46.8 %	32.3 %	13.3 %
Holmes County	94.6 %	3.4 %	1.1 %	0.9 %	98.1 %	1.9 %	54.7 %	42.0 %	20.2 %
Indian River County	88.6 %	9.5 %	0.4 %	1.4 %	89.4 %	10.6 %	63.5 %	51.7 %	29.1 %
Jackson County	73.3 %	25.1 %	0.7 %	0.8 %	97.0 %	3.0 %	54.1 %	41.5 %	20.1 %
Jefferson County	62.5 %	36.6 %	0.3 %	0.6 %	96.9 %	3.1 %	59.6 %	46.3 %	20.0 %
Lafayette County	92.4 %	6.9 %	0.3 %	0.5 %	89.8 %	10.2 %	49.2 %	36.9 %	18.0 %
Lake County	86.1 %	10.8 %	0.7 %	2.5 %	87.8 %	12.2 %	58.9 %	46.5 %	25.8 %

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
Lee County	88.3 %	9.3 %	0.5 %	2.0 %	82.3 %	17.7 %	58.7 %	46.7 %	24.9 %
Leon County	63.4 %	33.0 %	0.4 %	3.3 %	94.1 %	5.9 %	39.0 %	28.0 %	10.8 %
Levy County	87.9 %	10.7 %	0.6 %	0.9 %	93.0 %	7.0 %	57.9 %	44.5 %	20.0 %
Liberty County	87.0 %	10.7 %	1.5 %	0.7 %	95.6 %	4.4 %	48.5 %	34.5 %	15.2 %
Madison County	59.2 %	39.9 %	0.5 %	0.4 %	96.5 %	3.5 %	53.1 %	40.6 %	19.2 %
Manatee County	87.4 %	9.9 %	0.5 %	2.2 %	86.0 %	14.0 %	58.9 %	46.6 %	24.8 %
Marion County	84.2 %	13.5 %	0.5 %	1.8 %	89.4 %	10.6 %	60.8 %	48.8 %	27.0 %
Martin County	92.2 %	5.4 %	0.9 %	1.6 %	89.0 %	11.0 %	65.5 %	52.8 %	29.7 %
Miami-Dade County	77.8 %	20.0 %	0.3 %	1.9 %	35.0 %	65.0 %	49.7 %	34.8 %	16.2 %
Monroe County	91.2 %	6.6 %	0.5 %	1.7 %	78.9 %	21.1 %	59.8 %	44.5 %	17.5 %
Nassau County	90.8 %	7.4 %	0.5 %	1.3 %	96.7 %	3.3 %	55.7 %	41.3 %	17.6 %
Okealoosa County	84.1 %	10.2 %	0.7 %	5.0 %	93.1 %	6.9 %	50.1 %	36.3 %	15.8 %
Okeechobee County	90.7 %	6.7 %	1.3 %	1.3 %	78.1 %	21.9 %	49.6 %	37.6 %	18.8 %
Orange County	70.5 %	22.9 %	0.6 %	6.0 %	72.5 %	27.5 %	43.0 %	28.7 %	11.2 %
Osceola County	82.0 %	13.4 %	0.8 %	3.7 %	53.4 %	46.6 %	45.6 %	30.5 %	12.3 %
Palm Beach County	78.0 %	18.5 %	0.5 %	2.9 %	81.3 %	18.7 %	57.1 %	43.7 %	23.8 %
Pasco County	91.5 %	5.2 %	0.5 %	2.8 %	88.1 %	11.9 %	56.9 %	43.2 %	22.2 %
Pinellas County	84.6 %	11.3 %	0.4 %	3.6 %	91.9 %	8.1 %	60.6 %	46.9 %	23.5 %
Polk County	81.2 %	16.0 %	0.6 %	2.1 %	82.8 %	17.2 %	51.6 %	39.2 %	19.5 %
Putnam County	80.8 %	17.6 %	0.6 %	1.0 %	91.4 %	8.6 %	55.5 %	43.2 %	20.4 %
St. Johns County	90.7 %	6.3 %	0.3 %	2.6 %	94.5 %	5.5 %	55.0 %	39.6 %	16.9 %
St. Lucie County	76.7 %	20.5 %	0.6 %	2.2 %	83.8 %	16.2 %	55.1 %	41.9 %	21.5 %
Santa Rosa County	90.5 %	5.3 %	1.0 %	3.2 %	95.5 %	4.5 %	50.9 %	35.3 %	14.2 %
Sarasota County	92.6 %	5.3 %	0.3 %	1.8 %	92.3 %	7.7 %	68.0 %	56.5 %	33.1 %
Seminole County	82.5 %	12.5 %	0.5 %	4.5 %	82.2 %	17.8 %	50.0 %	34.6 %	13.7 %
Sumter County	92.6 %	6.0 %	0.4 %	1.0 %	95.6 %	4.4 %	81.2 %	75.0 %	47.5 %
Suwannee County	86.4 %	11.9 %	0.8 %	0.9 %	92.5 %	7.5 %	55.2 %	42.8 %	21.1 %
Taylor County	79.9 %	18.1 %	1.0 %	1.0 %	98.1 %	1.9 %	54.9 %	42.2 %	19.6 %
Union County	85.4 %	13.4 %	0.6 %	0.6 %	95.9 %	4.1 %	46.3 %	33.0 %	13.1 %
Volusia County	86.0 %	11.6 %	0.5 %	1.9 %	88.7 %	11.3 %	58.9 %	46.1 %	23.3 %
Wakulla County	87.1 %	11.2 %	0.7 %	0.9 %	97.2 %	2.8 %	49.8 %	35.1 %	12.9 %
Walton County	91.9 %	5.5 %	1.2 %	1.5 %	95.1 %	4.9 %	55.9 %	42.4 %	18.6 %
Washington County	84.9 %	12.6 %	1.5 %	0.9 %	97.3 %	2.7 %	54.2 %	40.5 %	18.8 %

Data are for 2011.

Data are in the percentage of women in the population.

Source: US Census Bureau – Population Estimates.

Table 2.8. 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 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 %
Florida	14.5 %	14.7 %	39.0 %	10.3 %	19.2 %	7.1 %	8.8 %	7.5 %	24.2 %
Alachua County	9.7 %	23.6 %	34.5 %	7.3 %	10.7 %	2.4 %	21.2 %	0.0 %	15.8 %
Baker County	21.6 %	16.5 %	41.7 %	11.0 %	1.0 %	0.0 %	59.5 %	100.0 %	17.8 %
Bay County	12.9 %	12.4 %	36.3 %	8.2 %	5.2 %	1.1 %	12.0 %	67.7 %	18.8 %
Bradford County	25.6 %	18.2 %	44.4 %	13.2 %	2.4 %	0.4 %	75.5 %	100.0 %	19.4 %
Brevard County	9.7 %	11.2 %	33.6 %	10.6 %	8.6 %	1.7 %	5.1 %	0.0 %	20.0 %
Broward County	12.7 %	13.0 %	36.7 %	10.5 %	31.2 %	8.5 %	0.0 %	0.0 %	26.2 %
Calhoun County	28.1 %	25.2 %	49.9 %	10.9 %	3.8 %	2.0 %	67.5 %	0.0 %	22.6 %
Charlotte County	11.6 %	11.4 %	36.0 %	13.0 %	9.3 %	1.9 %	8.9 %	0.0 %	22.0 %
Citrus County	14.8 %	15.8 %	44.4 %	15.0 %	5.1 %	0.9 %	34.5 %	0.0 %	23.2 %
Clay County	10.1 %	9.7 %	29.1 %	9.6 %	6.0 %	1.7 %	15.0 %	7.5 %	16.8 %
Collier County	14.7 %	13.5 %	33.4 %	9.5 %	23.3 %	8.1 %	8.5 %	0.0 %	25.9 %
Columbia County	18.8 %	16.2 %	46.3 %	16.0 %	3.6 %	1.1 %	62.1 %	0.0 %	21.2 %
DeSoto County	31.1 %	26.1 %	55.1 %	10.3 %	19.3 %	12.1 %	46.2 %	0.0 %	31.9 %
Dixie County	24.2 %	16.3 %	55.3 %	10.7 %	2.9 %	0.5 %	77.0 %	100.0 %	21.7 %
Duval County	12.5 %	14.9 %	36.6 %	10.0 %	9.1 %	2.6 %	2.9 %	4.3 %	18.8 %
Escambia County	12.9 %	16.9 %	40.2 %	10.9 %	5.9 %	1.9 %	8.3 %	4.8 %	18.9 %
Flagler County	9.9 %	13.3 %	37.7 %	10.3 %	13.2 %	4.2 %	10.3 %	0.0 %	22.0 %
Franklin County	20.6 %	24.0 %	40.9 %	9.6 %	3.3 %	0.5 %	68.0 %	0.0 %	21.6 %
Gadsden County	23.7 %	29.4 %	50.1 %	13.2 %	6.1 %	3.3 %	65.4 %	100.0 %	22.9 %
Gilchrist County	18.7 %	17.9 %	47.2 %	12.1 %	2.4 %	1.0 %	83.9 %	0.0 %	23.7 %
Glades County	26.0 %	19.5 %	41.1 %	10.6 %	16.8 %	8.2 %	70.6 %	100.0 %	28.0 %
Gulf County	22.7 %	17.5 %	40.3 %	10.5 %	3.5 %	1.4 %	77.1 %	0.0 %	20.0 %
Hamilton County	25.2 %	23.5 %	50.1 %	13.1 %	4.9 %	0.5 %	63.5 %	100.0 %	20.6 %
Hardee County	36.8 %	28.5 %	56.3 %	11.8 %	21.7 %	14.1 %	47.8 %	100.0 %	32.0 %
Hendry County	36.5 %	26.0 %	55.1 %	16.2 %	25.5 %	12.2 %	37.9 %	0.0 %	34.0 %
Hernando County	14.0 %	12.8 %	41.9 %	14.3 %	6.4 %	1.6 %	19.4 %	0.0 %	22.5 %
Highlands County	20.7 %	18.3 %	49.8 %	13.3 %	10.5 %	3.8 %	21.1 %	0.0 %	28.0 %
Hillsborough County	14.0 %	15.0 %	38.3 %	9.9 %	15.2 %	6.3 %	3.5 %	1.2 %	22.4 %
Holmes County	28.0 %	22.0 %	53.7 %	8.8 %	2.9 %	0.2 %	78.8 %	100.0 %	22.1 %
Indian River County	13.1 %	13.4 %	36.3 %	12.4 %	10.4 %	3.4 %	5.0 %	0.0 %	23.5 %
Jackson County	20.9 %	15.1 %	48.3 %	8.5 %	3.0 %	1.2 %	75.4 %	0.0 %	18.3 %
Jefferson County	19.0 %	16.1 %	43.1 %	10.7 %	3.1 %	1.6 %	100.0 %	0.0 %	20.5 %
Lafayette County	18.2 %	14.8 %	47.3 %	5.9 %	5.6 %	1.5 %	100.0 %	100.0 %	26.3 %
Lake County	12.9 %	11.4 %	36.8 %	9.7 %	8.6 %	2.2 %	19.3 %	0.0 %	22.0 %

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)
Lee County	13.0 %	13.5 %	35.9 %	11.9 %	15.2 %	5.5 %	5.8 %	0.0 %	24.6 %
Leon County	8.8 %	22.3 %	28.9 %	9.3 %	6.7 %	1.7 %	12.3 %	0.0 %	16.4 %
Levy County	19.3 %	22.6 %	51.4 %	12.7 %	3.9 %	0.9 %	92.0 %	0.0 %	25.7 %
Liberty County	26.8 %	21.4 %	46.3 %	21.2 %	2.9 %	1.9 %	100.0 %	100.0 %	19.8 %
Madison County	23.8 %	20.4 %	48.8 %	8.9 %	3.7 %	1.7 %	80.0 %	100.0 %	21.6 %
Manatee County	13.3 %	13.6 %	35.1 %	10.6 %	12.3 %	3.9 %	5.8 %	0.0 %	22.6 %
Marion County	15.2 %	16.5 %	44.0 %	12.6 %	7.9 %	2.6 %	31.0 %	0.0 %	24.6 %
Martin County	11.3 %	10.8 %	28.6 %	10.7 %	9.9 %	3.1 %	8.5 %	13.9 %	19.9 %
Miami-Dade County	22.4 %	17.9 %	49.9 %	9.9 %	51.2 %	26.7 %	0.4 %	8.9 %	37.5 %
Monroe County	10.7 %	11.6 %	34.7 %	6.1 %	17.3 %	5.4 %	8.7 %	100.0 %	24.5 %
Nassau County	13.4 %	9.4 %	29.2 %	8.8 %	2.7 %	0.2 %	48.1 %	100.0 %	17.4 %
Okaloosa County	9.3 %	11.7 %	29.9 %	8.3 %	7.2 %	2.4 %	12.1 %	5.3 %	17.0 %
Okeechobee County	31.0 %	23.7 %	48.4 %	11.8 %	12.7 %	6.5 %	36.5 %	0.0 %	28.8 %
Orange County	13.1 %	14.9 %	40.9 %	10.2 %	19.4 %	7.9 %	2.0 %	0.0 %	23.9 %
Osceola County	15.8 %	13.9 %	47.2 %	11.2 %	20.0 %	11.8 %	7.8 %	100.0 %	25.0 %
Palm Beach County	12.9 %	13.3 %	34.6 %	10.5 %	22.1 %	7.1 %	1.0 %	0.0 %	22.6 %
Pasco County	13.4 %	14.0 %	39.5 %	11.2 %	9.1 %	2.2 %	9.5 %	0.0 %	21.1 %
Pinellas County	11.7 %	12.6 %	36.0 %	9.0 %	11.2 %	3.1 %	0.3 %	0.0 %	21.3 %
Polk County	17.9 %	16.4 %	43.0 %	10.6 %	10.6 %	4.5 %	13.5 %	0.0 %	23.0 %
Putnam County	22.3 %	24.6 %	49.8 %	12.7 %	4.8 %	2.1 %	56.2 %	0.0 %	24.2 %
St. Johns County	7.5 %	9.5 %	23.7 %	7.1 %	6.3 %	1.1 %	23.8 %	0.0 %	13.9 %
St. Lucie County	16.8 %	15.3 %	42.3 %	14.1 %	15.7 %	5.2 %	3.4 %	0.0 %	26.5 %
Santa Rosa County	10.7 %	10.8 %	32.4 %	10.0 %	4.6 %	1.1 %	21.0 %	33.9 %	17.2 %
Sarasota County	8.9 %	11.0 %	32.7 %	10.7 %	11.5 %	2.4 %	4.3 %	0.0 %	21.5 %
Seminole County	8.9 %	10.0 %	29.4 %	8.8 %	11.5 %	3.1 %	3.2 %	7.5 %	18.4 %
Sumter County	14.5 %	11.2 %	34.2 %	11.2 %	5.7 %	0.9 %	35.0 %	100.0 %	17.5 %
Suwannee County	19.3 %	19.6 %	49.0 %	9.1 %	5.2 %	3.0 %	83.2 %	100.0 %	23.4 %
Taylor County	22.3 %	17.4 %	46.8 %	15.1 %	2.1 %	0.5 %	69.3 %	100.0 %	20.3 %
Union County	24.0 %	18.2 %	47.6 %	10.5 %	5.7 %	0.3 %	67.4 %	100.0 %	19.7 %
Volusia County	12.5 %	15.0 %	39.8 %	9.4 %	7.3 %	2.3 %	9.9 %	0.0 %	21.6 %
Wakulla County	13.5 %	12.8 %	32.7 %	9.9 %	2.7 %	0.0 %	61.7 %	100.0 %	16.7 %
Walton County	13.8 %	14.9 %	37.6 %	9.9 %	5.0 %	1.3 %	63.1 %	0.0 %	21.3 %
Washington County	20.2 %	20.3 %	48.1 %	11.7 %	2.6 %	0.6 %	84.6 %	100.0 %	22.1 %

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

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

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

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

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

Conclusions: Population characteristics

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

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

- Broward County (Komen Miami/Ft. Lauderdale)
- Duval County (Komen North Florida)
- Escambia County
- Gadsden County
- Hamilton County
- Jackson County
- Jefferson County
- Leon County
- Madison County
- Orange County (Komen Central Florida)

The following county has a substantially larger AIAN female population percentage than that of the state as a whole:

- Glades County (Komen Southwest Florida)

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

- Hardee County
- Hendry County (Komen Southwest Florida)
- Miami-Dade County (Komen Miami/Ft. Lauderdale)
- Osceola County (Komen Central Florida)

The following counties have substantially older female populations than that of the state as a whole:

- Charlotte County (Komen Southwest Florida)
- Citrus County
- Collier County (Komen Southwest Florida)
- Flagler County (Komen Central Florida)

- Hernando County
- Highlands County
- Indian River County
- Lake County (Komen Central Florida)
- Lee County (Komen Southwest Florida)
- Manatee County (Komen Florida Suncoast)
- Marion County (Komen Central Florida)
- Martin County (Komen South Florida)
- Sarasota County (Komen Florida Suncoast)
- Sumter County (Komen Central Florida)

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

- Baker County (Komen North Florida)
- Bradford County
- Calhoun County
- DeSoto County
- Dixie County
- Franklin County
- Gadsden County
- Glades County (Komen Southwest Florida)
- Gulf County
- Hamilton County
- Hardee County
- Hendry County (Komen Southwest Florida)
- Highlands County
- Holmes County
- Jackson County
- Liberty County
- Madison County
- Miami-Dade County (Komen Miami/Ft. Lauderdale)
- Okeechobee County
- Putnam County
- Taylor County
- Union County
- Washington County

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

- Calhoun County
- DeSoto County
- Gadsden County
- Hamilton County

- Hardee County
- Hendry County (Komen Southwest Florida)
- Holmes County
- Levy County
- Liberty County
- Madison County
- Okeechobee County
- Putnam County
- Washington County

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

- Citrus County
- Columbia County
- Hendry County (Komen Southwest Florida)
- Hernando County
- Liberty County
- St. Lucie County (Komen South Florida)
- Taylor County

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

- Hendry County (Komen Southwest Florida)
- Miami-Dade County (Komen Miami/Ft. Lauderdale)

The following counties have substantially larger percentages of adults without health insurance than does the state as a whole:

- DeSoto County
- Hardee County
- Hendry County (Komen Southwest Florida)
- Miami-Dade County (Komen Miami/Ft. Lauderdale)

Healthy People 2020 Forecasts

Healthy People 2020 is a major federal government program that has set specific targets (called “objectives”) for improving Americans’ health by the year 2020.

This report shows whether areas are likely to meet the two Healthy People 2020 objectives related to breast cancer: reducing breast cancer death rate and reducing the number of late-stage breast cancers.

Healthy People 2020 (HP2020) is a major federal government initiative that provides specific health objectives for communities and for the country as a whole (Healthy People 2020, 2010).

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.
- Reducing the number of breast cancers that are found at a late-stage.

The HP2020 objective for breast cancer death rates

As of the writing of this report, the HP2020 target for the breast cancer death rate is 20.6 breast-cancer related deaths per 100,000 females – a 10 percent improvement in comparison to the 2007 rate.

To see how well counties in Florida are progressing toward this target, this report uses the following information:

- County breast cancer death rate data for years 2006 to 2010.
- Estimates for the trend (annual percent change) in county breast cancer death rates 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 objective. 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 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.

The calculation was conducted using the following procedure:

- The annual percent change for 2006-2010 was calculated.
- Using 2008 (the middle of the period 2006-2010) as a starting point, the annual percent change was subtracted from (or added to) the expected death rate (based on the 2006-2010 death rate) for each year between 2010 and 2020.
- These calculated death rates were then compared with the target.
 - If the breast cancer death rate for 2006-2010 was already below the target, it is reported that the area “Currently meets target.”
 - If it would take more than 12 years (2008 to 2020) to meet the target, it is reported that the area would need “13 years or longer” to meet the target.
 - If the rate is currently below the target but the trend is increasing such that the target will no longer be met in 2020, it is reported that the area would need “13 years or longer” to meet the target.
 - In all other cases, the number of years it would take for the area to meet the target is reported. For example, if the area would meet the target in 2016, it would be reported as “eight years,” because it's eight years from 2008 to 2016.

The HP2020 objective for late-stage breast cancer diagnoses

Another Healthy People 2020 objective is a decrease in the number of breast cancers diagnosed at a late stage. As of the writing of this report, the HP2020 target for late-stage diagnosis rate is 41.0 late-stage cases per 100,000 females. For each county in the state, the late-stage incidence rate and trend are used to calculate the amount of time, in years, needed to meet the HP2020 target, assuming that the trend observed from 2006 to 2010 continues for years 2011 and beyond.

The calculation was conducted using the following procedure:

- The annual percent change for 2006-2010 was calculated.
- Using 2008 (the middle of the period 2006-2010) as a starting point, the annual percent change was subtracted from (or added to) the expected late-stage incidence rate (based on the 2006-2010 rate) for each year between 2010 and 2020.
- The calculated late-stage incidence rates were then compared with the target.
 - If the late-stage incidence rate for 2006-2010 was already below the target, it is reported that the area “Currently meets target.”
 - If it would take more than 12 years (2008 to 2020) to meet the target, it is reported that the area would need “13 years or longer” to meet the target.
 - If the rate is currently below the target but the trend is increasing such that the target will no longer be met in 2020, it is reported that the area would need “13 years or longer” to meet the target.
 - In all other cases, the number of years it would take for the area to meet the target is reported.

Identification of HP2020 breast cancer at-risk areas

Identifying geographic areas and groups of women with high needs will help develop effective, targeted breast cancer programs.

Priority areas are identified based on the time needed to meet Healthy People 2020 targets for breast cancer.

The purpose of this report is to combine evidence from many credible sources and use it to identify the highest HP2020 breast cancer priority areas (at-risk areas) for breast cancer programs (i.e., the areas of greatest need).

Classification of at-risk areas is 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 healthcare 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.

How counties are classified by need

Counties are classified as follows.

- 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 2.9 shows how counties are assigned to at-risk categories.

Table 2.9. Needs/At-risk 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.

Healthy People 2020 forecasts and at-risk areas

The results presented in Table 2.10 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 2.10. Breast cancer at-risk area for Florida with predicted time to achieve the HP2020 breast cancer targets and key population characteristics

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Baker County	Komen North Florida	Highest	SN	13 years or longer	Education, rural, medically underserved
Citrus County		Highest	13 years or longer	13 years or longer	Older, employment, rural
DeSoto County		Highest	NA	13 years or longer	Education, poverty, language, rural, insurance
Dixie County		Highest	SN	13 years or longer	Education, rural, medically underserved
Duval County	Komen North Florida	Highest	13 years or longer	13 years or longer	%Black/African-American
Gulf County		Highest	SN	13 years or longer	Education, rural
Hardee County		Highest	SN	13 years or longer	%Hispanic/Latina, education, poverty, language, rural, insurance, medically underserved
Okeechobee County		Highest	13 years or longer	13 years or longer	Education, poverty, rural
Osceola County	Komen Central Florida	Highest	13 years or longer	13 years or longer	%Hispanic/Latina, language, medically underserved
Union County		Highest	SN	13 years or longer	Education, rural, medically underserved
Wakulla County		Highest	SN	13 years or longer	Rural, medically underserved
Washington County		Highest	NA	13 years or longer	Education, poverty, rural, medically underserved
Alachua County		High	10 years	13 years or longer	Rural
Clay County	Komen North Florida	High	12 years	13 years or longer	Rural
Columbia County		High	9 years	13 years or longer	Employment, rural
Gadsden County		High	7 years	13 years or longer	%Black/African-American, education, poverty, rural, medically underserved
Hillsborough County	Komen Florida Suncoast	High	7 years	13 years or longer	
Brevard County	Komen Central Florida	Medium High	13 years or longer	1 year	
Broward County	Komen Miami/Ft. Lauderdale	Medium High	4 years	13 years or longer	%Black/African-American, foreign
Flagler County	Komen Central Florida	Medium High	13 years or longer	5 years	Older
Jefferson County		Medium High	13 years or longer	1 year	%Black/African-American, rural
Lake County	Komen Central Florida	Medium High	1 year	13 years or longer	Older, rural
Leon County		Medium High	1 year	13 years or longer	%Black/African-American

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Levy County		Medium High	13 years or longer	1 year	Poverty, rural
Nassau County	Komen North Florida	Medium High	2 years	13 years or longer	Rural, medically underserved
Polk County	Komen Florida Suncoast	Medium High	1 year	13 years or longer	
Taylor County		Medium High	13 years or longer	2 years	Education, employment, rural, medically underserved
Bay County		Medium	10 years	2 years	Medically underserved
Escambia County		Medium	10 years	1 year	%Black/African-American
Jackson County		Medium	13 years or longer	Currently meets target	%Black/African-American, education, rural
Marion County	Komen Central Florida	Medium	Currently meets target	13 years or longer	Older, rural
Martin County	Komen South Florida	Medium	Currently meets target	13 years or longer	Older, medically underserved
Monroe County	Komen Miami/Ft. Lauderdale	Medium	13 years or longer	Currently meets target	Medically underserved
Orange County	Komen Central Florida	Medium	5 years	10 years	%Black/African-American
Santa Rosa County		Medium	13 years or longer	Currently meets target	Rural, medically underserved
St. Johns County	Komen North Florida	Medium	3 years	8 years	Rural
Suwannee County		Medium	13 years or longer	Currently meets target	Rural, medically underserved
Volusia County	Komen Central Florida	Medium	Currently meets target	13 years or longer	
Walton County		Medium	13 years or longer	Currently meets target	Rural
Franklin County		Medium Low	SN	2 years	Education, rural
Gilchrist County		Medium Low	SN	1 year	Rural
Okaloosa County		Medium Low	11 years	Currently meets target	
Palm Beach County	Komen South Florida	Medium Low	2 years	1 year	
Pinellas County	Komen Florida Suncoast	Medium Low	Currently meets target	9 years	
Bradford County		Low	1 year	Currently meets target	Education, rural, medically underserved
Charlotte County	Komen Southwest Florida	Low	5 years	Currently meets target	Older
Hernando County		Low	2 years	Currently meets target	Older, employment, rural

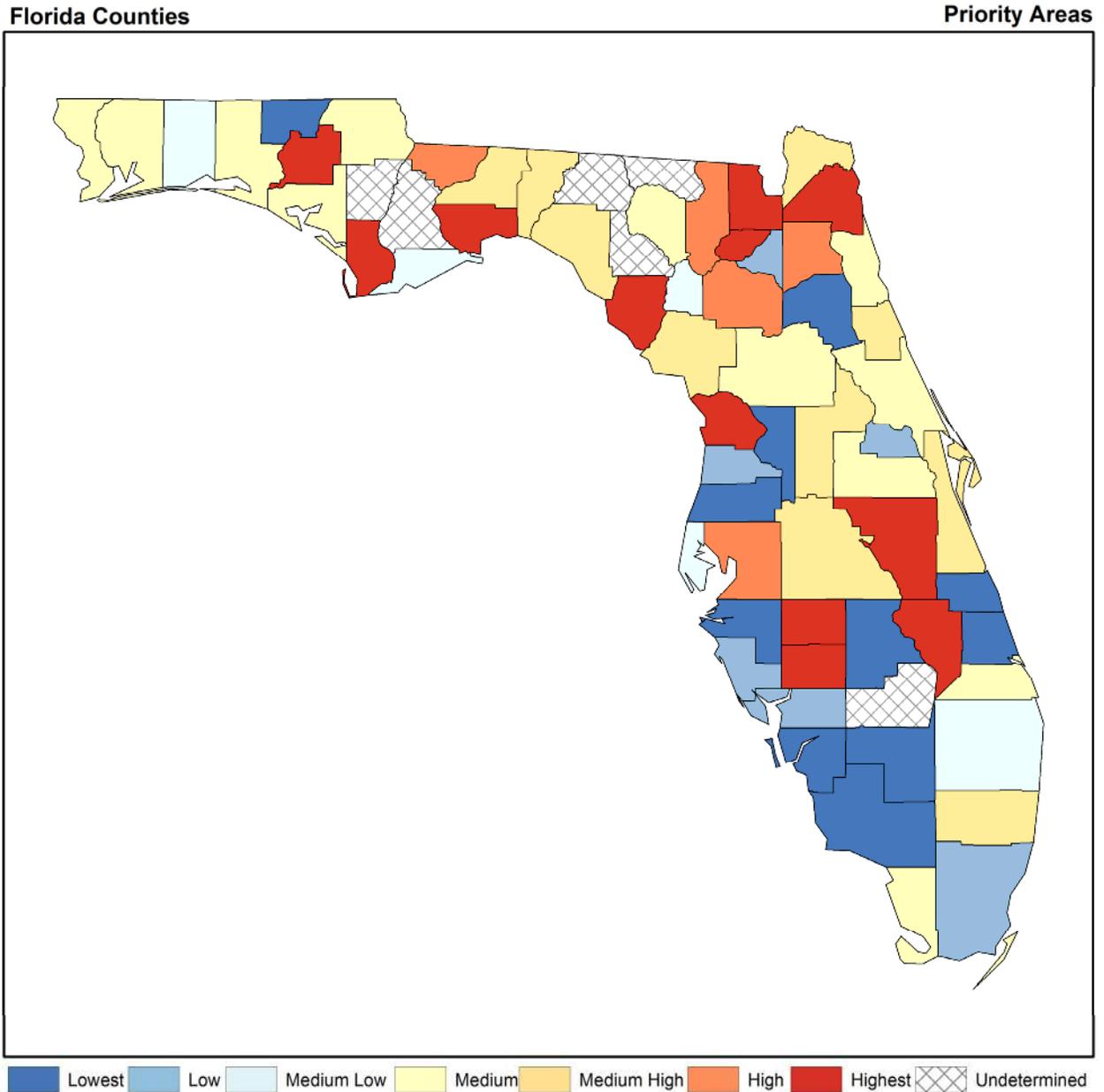
County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Miami-Dade County	Komen Miami/Ft. Lauderdale	Low	Currently meets target	2 years	%Hispanic/Latina, education, foreign, language, insurance
Sarasota County	Komen Florida Suncoast	Low	2 years	Currently meets target	Older
Seminole County	Komen Central Florida	Low	4 years	Currently meets target	
Collier County	Komen Southwest Florida	Lowest	Currently meets target	Currently meets target	Older
Hendry County	Komen Southwest Florida	Lowest	NA	Currently meets target	%Hispanic/Latina, education, poverty, employment, foreign, language, rural, insurance
Highlands County		Lowest	Currently meets target	Currently meets target	Older, education, rural
Holmes County		Lowest	SN	Currently meets target	Education, poverty, rural, medically underserved
Indian River County		Lowest	Currently meets target	Currently meets target	Older
Lee County	Komen Southwest Florida	Lowest	Currently meets target	Currently meets target	Older
Manatee County	Komen Florida Suncoast	Lowest	Currently meets target	Currently meets target	Older
Pasco County	Komen Florida Suncoast	Lowest	Currently meets target	Currently meets target	
Putnam County		Lowest	Currently meets target	Currently meets target	Education, poverty, rural
St. Lucie County	Komen South Florida	Lowest	Currently meets target	Currently meets target	Employment
Sumter County	Komen Central Florida	Lowest	Currently meets target	Currently meets target	Older, rural, medically underserved
Calhoun County		Undetermined	SN	SN	Education, poverty, rural
Glades County	Komen Southwest Florida	Undetermined	SN	SN	%AIAN, education, rural, medically underserved
Hamilton County		Undetermined	SN	SN	%Black/African-American, education, poverty, rural, medically underserved
Lafayette County		Undetermined	SN	SN	Rural, medically underserved
Liberty County		Undetermined	SN	SN	Education, poverty, employment, rural, medically underserved
Madison County		Undetermined	NA	SN	%Black/African-American, education, poverty, rural, medically underserved

NA – data not available.

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

Map of intervention at-risk areas

Figure 2.4 shows a map of the intervention categories for the counties in Florida. When both of the indicators used to establish a category for a county are not available, the priority is shown as “undetermined” on the map.



*Map with counties labeled is available in Appendix.

Figure 2.4. Intervention categories

Data Limitations

The quantitative data in this report have been gathered from credible sources and uses the most current data available at the time.

Recent data

The most recent data available were used but, for cancer incidence and death, these data are still several years behind. The most recent breast cancer incidence and death rates available in 2013 were data from 2010. For the US as a whole and for most states, breast cancer incidence and death rates do not often change rapidly. Rates in individual counties might change more rapidly. In particular if a cancer control program has been implemented in 2011-2013, any impact of the program on incidence and death rates would not be reflected in this report.

Over the planning period for this report (2015 to 2019), the data will become more out-of-date. The trend data included in the report can help estimate more current values. Also, the State Cancer Profiles Web site (<http://statecancerprofiles.cancer.gov/>) is updated annually with the latest cancer data for states and can be a valuable source of information about the latest breast cancer rates for your community.

Data availability

For some areas, data might not be available or might be of varying quality. Cancer surveillance programs vary from state to state in their level of funding and this can impact the quality and completeness of the data in the cancer registries and the state programs for collecting death information. There are also differences in the legislative and administrative rules for the release of cancer statistics for studies such as these. These factors can result in missing data for some of the data categories in this report.

Small populations

Areas with small populations might not have enough breast cancer cases or breast cancer deaths each year to support the generation of reliable statistics. Because breast cancer has relatively good survival rates, breast cancer deaths occur less often in an area than breast cancer cases. So it may happen that breast cancer incidence rates are reported for a county with a small number of people but not breast cancer death rates.

The screening mammography data have a similar limitation because they are based on a survey of a small sample of the total population. So screening proportions may not be available for some of the smaller counties. Finally, it may be possible to report a late-stage incidence rate but not have enough data to report a late-stage trend and to calculate the number of years needed to reach the HP2020 late-stage target.

Data on population characteristics were obtained for all counties, regardless of their size. These data should be used to help guide planning for smaller counties where there are not enough specific breast cancer data to calculate a priority based on HP2020 targets.

Other cancer data sources

If a person has access to other sources of cancer data for their state, they might notice minor differences in the values of the data, even for the same time period. There are often several sources of cancer statistics for a given population and geographic area. State registries and vital statistics offices provide their data to several national organizations that compile the data. This report used incidence data compiled by the North American Association of Central Cancer Registries (NAACCR) and the National Cancer Institute (NCI) and death data compiled by the National Center for Health Statistics (NCHS).

Individual state registries and health departments often publish their own cancer data. These data might be different from the data in this report for several reasons. The most common reason is differences in the timing of when cases are reported.

Sometimes, a small number of cancer cases are reported to cancer registries with as much as a five year delay. Because of this delay, counts of cancer cases for a particular year may differ. In addition, data need to be checked to see whether the same case might have been counted twice in different areas. If a case is counted twice, one of the two reports is deleted. These small adjustments may explain small inconsistencies in the number of cases diagnosed and the rates for a specific year. However, such adjustments shouldn't have a substantial effect on cancer rates at the state level.

Specific groups of people

Data on cancer rates for specific racial and ethnic subgroups such as Somali, Hmong, or Ethiopian are not generally available. Records in cancer registries often record where a person was born if they were born in a foreign country. However, matching data about the population in an area are needed to calculate a rate (the number of cases per 100,000 people) and these matching population data are often not available.

Inter-dependent statistics

The various types of breast cancer data in this report are inter-dependent. For example, an increase in screening can result in fewer late-stage diagnoses and fewer deaths. However, an increase in screening mammography can also result in an increase in breast cancer incidence – simply because previously undetected cases are now being diagnosed. Therefore, caution is needed in drawing conclusions about the causes of changes in breast cancer statistics.

It is important to consider possible time delay between a favorable change in one statistic such as screening and the impact being reflected in other statistics such as the death rate. There can take 10 to 20 years for favorable changes in breast cancer control activities to be reflected in death rates.

Missing factors

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. Good quantitative data are not available on how factors such as these vary from place to place. The quantitative data in this report should be supplemented by qualitative information about these other factors from your communities whenever possible.

Trend limitations

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. For example, breast cancer programs, if they are successful, should change the trends. In fact, this is the primary goal of breast cancer programs.

However, trends could also change from differences in the population characteristics of the area such as shifts in the race or ethnicity of the people in the area or changes in their general socioeconomics. Areas with high migration rates, either new people moving into an area or existing residents moving elsewhere, are particularly likely to see this second type of change in breast cancer trends.

Late-stage data and un-staged cases

Not all breast cancer cases have a stage indication. Breast cancer might be suspected in very elderly women and a biopsy may not be performed. Also, some breast cancer cases may be known only through an indication of cause-of-death on a death certificate. When comparing late-stage statistics, it is assumed that the rates of unknown staging don't change and are similar between counties. This may not be a good assumption when comparing data between urban and rural areas or between areas with younger and older populations. It is also assumed that the size and types of unknown cases do not change over time when the trends in late-stage statistics are calculated.

In this report, both late-stage incidence rates and late-stage proportions are provided. These two statistics differ in how un-staged cases are represented. With late-stage incidence rates, un-staged cases are excluded from the numerator (the number of late-stage cases) but are included in the denominator (total number of people in the population). With late-stage proportions, un-staged cases are excluded from both the numerator (the number of late-stage cases) and the denominator (number of staged cases). These differences can explain why comparisons using the two late-stage statistics may get different results

Conclusions: Healthy People 2020 Forecasts

Breast Cancer Death Rates

The State of Florida as a whole is **likely to achieve** the HP2020 death rate target. The state had a base rate of 21.3 breast cancer deaths per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent death rate trend, indicates that the State of Florida will likely achieve the HP2020 target of 20.6 female breast cancer deaths per 100,000.

The following counties **currently meet** the HP2020 breast cancer death rate target of 20.6:

- Collier County (Komen Southwest Florida)
- Highlands County
- Indian River County
- Lee County (Komen Southwest Florida)
- Manatee County (Komen Florida Suncoast)
- Marion County (Komen Central Florida)
- Martin County (Komen South Florida)
- Miami-Dade County (Komen Miami/Ft. Lauderdale)
- Pasco County (Komen Florida Suncoast)
- Pinellas County (Komen Florida Suncoast)
- Putnam County
- St. Lucie County (Komen South Florida)
- Sumter County (Komen Central Florida)
- Volusia County (Komen Central Florida)

The following counties are **likely to miss** the HP2020 breast cancer death rate target unless the death rate falls at a faster rate than currently estimated:

- Brevard County (Komen Central Florida)
- Citrus County
- Duval County (Komen North Florida)
- Flagler County (Komen Central Florida)
- Jackson County
- Jefferson County
- Levy County
- Monroe County (Komen Miami/Ft. Lauderdale)
- Okeechobee County
- Osceola County (Komen Central Florida)
- Santa Rosa County
- Suwannee County
- Taylor County
- Walton County

Because data for small numbers of people are not reliable, it can't be predicted whether Baker County, Calhoun County, DeSoto County, Dixie County, Franklin County, Gilchrist County, Glades County, Gulf County, Hamilton County, Hardee County, Hendry County, Holmes County, Lafayette County, Liberty County, Madison County, Union County, Wakulla County and Washington County will reach the death rate target. The remaining counties are likely to achieve the target by 2020 or earlier.

Breast Cancer Late-Stage Incidence Rates

The State of Florida as a whole is **likely to achieve** the HP2020 late-stage incidence rate target. The state had a base rate of 41.8 new late-stage cases per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent late-stage incidence rate trend, indicates that the State of Florida will likely achieve the HP2020 target of 41.0 new late-stage cases per 100,000.

The following counties **currently meet** the HP2020 late-stage incidence rate target of 41.0:

- Bradford County
- Charlotte County (Komen Southwest Florida)
- Collier County (Komen Southwest Florida)
- Hendry County (Komen Southwest Florida)
- Hernando County
- Highlands County
- Holmes County
- Indian River County
- Jackson County
- Lee County (Komen Southwest Florida)
- Manatee County (Komen Florida Suncoast)
- Monroe County (Komen Miami/Ft. Lauderdale)
- Okaloosa County
- Pasco County (Komen Florida Suncoast)
- Putnam County
- St. Lucie County (Komen South Florida)
- Santa Rosa County
- Sarasota County (Komen Florida Suncoast)
- Seminole County (Komen Central Florida)
- Sumter County (Komen Central Florida)
- Suwannee County
- Walton County

The following counties are **likely to miss** the HP2020 late-stage incidence rate target unless the late-stage incidence rate falls at a faster rate than currently estimated:

- Alachua County
- Baker County (Komen North Florida)
- Broward County (Komen Miami/Ft. Lauderdale)
- Citrus County
- Clay County (Komen North Florida)
- Columbia County
- DeSoto County
- Dixie County
- Duval County (Komen North Florida)
- Gadsden County

- Gulf County
- Hardee County
- Hillsborough County (Komen Florida Suncoast)
- Lake County (Komen Central Florida)
- Leon County
- Marion County (Komen Central Florida)
- Martin County (Komen South Florida)
- Nassau County (Komen North Florida)
- Okeechobee County
- Osceola County (Komen Central Florida)
- Polk County (Komen Florida Suncoast)
- Union County
- Volusia County (Komen Central Florida)
- Wakulla County
- Washington County

Because data for small numbers of people are not reliable, it can't be predicted whether Calhoun County, Glades County, Hamilton County, Lafayette County, Liberty County and Madison County will reach the late-stage incidence rate target. The remaining counties are likely to achieve the target by 2020 or earlier.

HP2020 Conclusions

Highest at-risk areas

Twelve counties in the State of Florida are in the highest priority category. Four of the twelve, Citrus County, Duval County, Okeechobee County and Osceola County, are not likely to meet either the death rate or late-stage incidence rate HP2020 targets. Eight of the twelve, Baker County, DeSoto County, Dixie County, Gulf County, Hardee County, Union County, Wakulla County and Washington County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Duval County (132.7 per 100,000) and Union County (188.1 per 100,000) are significantly higher than the state as a whole (114.3 per 100,000). Incidence trends in Hardee County (27.7 percent per year) are significantly less favorable than the state as a whole (-0.5 percent per year). The age-adjusted death rates in Duval County (27.4 per 100,000) are significantly higher than the state as a whole (21.3 per 100,000). The age-adjusted late-stage incidence rates in Duval County (51.0 per 100,000) are significantly higher than the state as a whole (41.8 per 100,000). Screening percentages in Dixie County (44.0 percent), Hardee County (36.9 percent) and Union County (48.5 percent) are significantly lower than the state as a whole (76.6 percent).

Baker County has low education levels. Citrus County has an older population and high unemployment. DeSoto County has low education levels, high poverty levels and a relatively large number of households with little English. Dixie County has low education levels. Duval

County has a relatively large Black/African-American population. Gulf County has low education levels. Hardee County has a relatively large Hispanic/Latina population, low education levels, high poverty levels and a relatively large number of households with little English. Okeechobee County has low education levels and high poverty levels. Osceola County has a relatively large Hispanic/Latina population and a relatively large number of households with little English. Union County has low education levels. Washington County has low education levels and high poverty levels.

High at-risk areas

Five counties in the State of Florida are in the high priority category. All of the five, Alachua County, Clay County, Columbia County, Gadsden County and Hillsborough County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Alachua County (132.5 per 100,000) and Hillsborough County (124.9 per 100,000) are significantly higher than the state as a whole (114.3 per 100,000). The age-adjusted death rates in Hillsborough County (23.4 per 100,000) are significantly higher than the state as a whole (21.3 per 100,000). The age-adjusted late-stage incidence rates in Hillsborough County (47.3 per 100,000) are significantly higher than the state as a whole (41.8 per 100,000).

Columbia County has high unemployment. Gadsden County has a relatively large Black/African-American population, low education levels and high poverty levels.

Health Systems Analysis

This section of the state report tells the story of the breast cancer continuum of care and the delivery of quality health care in the community. Key to this section is the observation of potential strengths and weaknesses in the health care system that could compromise a women's health as she works her way through the continuum of care (e.g., screening, diagnosis, treatment and follow-up/survivorship services).

Health Systems Analysis Data Sources

Breast Cancer Programs and Services

An inventory of breast cancer programs and services in the state were collected through a comprehensive internet search to identify the following types of health care facilities or community organizations that may provide breast cancer related services:

- Hospitals- Public or private, for-profit or nonprofit.
- Community Health Centers (CHC) - Community based organizations that provide primary care regardless of ability to pay; include Federally Qualified Health Centers (FQHCs) and FQHC look-alikes.
- Free Clinic- Free and charitable clinics are safety-net health care organizations that utilize a volunteer/staff model and restrict eligibility for their services to individuals who are uninsured, underinsured and/or have limited or no access to primary health care.
- Health Department- Local health department run by government entity (e.g. county, city) focused on the general health of its citizens.
- Title X Provider- Family planning centers that also offer breast and cervical cancer screening. Services are provided through state, county, and local health departments; community health centers; Planned Parenthood centers; and hospital-based, school-based, faith-based, other private nonprofits.
- Other- Any institution that is not a hospital, CHC, free clinic, health department or Title X provider (e.g., FDA certified mammography center that is not a hospital/CHC, community organization that is not a medical provider but does connect people to services or provide support services such as financial/legal assistance).

Information collected through these means was inputted into a Health Systems Analysis spreadsheet by service type: screening, diagnostics, treatment, and support. The screening service category encompasses clinical breast exams (CBEs), screening mammograms, mobile mammography units, ultrasounds, and patient navigation. The category of diagnostics includes diagnostic mammograms, ultrasounds, biopsy, MRI, and patient navigation. Treatment modalities counted were chemotherapy, radiation, surgery consultations, surgery, reconstruction, and patient navigations. Support encompasses a broad range of services including support groups, wigs, mastectomy wear, individual counseling/psychotherapy, exercise/nutrition programs, complementary therapies, transportation assistance, financial assistance for cost of living expenses, as well as end of life care, legal services, and education.

In order to understand the effect available health systems have on the state, the identified resources were plotted on an asset map by Susan G. Komen Information Technology (IT) staff to visually illustrate the services (or lack thereof) available in the state. While every effort was

made to ensure these findings were comprehensive, it may be possible that a facility or organization was missed or has since closed; as a result, these findings should not be considered exhaustive and/or final.

Quality of Care Indicators

For all health care facilities and hospitals, an additional layer of analysis was applied using quality of care indicators. Quality of care indicators are quantifiable measures related to the process of care, outcomes of care, and patient satisfaction levels from a particular program and/or organization. Multiple national organizations have developed key quality of care indicators for breast health services, and if an organization meets all of the key indicators they are designated an “accredited” health care institution. These accreditations outline key quality of care indicators health care institutions must meet in order to obtain and/or retain accreditation status. The following five accreditations were considered high quality of care indicators in the state’s health system analysis.

- ***FDA Approved Mammography Facilities***

The Food and Drug Administration (FDA) passed the Mammography Quality Standards Act (MQSA) in 1992 to ensure facilities meet standards for performing high quality mammography. Accreditation bodies administer the MQSA to evaluate and accredit mammography facilities based upon quality standards. These quality standards are extensive and outline how a facility can operate. For instance, physicians interpreting mammograms must be licensed to practice medicine, be certified to interpret radiological procedures including mammography, and must complete continuing experience or education to maintain their qualifications (US Food and Drug Administration [US FDA], 2014). Radiologic technologists must also be trained and licensed to perform general radiographic procedures and complete continuing experience or education to maintain their qualifications. Facilities are required to maintain personnel records to document the qualifications of all personnel who work at the facility such as physicians, radiologic technologists or medical physicists.

All radiographic equipment used in FDA approved mammography centers must be specifically designed for mammography and must not be equipment designed for general purpose or equipment that has been modified with special attachments for mammography. Equipment regulations also apply to compression paddles, image receptor size, light fields and magnification, focal spot selection, x-ray film, film processing solutions, lighting and film masking devices. Facilities must also prepare a written report of the results of each mammography examination performed under its certificate. The report must include the name of the patient and an additional patient identifier, date of examination, the name of the interpreting physician, and the overall final assessment of findings. Findings from mammograms are classified into four different categories, including negative, benign, probably benign, and highly suggestive of malignancy. An assessment can also be assigned as incomplete indicating additional imaging evaluation is needed.

FDA approved mammography facilities are obligated to communicate the results of mammograms to the patient and the patient's primary care provider in a written report within 30 days. Each facility must also maintain mammography films and reports in a permanent medical record for a period of no less than five years or longer if mandated by State or local law. Patients can request to permanently or temporarily transfer the original mammograms and patient report to a medical institution, physician, health care provider, or to the patient directly. Any fees for providing transfer services shall not exceed the documented costs associated with this service.

A quality assurance program must be established at each facility to ensure safety, reliability, clarity, and accuracy of mammography services. At least once a year, each facility undergoes a survey by a medical physicist that includes the performance of tests to ensure the facility meets quality assurance requirements. The FDA evaluates the performance of each certificated agency annually through the use of performance indicators that address the adequacy of program performance in certification, inspection, and enforcement activities. Only facilities that are accredited by FDA accrediting bodies or are undergoing accreditation by accrediting bodies may obtain a certificate from the FDA to legally perform mammography (US FDA, 2014). Only FDA approved mammography centers were included in the health system analysis for each target community.

- ***American College of Surgeons Commission on Cancer Certification (CoCC)***
Applying and sustaining an American College of Surgeons Commission on Cancer Certification (CoCC) is a voluntary effort a cancer program can undertake to ensure a range of services necessary to diagnose and treat cancer, as well as rehabilitate and support patients and their families, are available (American College of Surgeons [ACoS], 2013). There are various categories of cancer programs, and each facility is assigned a category based on the type of facility or organization, services provided, and cases accessioned or recorded. Program categories include: Integrated Network Cancer Program (INCP); NCI-Designated Comprehensive Cancer Center Program (NCIP); Academic Comprehensive Cancer Program (ACAD); Veterans Affairs Cancer Program (VACP); Comprehensive Community Cancer Program (CCCP); Hospital Associate Cancer Program (HACP); Pediatric Cancer Program (PCP); and Freestanding Cancer Center Program (FCCP) (ACoS, 2013).

CoCC cancer programs are surveyed every three years. In preparation for survey, the cancer committee for that facility must assess program compliance with the requirements for all standards outlined in *Cancer Program Standards 2012: Ensuring Patient-Centered Care*. An individual must then review and complete an online Survey Application Record (SAR). In addition, the individual responsible for completing the SAR will perform a self-assessment and rate compliance with each standard using the Cancer Program Ratings Scale.

The surveyor's role is to assist in accurately defining the standards and verifying the facility's cancer program is in compliance. To accomplish this task, the surveyor will meet with the cancer committee, cancer registry staff and cancer liaison physicians, review pathology reports, and attend a cancer conference to observe the multidisciplinary patient management discussions and confirm treatment is planned using nationally recognized, evidence-based treatment guidelines. CoCC-accredited programs must also submit documentation of cancer program activities with the SAR using multiple sources such as policies, procedures, manuals, and grids.

Each cancer program standard is rated on a compliance scale that consists of the score of (1+) commendation, (1) compliance, (5) noncompliance, and (8) not applicable. A deficiency is defined as any standard with a rating of five. A deficiency in one or more standards will affect the accreditation award. Commendation ratings (+1) are valid for eight standards, can only be earned at the time of survey, and are used to determine the accreditation award and award level (bronze, silver, or gold). Accreditation awards are based on consensus ratings by the cancer program surveyor, CoCC staff and when necessary, the Program Review Subcommittee. A program can earn one of the following Accreditation Awards; three-year with commendation accreditation, three-year accreditation, three-year accreditation with contingency, provisional accreditation, or no accreditation. Programs are surveyed at three-year intervals from the date of survey.

Award notification takes place within 45 days following the completed survey and will include The Accredited Cancer Program Performance Report. This report includes a comprehensive summary of the survey outcome and accreditation award, the facility's compliance rating for each standard, an overall rating compared with other accredited facilities nation- and state-wide, and the category of accreditation. In addition, a narrative description of deficiencies that require correction, suggestions to improve or enhance the program, and commendations awarded are also included.

- ***American College of Surgeons National Accreditation Program for Breast Centers (NAPBC)***

The American College of Surgeons' National Accreditation Program for Breast Centers (NAPBC) is a consortium of national professional organizations focused on breast health and dedicated to improving quality of care and outcomes for patients with diseases of the breast (ACoS, 2014). The NAPBC utilizes evidence-based standards as well as patient and provider education, and encourages leaders from major disciplines to work together to diagnose and treat breast disease. The NAPBC has defined 28 program standards and 17 program components of care that provide the most efficient and contemporary care for patients diagnosed with diseases of the breast. Quality standards cover a range of topics and levels of operation including leadership, clinical management, research, community outreach, professional education, and quality improvement (ACoS, 2014).

To be considered for initial survey, breast center leadership must ensure clinical services, interdisciplinary/multidisciplinary conference(s), and quality management programs are in place and ensure a facility can meet the requirements outlined for all standards. Critical standards include having breast program leadership that is responsible and accountable for services and also establishes, monitors, and evaluates the interdisciplinary breast cancer conference frequency, multidisciplinary and individual attendance, prospective case presentation, and total case presentation annually. In addition, the interdisciplinary patient management standard requires patient management to be conducted by an interdisciplinary team after a patient is diagnosed with breast cancer.

Breast center leadership then completes a pre-application to participate and pay for the survey fee within 30 days of the receipt from the NAPBC. To prepare for a survey, the breast center must complete a Survey Application Record (SAR) prior to the on-site visit. The SAR is intended to capture information about the breast center activity and includes portions of individuals to perform a self-assessment and rate compliance with each standard using a provided rating system. The NAPBC will then complete a survey of the facility within six months. A survey of a facility typically includes a tour of the center, a meeting between the surveyor and breast center leadership and staff, chart and medical record review, and the attendance of a breast conference.

Accreditation awards are based on consensus ratings by the surveyor, the NAPBC staff, and, if required, the Standards and Accreditation Committee. Accreditation award is based on compliance with 28 standards. A three year, full accreditation is granted to centers that comply with 90 percent or more of the standards with resolution of all deficient standards documented within 12 months of survey. Centers that do not resolve all deficiencies within the 12 month period risk losing NAPBC accreditation status and are required to reapply. Once a performance report and certificate of accreditation are issued, these centers are surveyed every three years.

A three-year contingency accreditation is granted to centers that meet less than 90 percent, but more than 75 percent of the standards at the time of survey. The contingency status is resolved by the submission of documentation of compliance within 12 months from the date of survey. A performance report and certificate of accreditation are issued, and these facilities are surveyed every three years. An accreditation can be deferred if a center meets less than 75 percent of the standards at the time of the survey. The deferred status is resolved by the submission of documentation of compliance within 12 months from the date of survey. Based on the resolution of deficiencies and survey results, a performance report and certificate of accreditation are issued, and these facilities are surveyed every three years. For the complete list of NAPBC quality standards, visit: <http://www.napbc-breast.org/standards/standards.html>.

- ***American College of Radiology Breast Imaging Centers of Excellence (BICOE)***
The American College of Radiology (ACR) Breast Imaging Centers of Excellence (BICOE) designation is awarded to breast imaging centers that seek and earn accreditation in the ACR's entire voluntary breast imaging accreditation programs and modules, in addition to the Mandatory Mammography Accreditation Program (MMAP) (American College of Radiology [ACR], n.d.). The ACR MMAP is designed to provide facilities with peer review and constructive feedback on staff qualifications, equipment, quality control, quality assurance, image quality, and radiation dose. This ensures facilities comply with the 1992 Mammography Quality Standards Act (MQSA), which requires all mammography facilities be accredited. In order to receive the ACR's BICOE designation, a facility must be accredited by the ACR in mammography, stereotactic breast biopsy, breast ultrasound, and effective January 1, 2016, breast MRI.

The ACR will send a BICOE certificate to each facility that fulfills the necessary requirements. The designation remains in effect as long as all breast imaging facilities (an organizations home location or a different location) remain accredited in all required breast imaging services provided. If the center or facility neglects to renew any of its accreditations or fails during renewal, the facility will be notified that it no longer has the BICOE designation and the BICOE certificate must be removed from public display. Some centers will need to specifically request a BICOE designation, while in most cases the ACR will consult its database and automatically provide an eligible center a BICOE certificate if the center is at a single physical location and meets all breast imaging requirements (ACR, n.d.).

- ***National Cancer Institute Designated Cancer Centers***
A National Cancer Institute (NCI) designated Cancer Center is an institution dedicated to researching the development of more effective approaches to the prevention, diagnosis, and treatment of cancer (National Cancer Institute [NCI], 2012). A NCI-designated Cancer Center conducts cancer research that is multidisciplinary and incorporates collaboration between institutions and university medical centers. This collaboration also provides training for scientists, physicians, and other professionals interested in specialized training or board certification in cancer-related disciplines. NCI-designated Cancer Centers also provide clinical programs that offer the most current forms of treatment for various types of cancers and typically incorporate access to clinical trials of experimental treatments. In addition, public education and community outreach regarding cancer prevention and screening are important activities of a NCI-designated Cancer Center (NCI, 2012).

HRSA Shortage Designations

The US Department of Health and Human Services-Health Resources and Services Administration (HRSA) designations for Health Professional Shortage Areas (HSPAs) and Medically Underserved Areas/Populations (MUA/Ps) were used to identify areas within the state where individuals may have inadequate access to primary care providers and facilities (US Department of Health and Human Services, n.d.).

- **Health Professional Shortage Areas (HPSAs)** are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), population (e.g. low income or Medicaid eligible) or facilities (e.g. federally qualified health center or other state or federal prisons).
- **Medically Underserved Areas/Populations (MUA/Ps)** are areas or populations designated by HRSA as having too few primary care providers, high infant death, high poverty or a high elderly population.

Breast Cancer Continuum of Care

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

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

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

The woman would proceed to treatment if breast cancer is diagnosed. Education can cover such topics as treatment options, how a pathology reports determines the best options for

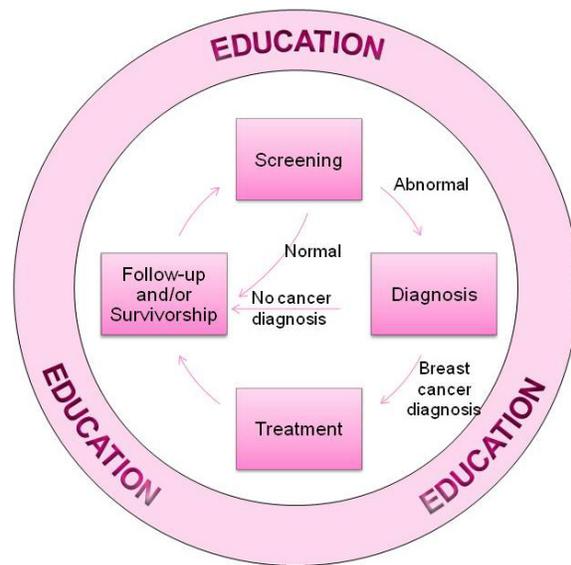


Figure 3.1. Breast Cancer Continuum of Care (CoC)

treatment, understanding side effects and how to manage them, and helping to formulate questions a woman may 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 actually may occur at the same time. Follow-up and survivorship may include things like navigating insurance issues, locating financial assistance, symptom management, such as pain, fatigue, sexual issues, bone health, etc. Education may address topics such as making healthy lifestyle choices, long term effects of treatment, managing side effects, the importance of follow-up appointments, and communication with their providers. Most women will return to screening at a recommended interval after treatment ends, or for some, during treatment (such as those taking long term hormone therapy).

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

Health Systems Analysis Findings

In the State of Florida there were 1094 locations found to provide breast cancer services varying between screening, diagnostic, treatment, and survivorship (Figure 3.2). There were 1083 locations that provided screening services, 617 locations in the state that provide diagnostic services and 160 locations providing treatment services. In the state there were 153 locations that provided survivorship services or care. Identified facilities that provide mammography services were all accredited by the Federal Drug Administration. There were 66 locations that are accredited by the American College of Surgeons Commission on Cancer, 95 locations accredited by the American College of Radiology as a Breast Imaging Center of Excellence and 29 locations accredited a an American College of Surgeons NAPBC program. There was one location designated as a NCI Cancer Center.

The following counties are designated as a Medically Underserved Area/Population and/or a Health Professional Shortage Area for primary care: Alachua, Baker, Bay, Bradford, Brevard, Broward, Calhoun, Charlotte, Citrus, Clay, Collier, Columbia, DeSota, Dixie, Duval, Escambia, Flagler, Franklin, Gadsden, Gilchrist, Glades, Gulf, Hamilton, Hardee, Hendry, Hernando, Highlands, Hillsborough, Holmes, Indian River, Jackson, Jefferson, Lafayette, Lake, Lee, Leon, Levy, Liberty, Madison, Manatee, Marion, Martin, Miami-Dade, Monroe, Nassau, Okaloosa, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Putnam, Santa Rosa, Sarasota, Seminole, St. Johns, St. Lucie, Sumter, Suwannee, Taylor, Union, Volusia, Wakulla, Walton and Washington.

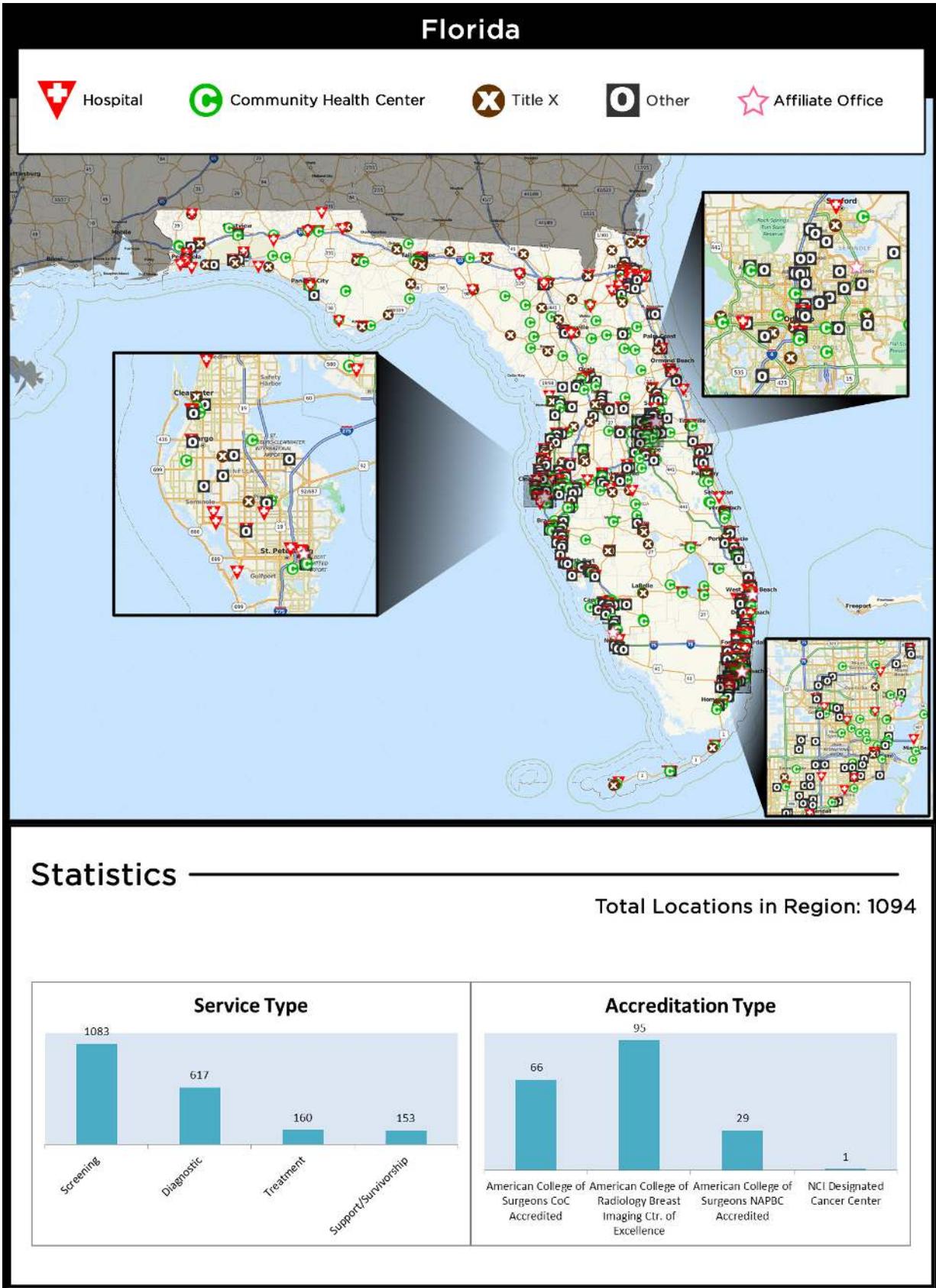


Figure 3.2. Breast cancer services available in Florida

Public Policy Overview

In recent years, public policies pertaining to breast cancer have undergone substantial changes that will affect at-risk women across the United States. States have responded differently to the public policy developments concerning access to services within the breast cancer continuum of care (screening, diagnostic, treatment and survivorship care); therefore, women are dependent on their state's agenda and action on health care reform. This section of the state report will focus on the following public policies that affect breast cancer care in the state: National Breast and Cervical Cancer Early Detection Program, State Comprehensive Cancer Control Plan, the Affordable Care Act and Medicaid Expansion.

Susan G. Komen Advocacy

Susan G. Komen is the voice for the more than three million breast cancer survivors and those who love them, working to ensure that the fight against breast cancer is a priority among policymakers in Washington, D.C., and every Capitol across the country.

Each year, Komen works to identify, through a transparent and broad-based, intensive vetting and selection process, the policy issues that have the greatest potential impact on Komen's mission. This process includes the collection of feedback from Komen Headquarters leadership, policy staff, and subject matter experts; Komen Affiliates from across the country; advisory groups including the Komen Advocacy Advisory Taskforce (KAAT), Advocates in Science (AIS), and Komen Scholars; and other stakeholders with a vested interest in breast cancer-related issues.

The selected issues are the basis for Komen's state and federal advocacy work in the coming year. While the priority issues may change on an annual basis, the general focus for Komen's advocacy work is to ensure high-quality, affordable care for all, though access to services and an increased investment in research to ensure the continued development of the latest technologies and treatments. For more information on Komen's current Advocacy Priorities, please visit: <http://ww5.komen.org/WhatWeDo/Advocacy/Advocacy.html>.

National Breast and Cervical Cancer Early Detection Program

The United States Congress passed the Breast and Cervical Cancer Mortality Prevention Act of 1990, which directed the Centers for Disease Control and Prevention (CDC) to create the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) to improve access to screening (CDC, 2015a). NBCCEDP is a federal-state partnership which requires states to satisfy a 1:3 matching obligation (\$1 in state funds or in-kind funds for every \$3 in federal funds provided to that state) (CDC, n.d.). Currently, the NBCCEDP funds all 50 states, the District of Columbia, five US territories, and 11 American Indian/Alaska Native tribes or tribal organizations, to provide the following services to women (CDC, 2015a; CDC, n.d.):

- Breast and cervical cancer screening for women with priority to low-income women.
- Providing appropriate follow-up and support services (i.e., case management and referrals for medical treatment).
- Developing and disseminating public information and education programs.

- Improving the education, training and skills of health professionals.
- Monitoring screening procedure quality and interpretation.

To be eligible to receive NBCCEDP services, uninsured and underinsured women must be at or below 250 percent of the federal poverty level and between the ages of 40 to 64 for breast cancer screening (CDC, 2015a; CDC, n.d.). Uninsured women between the ages of 50 and 64 who are low-income (up to 250 percent federal poverty level) and who have not been screened in the past year are a priority population for NBCCEDP (CDC, n.d.).

While federal guidelines are provided by the CDC, there are some variations among states, tribal organizations and territories (CDC, 2015b):

- Program funding, clinical costs and additional eligibility guidelines vary by state, tribal organization and territory which influence the number of services that can be provided.
- Flexibility of the program allows each state, tribal organization and territory to adopt an operational model that is appropriate for their respective public health infrastructure and legislative policies.

Since the launch of the program in 1991, NBCCEDP has served more than 4.8 million women providing over 12 million breast and cervical cancer screening services that has resulted in more than 67,900 women being diagnosed with breast cancer (CDC, 2015a).

Congress passed the Breast and Cervical Cancer Prevention and Treatment Act in 2000 to provide states the option to offer Medicaid coverage for breast cancer treatment for women who were diagnosed when receiving services through from the NBCCEDP (CDC, 2015a). To date, all 50 states and the District of Columbia have approved provision of Medicaid coverage for cancer treatment; therefore, providing low-income, uninsured and underinsured women coverage from screening through completion of treatment (CDC, 2015a). Congress expanded this option 2001, with the passage of the Native American Breast and Cervical Cancer Treatment Technical Amendment Act, to include eligible American Indians and Alaska Natives that receive services by the Indian Health Service or by a tribal organization (CDC, 2015a).

In the State of Florida, the NBCCEDP is known as Florida's Breast and Cervical Cancer Early Detection Program and is administered by the Bureau of Chronic Disease Prevention. From July 2009 to June 2014, Florida's Breast and Cervical Cancer Early Detection Program provided breast cancer and cervical cancer screening and diagnostic services to 49,268 women. The program provided 63,054 mammograms that resulted in 15,162 women receiving an abnormal result and 1,214 women being diagnosed with breast cancer (NBCCEDP Minimum Data Elements, 2015). To find out more information about getting screened and eligibility, contact the Breast and Cervical Cancer Early Detection Program (1-800-227-2345).

State Comprehensive Cancer Control Plan

Comprehensive cancer control is a process through which communities and partner organizations pool resources to reduce cancer risk, find cancers earlier, improve treatments, increase the number of people who survive cancer and improve quality of life for cancer survivors to ultimately reduce the burden of cancer in the state (CDC, 2015d).

The National Comprehensive Cancer Control Program (NCCCP) (<http://www.cdc.gov/cancer/ncccp/>) is an initiative by the CDC to help states, tribes, US affiliated Pacific Islands, and territories form or support existing coalitions to fight cancer by using local data to determine the greatest cancer-related needs in their area (2015d). Once areas have been identified, the state coalition works collaborative to develop and implement a State Comprehensive Cancer Control Plan to meet the identified needs (CDC, 2015d). These plans include initiatives involving healthy lifestyles, promotion of cancer screening tests, access to good cancer care, and improvement in the quality of life for people who survive cancer (CDC, 2015d). State Comprehensive Cancer Control Plans (2015c) can be located at the following link: http://www.cdc.gov/cancer/ncccp/ccc_plans.htm.

Florida's comprehensive cancer control plan for 2012-2016 (http://www.ccrab.org/media/12538/fcc_report2015_single51-2.pdf) includes the following goals and objectives specific for screening and breast cancer:

Breast Cancer Screening Goal: Increase the percentage of women aged 50 to 74 who receive a mammogram in the last two years from 76.8 percent to 81.1 percent by 2020

General Screening Goals and Objectives: Increase the proportion of Floridians who receive appropriate cancer screenings

Objectives:

- Increase the proportion of Floridians who receive appropriate cancer screenings
- Support education and awareness programs aimed to encourage Floridians to discuss their risks for cancer and potential screening tests available with their doctor
- Endorse programs aimed to improve cancer screening methods or screening percentages, including effective methods to screen high-risk populations of Floridians
- Increase the percentage of adults 50 years of age and older who receive colorectal cancer screening based on national guidelines from 61.2 percent to 80.0 percent in 2018
- Increase the percentage of women aged 21 to 65 who receive a Pap test in the last three years from 80.4 percent to 93.0 percent by 2020
- Increase the percentage of women aged 50 to 74 who receive a mammogram in the last two years from 76.8 percent to 81.1 percent by 2020
- Support the recommendation from the Florida Prostate Cancer Advisory Council that men aged 50 years and older (age 40 for men at high risk: African American men and

men with a family history of prostate cancer) should be informed by their health care providers annually regarding the risks and benefits of PSA screening

- Promote the Human Papillomavirus vaccine for Florida's youth •By June 2015, educate providers and the general public through two activities on the importance of provider vaccine recommendation to age appropriate persons, series completion and reminder systems
- Support policies which limit out-of-pocket expenses for Floridians recommended for cancer screening services
- Support policies which limit out-of-pocket expenses for Floridians recommended for genetic testing and counseling based upon published guidelines, deemed at high risk for an inheritable cancer risk syndrome

For more information regarding Florida's comprehensive cancer plan please visit:

<http://www.floridahealth.gov/diseases-and-conditions/cancer/cancer-control-florida.html>

Affordable Care Act

In 2010, Congress passed the Patient Protection and Affordable Care Act (commonly known as Affordable Care Act or ACA) to expand access to care through insurance coverage, enhance the quality of health care, improve health care coverage for those with health insurance and to make health care more affordable (US Department of Health and Human Services, 2015a).

The ACA includes the following mandates to improve health insurance coverage and enhance health care quality (US Department of Health and Human Services, 2015a):

- Prohibit insurers from denying coverage based on pre-existing conditions
- Prohibit insurers from rescinding coverage
- Prohibit annual and lifetime caps on coverage
- Provide coverage of preventive services with no cost-sharing (including screening mammography, well women visits)
- Establish minimum benefits standards, known as the Essential Health Benefits (EHB)

The ACA provides tax subsidies for middle-income individuals to purchase insurance through the health insurance exchanges (commonly called the Marketplace). To be eligible to receive health coverage through the Marketplace, an individual must live in the United States, be a US citizen or national (or lawfully present), cannot be incarcerated, fall into certain income guidelines and cannot be eligible for other insurance coverage (i.e., Medicaid, Medicare and employer sponsored health care coverage) (US Centers for Medicare and Medicaid Services, n.d.).

Based on 2015 data, of the estimated 2,788,000 total number of uninsured in Florida, 11.0 percent are Medicaid eligible, 30.0 percent are eligible for tax subsidies and 39.0 percent are ineligible for financial assistance due to income, employer sponsored insurance offer or citizenship status (Garfield et al., 2015).

Some of the ways that the ACA has affected Florida over the past five years include (US Department of Health and Human Service, 2015b):

- Making health care more affordable and accessible through Health Insurance Marketplaces.
 - In Florida, 1,596,296 consumers selected or were automatically re-enrolled in health insurance coverage.
- Reducing the number of uninsured.
 - The number of uninsured in Florida decreased to 18.3 percent (2014) from 22.1 percent (2013).
- Removing lifetime limits on health benefits and discrimination for pre-existing conditions resulting in cancer patients not having to worry about going without treatment.
 - In Florida, over 2,170,000 women no longer have to worry about lifetime limits on coverage.
- Making prescription drug coverage more affordable for those on Medicare.
 - In Florida, Medicare covered individuals have saved nearly \$979,196,447 on prescription drugs.
- Covering preventive services, such as screening mammograms, with no deductible or co-pay.
 - In Florida, over 1,801,000 women received preventive services without cost-sharing.
- Providing increased funding to support health care delivery improvement projects that offer a broader array of primary care services, extend hours of operations, employ more providers and improve health care facilities.
 - Florida received \$390,088,409 under the health care law.

For more information about the Affordable Care Act or to obtain coverage, please visit the following websites:

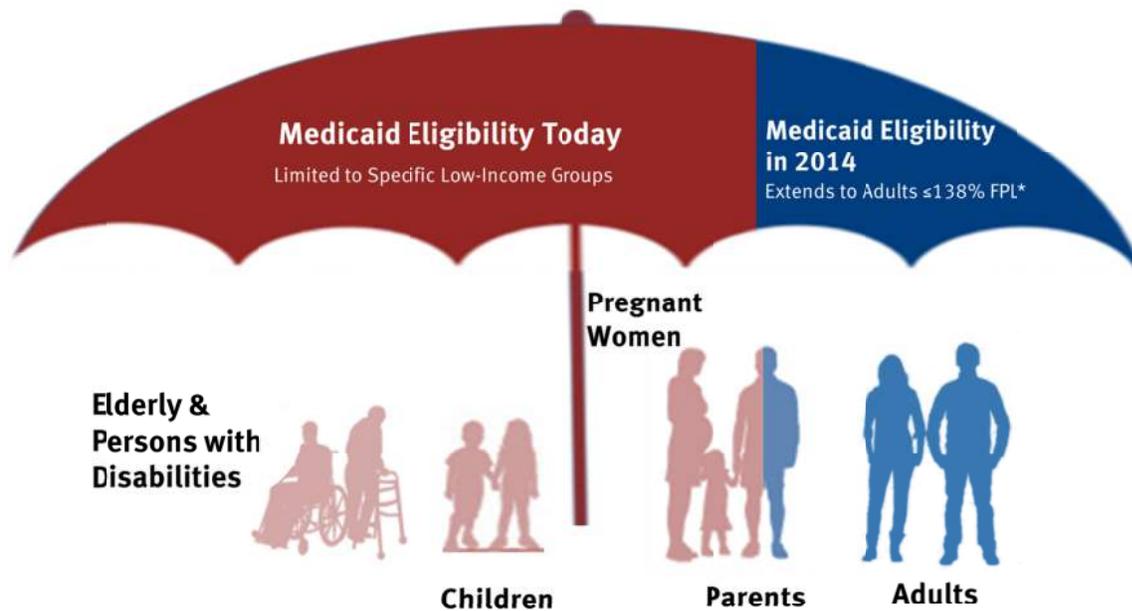
- US Department of Health and Human Services: <http://www.hhs.gov/healthcare>
- Information about health insurance coverage: 1-800-318-2596 or www.healthcare.gov
- ACA assistance in the local community: <https://localhelp.healthcare.gov/#intro>

Medicaid Expansion

Traditional Medicaid had gaps in coverage for adults because eligibility was restricted to specific categories of low-income individuals (i.e., children, their parents, pregnant women, the elderly, or individuals with disabilities) (Figure 4.1) (The Henry J. Kaiser Family Foundation, 2014). In most states, non-elderly adults without dependent children were ineligible for Medicaid, regardless of their income.

Under the ACA, states were provided the option to expand Medicaid coverage to a greater number of non-elderly adults with incomes at or below 138 percent of poverty (about \$16,242 per year for an individual in 2015); thus reducing the number of uninsured, low-income adults (The Henry J. Kaiser Family Foundation, n.d.). As of January 2016, 32 states including the

District of Columbia have adopted and implemented Medicaid Expansion, three states are still considering adopting Medicaid Expansion and 16 are not adopting Medicaid Expansion at this time (The Henry J. Kaiser Family Foundation, n.d.).



NOTE: The June 2012 Supreme Court decision in *National Federation of Independent Business v. Sebelius* maintained the Medicaid expansion, but limited the Secretary's authority to enforce it, effectively making the expansion optional for states. 138% FPL = \$15,856 for an individual and \$26,951 for a family of three in 2013.



Figure 4.1. The ACA Medicaid Expansion fills current gaps in coverage

Additional information regarding Medicaid Expansion can be found at the following websites:

- The Henry J. Kaiser Family Foundation State Health Facts: <http://kff.org/>
- US Centers for Medicare and Medicaid Services: <https://www.healthcare.gov/medicaid-chip/medicaid-expansion-and-you/>

As of January 2016, Florida has not adopted Medicaid Expansion. In states that did not adopt Medicaid Expansion, low-income “adults fall into a ‘coverage gap’ of having incomes above Medicaid eligibility limits but below the lower limit for Marketplace premium tax credits (Figure 4.2) (Garfield and Damico, 2016).

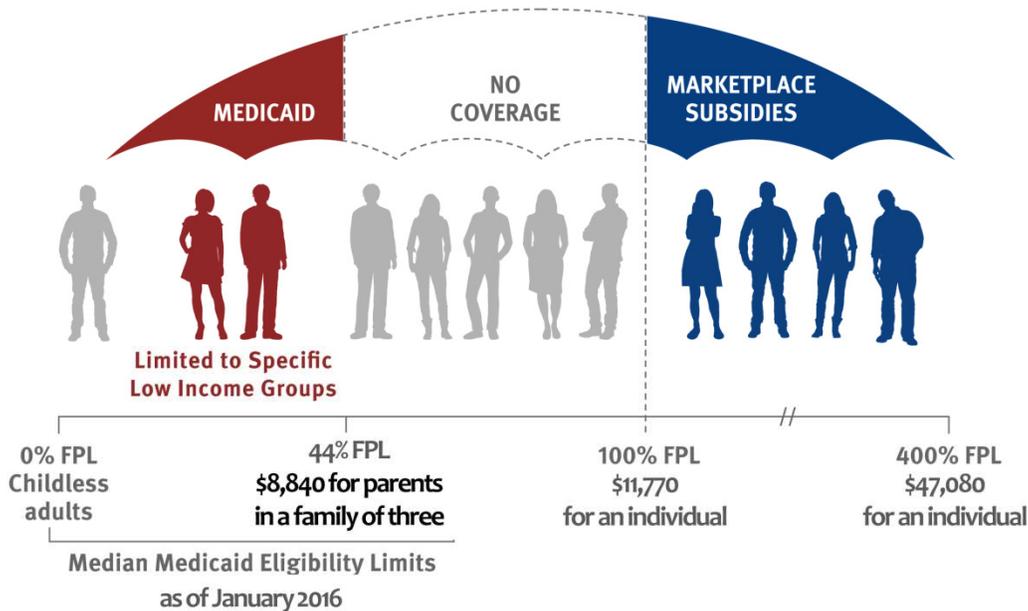
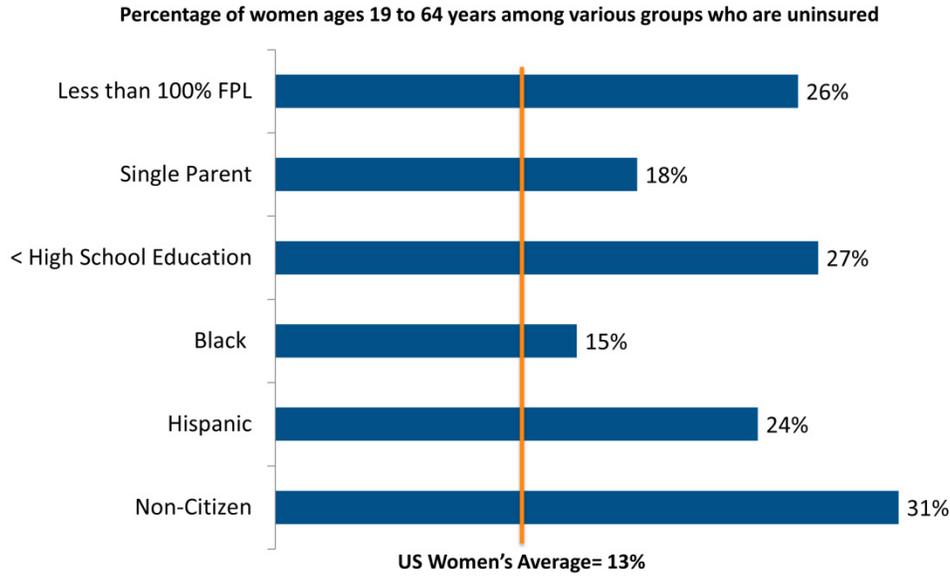


Figure 4.2. Gap in coverage for adults in states that do not expand Medicaid under ACA

In Florida, 567,000 people fall within the “coverage gap”. Of those in the “coverage gap”, 57.0 percent are people of color, 82.0 percent are adults without dependent children, 50.0 percent are female and 54.0 percent are part of a working family (the individual, or a family member, is employed but still living below the poverty line) (*Note: individuals can be classified in more than one category*) (Garfield and Damico, 2016). If Florida would have adopted Medicaid Expansion, an estimated 948,000 uninsured adults (including those in the coverage gap) would have been eligible for Medicaid coverage (Garfield and Damico, 2016).

Affordable Care Act, Medicaid Expansion and Uninsured Women

Even after implementation of the ACA and Medicaid Expansion (in some states), there are approximately 12.8 million women (ages 19 to 64) in the US that remain uninsured (The Henry J. Kaiser Family Foundation, 2016). Uninsured women have been found to have inadequate access to care and receive a lower standard of care within health systems that lead to poorer health outcomes (Kaiser Commission on Medicaid and the Uninsured, 2013). Women that are single parents, have incomes below 100 percent federal poverty level, have less than a high school education, are women of color or immigrants are at greatest risk of being uninsured (Figure 4.3) (The Henry J. Kaiser Family Foundation, 2016).



Note: The Federal Poverty Level (FPL) in 2014 was \$19,790 for a family of three.
 SOURCE: Kaiser Family Foundation analysis of 2015 Current Population Survey, U.S. Census Bureau.



Figure 4.3. Women at greatest risk of being uninsured, 2014

A 2014 survey by The Henry J. Kaiser Family Foundation (2016) found that 47.0 percent of uninsured women indicated that insurance was too expensive, 13.0 percent were unemployed/work does not offer/not eligible through work, 8.0 percent tried to obtain coverage but were told they were ineligible, 7.0 percent were not eligible due to immigration status and 4.0 percent indicated that they did not need coverage. Of the 6,019,000 women in Florida, 1,083,420 (18.0 percent) were without health insurance coverage in 2014 (The Henry J. Kaiser Family Foundation, 2016).

Community Profile Summary

Introduction to the Community Profile Report

Susan G. Komen is the world's largest breast cancer organization, funding more breast cancer research than any other nonprofit while providing real-time help to those facing the disease. Since its founding in 1982, Komen has funded more than \$889 million in research and provided \$1.95 billion in funding to screening, education, treatment and psychosocial support programs serving millions of people in more than 30 countries worldwide. Komen was founded by Nancy G. Brinker, who promised her sister, Susan G. Komen, that she would end the disease that claimed Suzy's life.

The purpose of the Florida Community Profile is to assess breast cancer burden within the state by identifying areas at highest risk of negative breast cancer outcomes. Through the Community Profile, populations most at-risk of dying from breast cancer and their demographic and socioeconomic characteristics can be identified; as well as, the needs and disparities that exist in availability, access and utilization of quality care.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

After review of breast cancer late-stage diagnosis and death rates and trends for each county in the state, areas of greatest need were identified based on if the county would meet Healthy People 2020 late-stage diagnosis rate (41.0 per 100,000 women) and death rate (20.6 per 100,000 women) targets.

Breast Cancer Death Rates

The State of Florida as a whole is **likely to achieve** the HP2020 death rate target. The state had a base rate of 21.3 breast cancer deaths per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent death rate trend, indicates that the State of Florida will likely achieve the HP2020 target of 20.6 female breast cancer deaths per 100,000.

The following counties **currently meet** the HP2020 breast cancer death rate target of 20.6:

- Collier County (Komen Southwest Florida)
- Highlands County
- Indian River County
- Lee County (Komen Southwest Florida)
- Manatee County (Komen Florida Suncoast)
- Marion County (Komen Central Florida)
- Martin County (Komen South Florida)
- Miami-Dade County (Komen Miami/Ft. Lauderdale)
- Pasco County (Komen Florida Suncoast)
- Pinellas County (Komen Florida Suncoast)
- Putnam County
- St. Lucie County (Komen South Florida)

- Sumter County (Komen Central Florida)
- Volusia County (Komen Central Florida)

The following counties are **likely to miss** the HP2020 breast cancer death rate target unless the death rate falls at a faster rate than currently estimated:

- Brevard County (Komen Central Florida)
- Citrus County
- Duval County (Komen North Florida)
- Flagler County (Komen Central Florida)
- Jackson County
- Jefferson County
- Levy County
- Monroe County (Komen Miami/Ft. Lauderdale)
- Okeechobee County
- Osceola County (Komen Central Florida)
- Santa Rosa County
- Suwannee County
- Taylor County
- Walton County

Because data for small numbers of people are not reliable, it can't be predicted whether Baker County, Calhoun County, DeSoto County, Dixie County, Franklin County, Gilchrist County, Glades County, Gulf County, Hamilton County, Hardee County, Hendry County, Holmes County, Lafayette County, Liberty County, Madison County, Union County, Wakulla County and Washington County will reach the death rate target. The remaining counties are likely to achieve the target by 2020 or earlier.

Breast Cancer Late-Stage Incidence Rates

The State of Florida as a whole is **likely to achieve** the HP2020 late-stage incidence rate target. The state had a base rate of 41.8 new late-stage cases per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent late-stage incidence rate trend, indicates that the State of Florida will likely achieve the HP2020 target of 41.0 new late-stage cases per 100,000.

The following counties **currently meet** the HP2020 late-stage incidence rate target of 41.0:

- Bradford County
- Charlotte County (Komen Southwest Florida)
- Collier County (Komen Southwest Florida)
- Hendry County (Komen Southwest Florida)
- Hernando County
- Highlands County
- Holmes County
- Indian River County

- Jackson County
- Lee County (Komen Southwest Florida)
- Manatee County (Komen Florida Suncoast)
- Monroe County (Komen Miami/Ft. Lauderdale)
- Okaloosa County
- Pasco County (Komen Florida Suncoast)
- Putnam County
- St. Lucie County (Komen South Florida)
- Santa Rosa County
- Sarasota County (Komen Florida Suncoast)
- Seminole County (Komen Central Florida)
- Sumter County (Komen Central Florida)
- Suwannee County
- Walton County

The following counties are **likely to miss** the HP2020 late-stage incidence rate target unless the late-stage incidence rate falls at a faster rate than currently estimated:

- Alachua County
- Baker County (Komen North Florida)
- Broward County (Komen Miami/Ft. Lauderdale)
- Citrus County
- Clay County (Komen North Florida)
- Columbia County
- DeSoto County
- Dixie County
- Duval County (Komen North Florida)
- Gadsden County
- Gulf County
- Hardee County
- Hillsborough County (Komen Florida Suncoast)
- Lake County (Komen Central Florida)
- Leon County
- Marion County (Komen Central Florida)
- Martin County (Komen South Florida)
- Nassau County (Komen North Florida)
- Okeechobee County
- Osceola County (Komen Central Florida)
- Polk County (Komen Florida Suncoast)
- Union County
- Volusia County (Komen Central Florida)
- Wakulla County
- Washington County

Because data for small numbers of people are not reliable, it can't be predicted whether Calhoun County, Glades County, Hamilton County, Lafayette County, Liberty County and Madison County will reach the late-stage incidence rate target. The remaining counties are likely to achieve the target by 2020 or earlier.

HP2020 Conclusions

Highest at-risk areas

Twelve counties in the State of Florida are in the highest priority category. Four of the twelve, Citrus County, Duval County, Okeechobee County and Osceola County, are not likely to meet either the death rate or late-stage incidence rate HP2020 targets. Eight of the twelve, Baker County, DeSoto County, Dixie County, Gulf County, Hardee County, Union County, Wakulla County and Washington County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Duval County (132.7 per 100,000) and Union County (188.1 per 100,000) are significantly higher than the state as a whole (114.3 per 100,000). Incidence trends in Hardee County (27.7 percent per year) are significantly less favorable than the state as a whole (-0.5 percent per year). The age-adjusted death rates in Duval County (27.4 per 100,000) are significantly higher than the state as a whole (21.3 per 100,000). The age-adjusted late-stage incidence rates in Duval County (51.0 per 100,000) are significantly higher than the state as a whole (41.8 per 100,000). Screening percentages in Dixie County (44.0 percent), Hardee County (36.9 percent) and Union County (48.5 percent) are significantly lower than the state as a whole (76.6 percent).

Baker County has low education levels. Citrus County has an older population and high unemployment. DeSoto County has low education levels, high poverty levels and a relatively large number of households with little English. Dixie County has low education levels. Duval County has a relatively large Black/African-American population. Gulf County has low education levels. Hardee County has a relatively large Hispanic/Latina population, low education levels, high poverty levels and a relatively large number of households with little English. Okeechobee County has low education levels and high poverty levels. Osceola County has a relatively large Hispanic/Latina population and a relatively large number of households with little English. Union County has low education levels. Washington County has low education levels and high poverty levels.

High at-risk areas

Five counties in the State of Florida are in the high priority category. All of the five, Alachua County, Clay County, Columbia County, Gadsden County and Hillsborough County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Alachua County (132.5 per 100,000) and Hillsborough County (124.9 per 100,000) are significantly higher than the state as a whole (114.3 per 100,000). The age-adjusted death rates in Hillsborough County (23.4 per 100,000) are significantly higher than the state as a whole (21.3 per 100,000). The age-adjusted late-stage

incidence rates in Hillsborough County (47.3 per 100,000) are significantly higher than the state as a whole (41.8 per 100,000).

Columbia County has high unemployment. Gadsden County has a relatively large Black/African-American population, low education levels and high poverty levels.

Health Systems Analysis

The Breast Cancer Continuum of Care (CoC), shown in Figure 5.1, is a model that shows how a woman typically moves through the health care system for breast care. A woman would ideally move through the CoC quickly and seamlessly, receiving timely, quality care in order to have the best outcomes. Education can play an important role throughout the entire CoC.

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

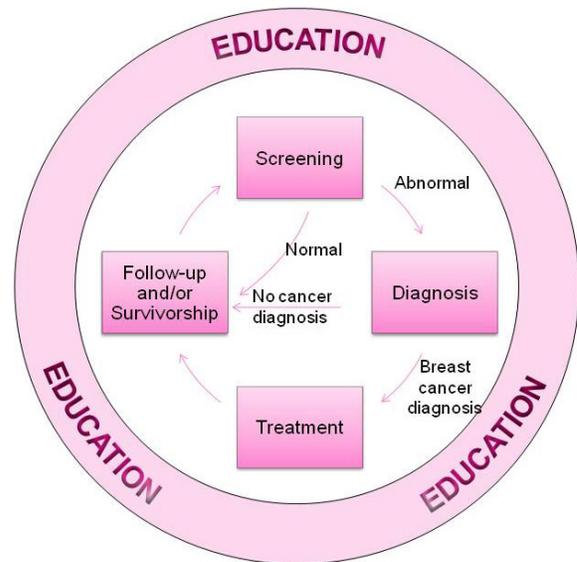
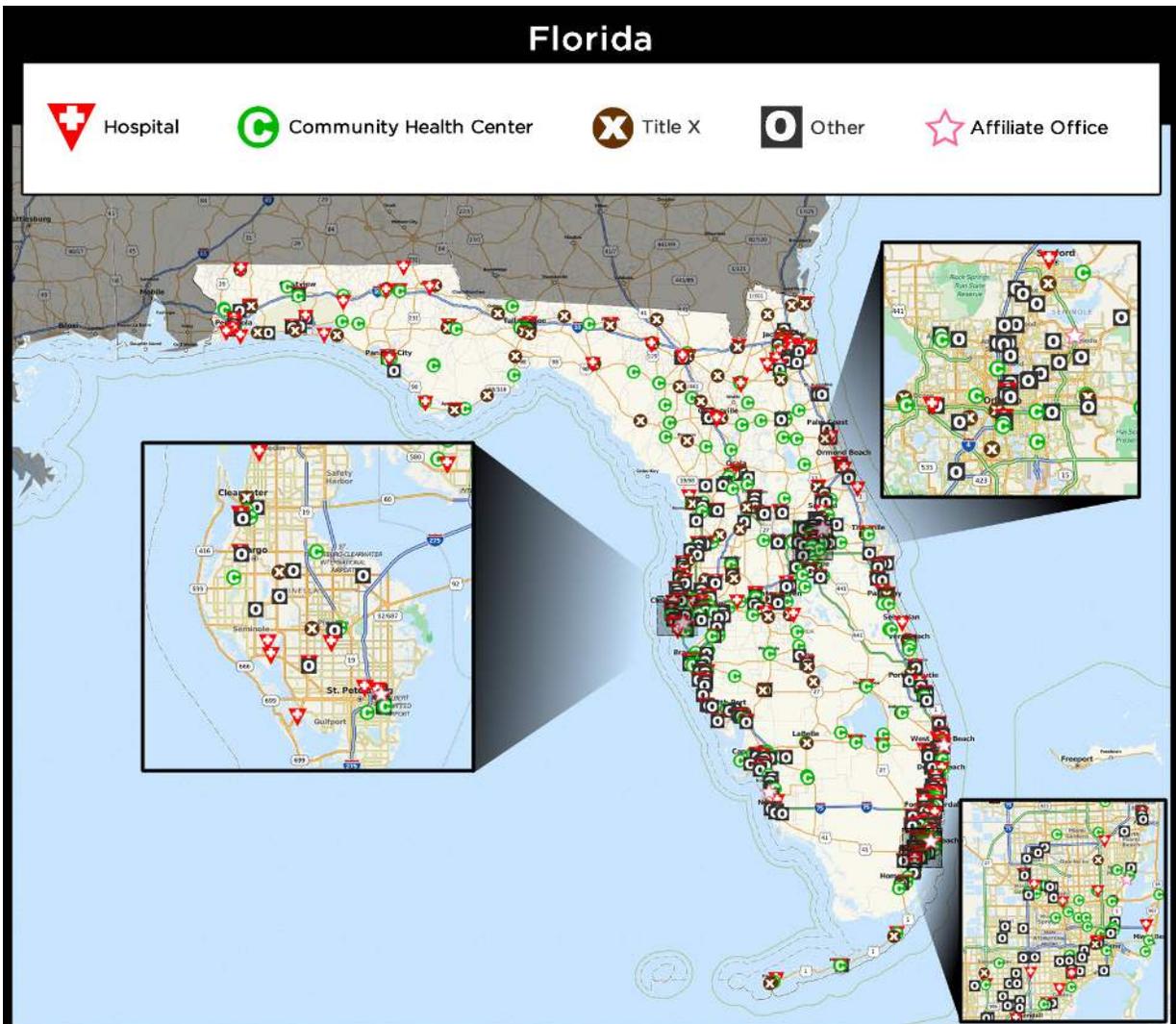


Figure 5.1. Breast Cancer Continuum of Care (CoC)

In the State of Florida there were 1094 locations found to provide breast cancer services varying between screening, diagnostic, treatment, and survivorship (Figure 5.2). There were 1083 locations that provided screening services, 617 locations in the state that provide diagnostic services and 160 locations providing treatment services. In the state there were 153 locations that provided survivorship services or care. Identified facilities that provide mammography services were all accredited by the Federal Drug Administration. There were 66 locations that are accredited by the American College of Surgeons Commission on Cancer, 95 locations accredited by the American College of Radiology as a Breast Imaging Center of Excellence and 29 locations accredited a an American College of Surgeons NAPBC program. There was one location designated as a NCI Cancer Center.

The following counties are designated as a Medically Underserved Area/Population and/or a Health Professional Shortage Area for primary care: Alachua, Baker, Bay, Bradford, Brevard, Broward, Calhoun, Charlotte, Citrus, Clay, Collier, Columbia, DeSota, Dixie, Duval, Escambia, Flagler, Franklin, Gadsden, Gilchrist, Glades, Gulf, Hamilton, Hardee, Hendry, Hernando, Highlands, Hillsborough, Holmes, Indian River, Jackson, Jefferson, Lafayette, Lake, Lee, Leon, Levy, Liberty, Madison, Manatee, Marion, Martin, Miami-Dade, Monroe, Nassau, Okaloosa, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Putnam, Santa Rosa, Sarasota, Seminole, St. Johns, St. Lucie, Sumter, Suwannee, Taylor, Union, Volusia, Wakulla, Walton and Washington.



Statistics

Total Locations in Region: 1094

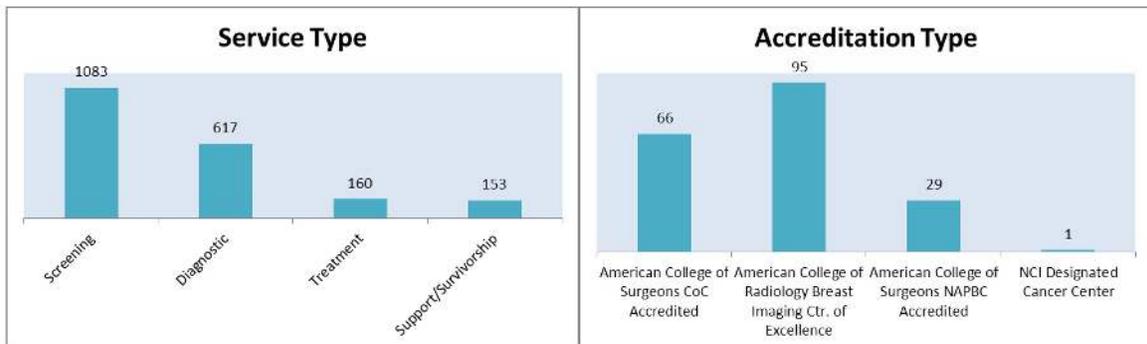


Figure 5.2. Breast cancer services available in Florida

Public Policy Overview

In recent years, public policies pertaining to breast cancer have undergone substantial changes that will affect at-risk women across the United States. States have responded differently to the public policy developments concerning access to services within the breast cancer continuum of care (screening, diagnostic, treatment and survivorship care); therefore, women are dependent on their state's agenda and action on health care reform.

National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

The NBCCEDP is a nationwide program that provides low-income women with breast and cervical cancer screening, follow-up and support services (i.e., case management and referrals for medical treatment), developing and disseminating public information and education programs and improving the education, training and skills of health professionals.

In the State of Florida, the NBCCEDP is known as Florida's Breast and Cervical Cancer Early Detection Program and is administered by the Bureau of Chronic Disease Prevention. From July 2009 to June 2014, Florida's Breast and Cervical Cancer Early Detection Program provided breast cancer and cervical cancer screening and diagnostic services to 49,268 women. The program provided 63,054 mammograms that resulted in 15,162 women receiving an abnormal result and 1,214 women being diagnosed with breast cancer (NBCCEDP Minimum Data Elements, 2015). To find out more information about getting screened and eligibility, contact the Breast and Cervical Cancer Early Detection Program (1-800-227-2345).

State Comprehensive Cancer Control Plan

Comprehensive cancer control is a process through which communities and partner organizations pool resources to reduce cancer risk, find cancers earlier, improve treatments, increase the number of people who survive cancer and improve quality of life for cancer survivors to ultimately reduce the burden of cancer in the state. Under the National Comprehensive Cancer Control Program (NCCCP), state cancer coalitions develop and implement a State Comprehensive Cancer Control Plan to meet identified cancer needs.

Florida's comprehensive cancer control plan for 2012-2016

(http://www.ccrab.org/media/12538/fcc_report2015_singlelev51-2.pdf) includes the following goals and objectives specific for screening and breast cancer:

Breast Cancer Screening Goal: Increase the percentage of women aged 50 to 74 who receive a mammogram in the last two years from 76.8 percent to 81.1 percent by 2020

General Screening Goals and Objectives: Increase the proportion of Floridians who receive appropriate cancer screenings

Objectives:

- Increase the proportion of Floridians who receive appropriate cancer screenings

- Support education and awareness programs aimed to encourage Floridians to discuss their risks for cancer and potential screening tests available with their doctor
- Endorse programs aimed to improve cancer screening methods or screening percentages, including effective methods to screen high-risk populations of Floridians
- Increase the percentage of adults 50 years of age and older who receive colorectal cancer screening based on national guidelines from 61.2 percent to 80.0 percent in 2018
- Increase the percentage of women aged 21 to 65 who receive a Pap test in the last three years from 80.4 percent to 93.0 percent by 2020
- Increase the percentage of women aged 50 to 74 who receive a mammogram in the last two years from 76.8 percent to 81.1 percent by 2020
- Support the recommendation from the Florida Prostate Cancer Advisory Council that men aged 50 years and older (age 40 for men at high risk: African American men and men with a family history of prostate cancer) should be informed by their health care providers annually regarding the risks and benefits of PSA screening
- Promote the Human Papillomavirus vaccine for Florida's youth •By June 2015, educate providers and the general public through two activities on the importance of provider vaccine recommendation to age appropriate persons, series completion and reminder systems
- Support policies which limit out-of-pocket expenses for Floridians recommended for cancer screening services
- Support policies which limit out-of-pocket expenses for Floridians recommended for genetic testing and counseling based upon published guidelines, deemed at high risk for an inheritable cancer risk syndrome

For more information regarding Florida's comprehensive cancer plan please visit:

<http://www.floridahealth.gov/diseases-and-conditions/cancer/cancer-control-florida.html>

Affordable Care Act

In 2010, Congress passed the Patient Protection and Affordable Care Act (commonly known as Affordable Care Act or ACA) to expand access to care through insurance coverage, enhance the quality of health care, improve health care coverage for those with health insurance and to make health care more affordable.

The ACA includes the following mandates to improve health insurance coverage and enhance health care quality (US Department of Health and Human Services, 2015a):

- Prohibit insurers from denying coverage based on pre-existing conditions
- Prohibit insurers from rescinding coverage
- Prohibit annual and lifetime caps on coverage
- Provide coverage of preventive services with no cost-sharing (including screening mammography, well women visits)
- Establish minimum benefits standards, known as the Essential Health Benefits (EHB)

The ACA provides tax subsidies for middle-income individuals to purchase insurance through the health insurance exchanges (commonly called the Marketplace). To be eligible to receive health coverage through the Marketplace, an individual must live in the United States, be a US citizen or national (or lawfully present), cannot be incarcerated, fall into certain income guidelines and cannot be eligible for other insurance coverage (i.e., Medicaid, Medicare and employer sponsored health care coverage) (US Centers for Medicare and Medicaid Services, n.d.).

Based on 2015 data, of the estimated 2,788,000 total number of uninsured in Florida, 11.0 percent are Medicaid eligible, 30.0 percent are eligible for tax subsidies and 39.0 percent are ineligible for financial assistance due to income, employer sponsored insurance offer or citizenship status (Garfield et al., 2015).

Medicaid Expansion

Traditional Medicaid had gaps in coverage for adults because eligibility was restricted to specific categories of low-income individuals (i.e., children, their parents, pregnant women, the elderly, or individuals with disabilities). In most states, non-elderly adults without dependent children were ineligible for Medicaid, regardless of their income.

Under the ACA, states were provided the option to expand Medicaid coverage to a greater number of non-elderly adults with incomes at or below 138 percent of poverty (about \$16,242 per year for an individual in 2015); thus reducing the number of uninsured, low-income adults.

As of January 2016, Florida has not adopted Medicaid Expansion. If Florida would have adopted Medicaid Expansion, an estimated 948,000 uninsured adults (including those in the coverage gap) would have been eligible for Medicaid coverage (Garfield and Damico, 2016).

Affordable Care Act, Medicaid Expansion and Uninsured Women

Even after implementation of the ACA and Medicaid Expansion (in some states), there are approximately 12.8 million women (ages 19 to 64) in the US that remain uninsured. Of the 6,019,000 women in Florida, 1,083,420 (18.0 percent) were without health insurance coverage in 2014 (The Henry J. Kaiser Family Foundation, 2016).

Uninsured women have been found to have inadequate access to care and receive a lower standard of care within health systems that lead to poorer health outcomes. Women that are single parents, have incomes below 100 percent federal poverty level, have less than a high school education, are women of color or immigrants are at greatest risk of being uninsured.

Conclusions

Overall, Florida is likely to achieve the HP2020 targets for both late-stage diagnosis rate and death rate. A total of 1,094 locations were identified as providing at least one type of breast cancer service along the continuum of care. While all of the facilities providing mammography services were accredited by the FDA, only 17.0 percent of the locations have been recognized

as receiving additional quality of care accreditations. Florida also has many designated areas that are rural and/or medically underserved - where individuals may have inadequate access to health care. Although Florida has implemented programs (i.e., NBCCEDP) to assist low-income and uninsured individuals, there are still far too many individuals that have inadequate access to health care and may be receiving a lower standard of care. Both may contribute to poorer breast cancer outcomes.

The information provided in this report can be used by public health organizations, local service providers and policymakers to identify areas of greatest need and the potential demographic and socioeconomic factors that may be causing suboptimal breast cancer outcomes. Susan G. Komen will continue to utilize evidence-based practices to reduce breast cancer late-stage diagnosis and death rates by empowering others, ensuring quality care for all and energizing science to find the cures.

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Appendix

Appendix A. State Map with County Names



Source: US Census Bureau, 2014