

DHCS

EVERY WOMAN COUNTS
REPORT TO THE CALIFORNIA LEGISLATURE:
BREAST AND CERVICAL CANCER SCREENING
AND DIAGNOSTIC SERVICES,
FISCAL YEAR 2012-2013



FEBRUARY 2015

Additional information is available from the Department of Health Care Services, Benefits Division, Every Woman Counts: <http://dhcs.ca.gov/EveryWomanCounts>

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Women seeking breast cancer and cervical cancer screening services in her area should call the toll-free number 1-800-511-2300 or visit our Online Provider Locator: <http://dhcs.ca.gov/EveryWomanCounts>

**CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES
Benefits Division**

**EVERY WOMAN COUNTS
Breast and Cervical Cancer Screening and Diagnostic Services
Fiscal Year 2012-2013
February 2015**

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PURPOSE AND LEGISLATIVE REQUIREMENT

The Breast Cancer Control Program (BCCP) is currently implemented as part of the Every Woman Counts (EWC) program administered by the California Department of Health Care Services (DHCS). EWC was previously housed in the Cancer Detection Section (CDS) of the California Department of Public Health (CDPH) until June 30, 2012. Effective July 1, 2012, EWC transitioned to DHCS per Assembly Bill (AB) 1467 (Committee on Budget, Chapter 23, Statutes of 2012). Section 30461.6 (f) of the Revenue and Taxation Code requires the oversight department to submit an annual report to the Legislature on specified activities of EWC. The portion of the statute pertaining to the report states:

(f)... The California Department of Public Health [now State Department of Health Care Services per AB1467] shall submit an annual report to the Legislature and any other appropriate entity. The report shall describe the activities and effectiveness of the program and shall include, but not be limited to, the following types of information regarding those served by the program:

- (1) The number.*
- (2) The ethnic, geographic, and age breakdown.*
- (3) The stages of presentation.*
- (4) The diagnostic and treatment status.*

In addition to breast cancer screening and diagnostic services, EWC provides cervical cancer screening and diagnostic services using a combination of state and federal funds. This report includes outcomes for both breast cancer and cervical cancer screening and diagnostic services provided by EWC during fiscal year (FY) 2012-2013.

BACKGROUND

AB 478 (Friedman, Chapter 660, Statutes of 1993) and AB 2055 (Friedman, Chapter 661, Statutes of 1993) created the California Breast Cancer Act (BCA). BCA was signed into law on October 1, 1993, by Governor Pete Wilson and went into effect January 1, 1994. BCA authorized the Breast Cancer Fund derived from a dedicated two-cent tax on tobacco products. Half of the revenues are deposited into the Breast Cancer Control Account to implement a state-funded breast cancer screening program, called the Breast Cancer Early Detection Program (BCEDP).

BCEDP was created in coordination with the Breast and Cervical Cancer Control Program (BCCCP), a federal Centers for Disease Control and Prevention (CDC) funded multi-component public health program in existence since 1991. BCCCP is now known as the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) and funds cancer screening, public education, outreach, quality assurance, and program evaluation activities. BCEDP and NBCCEDP were unified in October 2002, to form one comprehensive program, Cancer Detection Programs: Every Woman Counts. To meet the increasing demand for services, EWC began receiving additional funding from

Proposition 99 unallocated Tobacco Tax and Health Promotion Act (Prop 99) in FY 1999-2000 and state general funds in FY 2010-2011.

REPORTING PERIOD

This report to the Legislature includes EWC services provided by combined state and federal funds for reporting period FY 2012-2013. Finalized data for FY 2012-2013, includes the number and demographics of women served, breast and cervical cancer screening and diagnostic services and for calendar year (CY) 2011 confirmed diagnoses of breast and cervical cancer and stage at diagnosis.

DATA SOURCES USED IN THIS REPORT

The sources of the FY 2012-2013 data used for this report are listed below, reported as of September 2014:

- ***DHCS, Detecting Early Cancer Data Management System (DETEC)***: EWC's data management system for recipient enrollment and clinical services outcomes.
- ***DHCS, Medi-Cal Fiscal Intermediary Xerox Corporation (claims database)***: Adjudicated claims are used to identify EWC clinical services paid during FY 2012-2013. These records were subsequently linked to adjudicated claims to substantiate and identify all services in the clinical path.
- ***CDPH, California Cancer Registry (CCR)***: EWC links recipient records bi-annually to CCR, the state's cancer surveillance system, to validate cancer diagnoses, recipient demographics, determine stage of diagnosis, source of treatment and follow up. EWC clinical services recipient records were linked to 2011 case data from CCR, the most recent year for which data is complete (due to time needed to accurately collect and process case information within CCR).
- ***DHCS, Breast and Cervical Cancer Treatment Program (BCCTP)***: The BCCTP provides cancer treatment and services for eligible low-income California residents. BCCTP data was used to validate the number of EWC recipients diagnosed with breast and cervical cancers, which were referred for treatment in Medi-Cal through BCCTP. EWC conducts bi-annual record linkage with BCCTP.

EWC: OVERVIEW OF BREAST AND CERVICAL CANCER SCREENING AND DIAGNOSTIC AND PUBLIC HEALTH SERVICES

EWC facilitates access to breast and cervical cancer screening and diagnostic services for uninsured and underinsured women in California. EWC is the largest breast cancer detection program in the nation. In order to access EWC cancer screening, diagnostics, and case management, women must meet program eligibility criteria. These criteria include being uninsured or underinsured (defined as financially unable to meet co-payments or deductibles, or insurance does not provide coverage of breast and cervical cancer screening and/or diagnostic services) and having a household income at or below 200 percent of the federal poverty level. EWC provides breast cancer screening and diagnostic services to eligible California women ages 40 and over and cervical cancer screening and diagnostic services to eligible California women, ages 25 and over. However, starting April 2013, EWC began to offer cervical cancer screening to women 21-24 years old, pursuant to federal CDC policy, in accordance with the recommendations of the U.S. Preventive Services Task Force.

CCR estimated that in 2011, 24,591 women were diagnosed and 4,246 died from invasive breast cancer in California.¹ Cervical cancer was diagnosed in 1,389 California women with 428 deaths in that same year.² Timely, age-appropriate screening could have prevented many of these deaths by detecting cancer early when it is most treatable.

Early detection of breast cancer and cervical cancer increases the chance of survival. If breast cancer is found early as a localized tumor (e.g., the tumor has broken through the basement membrane, but still confined to the breast), the five-year relative survival rate is 100 percent, whereas, if it is regional (e.g., the tumor has spread to lymph nodes or adjacent tissues), the survival rate could decline to 86.5 percent during the five-year period. Similarly, if cervical cancer is found localized, the five-year survival rate is about 93.2 percent while regional is approximately a 59.8 percent survival rate.³ The number of years of survival after cancer diagnosis may vary widely among different sub-populations and individuals.

Clinical breast exams, mammograms, Papanicolaou (Pap) tests alone or with Human Papillomavirus (HPV) co-testing are highly effective cancer screening tools, but are underused by women, who are uninsured and underinsured, geographically and culturally isolated, medically underserved, racial, ethnic, and cultural minorities. The goal of EWC is to improve access to and utilization of screening services for these women.

¹ California Department of Public Health, California Cancer Registry. Annual Statistical Tables by Site, Breast Cancer, http://www.ccrca.org/pdf/AnnualReport/1988-2011_BREAST.pdf Accessed January 21, 2015.

² California Department of Public Health, California Cancer Registry. Annual Statistical Tables by Site, Cervical Uteri Cancer, http://www.ccrca.org/pdf/AnnualReport/1988-2011_CERVIX.pdf Accessed January 21, 2015.

³ American Cancer Society, California Department of Public Health, California Cancer Registry. California Cancer Facts and Figures 2014. Oakland, CA: American Cancer Society, Inc. California Division, February 2014. Page 11. http://www.ccrca.org/pdf/Reports/ACS_2014.pdf Accessed on January 21, 2015.

PUBLIC EDUCATION AND TARGETED OUTREACH

EWC outreach and recruitment efforts focus on accessing underserved populations and directing them to screening and diagnostic services. Health education, tailored to specific racial/ethnic populations, is used to promote screening services. In FY 2012-2013, 6,431 women attended an EWC health education session. Of these, 3,576 women were ages 50 and over.

EWC supports a statewide toll-free referral line (1-800-511-2300) to increase access to EWC services. The toll-free line is promoted through EWC tailored health education sessions. In FY 2012-2013 EWC contracted with the Cancer Prevention Institute of California Call Center where multilingual counselors answered calls from prospective EWC recipients during regular business hours five days a week. The call center's staff provided callers with the names and contact information of up to three local EWC primary care providers. In FY 2012-2013, the toll-free referral line received an estimated 17,124 calls; of these, 66 percent were from those seeking screening services.

CASE MANAGEMENT

Case management is an integral part of EWC. Program recipients found to have abnormal screening test results are provided with case management services to ensure they receive timely diagnosis and appropriate treatment. The role of case management is to establish, broker, and sustain essential support services for EWC-enrolled women to identify and overcome barriers to increased adherence to diagnostic and treatment services; and ensure clients receive support while accessing needed services.

**EWC BREAST AND CERVICAL CANCER SCREENING AND DIAGNOSTIC SERVICES,
FY 2012-2013**

WOMEN SERVED BY EWC

EWC provided breast and/or cervical cancer screening and diagnostic services to nearly 266,081 uninsured and underinsured women in FY 2012-2013. Of the women served approximately 233,511 received EWC breast cancer screening and diagnostic services, and approximately 135,740 received EWC cervical cancer screening and diagnostic services (categories of service are not mutually exclusive). Forty percent of the women served for breast clinical services, and 40 percent of the women served for cervical clinical services were new to EWC.

In FY 2012-2013, EWC clinical services were delivered by approximately 900 primary care providers and an unknown number of referral providers throughout the state. Table 1, shows the distribution of women served in FY 2012-2013 by age group, race/ethnicity and county of residence. The majority of women served were aged 50 and older, comprising 61 percent of breast and 56 percent of cervical cancer screening and diagnostic services. For both breast and cervical cancer screening and diagnostic services, the majority were Hispanic (71 and 70 percent, respectively).

Approximately, 33 percent for breast and 21 percent for cervical cancer screening and diagnostic services received those services in Los Angeles County.

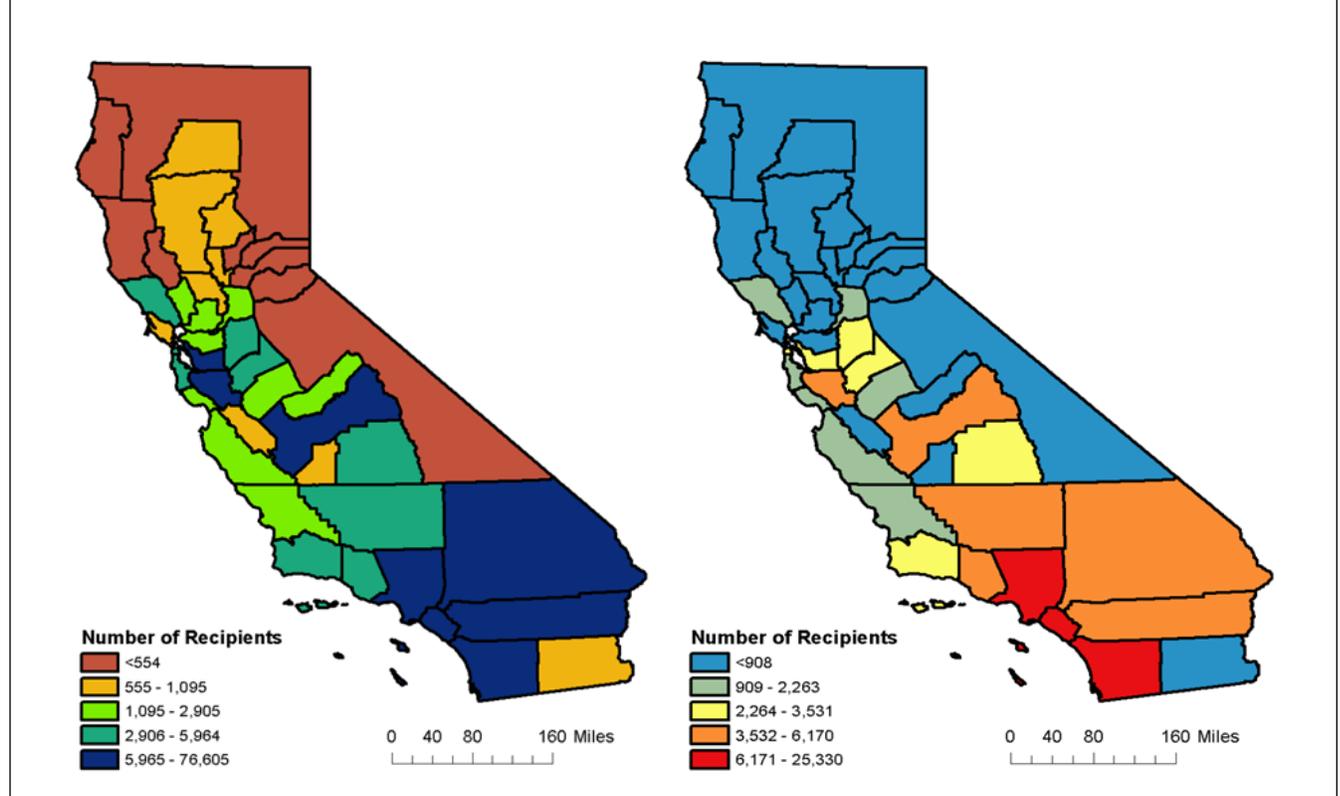
The geographic distribution of the number of women served by breast cancer and cervical cancer screening and diagnostics services from Table 1 are displayed in Figures 1a and 1b, respectively.

Table 1. Breast and Cervical Cancer Screening and Diagnostic Services by Recipient Demographics and County of Residence, Every Woman Counts, Fiscal Year 2012-2013

Age Group (years)	Breast Cancer (n=233,511)		Cervical Cancer (n=135,740)	
	Number	Percent	Number	Percent
21-39	n/a	n/a	15,730	12%
40-49	89,929	39%	44,363	33%
50 and over	142,925	61%	75,647	56%
Unknown	657	<1%	0	0%
Race/Ethnicity	Number	Percent	Number	Percent
White, Non-Hispanic	23,281	10%	14,308	11%
African American	7,382	3%	3,519	3%
Hispanic	164,972	71%	95,429	70%
Asian-Pacific Islander	29,753	13%	17,742	13%
American Indian and Other	2,349	1%	1,418	1%
Unknown	5,774	2%	3,324	2%
County of Residence	Number	Percent	Number	Percent
Alameda	10,110	4%	4,108	3%
Alpine/Amador	112	<1%	78	<1%
Butte	889	<1%	522	<1%
Calaveras	111	<1%	87	<1%
Colusa	281	<1%	241	<1%
Contra Costa	2,429	1%	1,020	1%
Del Norte	121	<1%	107	<1%
El Dorado	448	<1%	326	<1%
Fresno	6,726	3%	6,010	4%
Glenn	319	<1%	170	<1%
Humboldt	511	<1%	388	<1%
Imperial	1,095	<1%	753	1%
Inyo	86	<1%	129	<1%
Kern	5,049	2%	4,591	3%
Kings	1,057	<1%	973	1%
Lake	232	<1%	220	<1%
Lassen	42	<1%	28	<1%
Los Angeles	76,605	33%	28,074	21%
Madera	1,125	<1%	908	1%
Marin	1,014	<1%	726	1%
Mariposa	41	<1%	29	<1%
Mendocino	270	<1%	228	<1%
Merced	2,213	1%	1,925	1%
Modoc	38	<1%	34	<1%
Mono	37	<1%	36	<1%
Monterey	2,905	1%	2,473	2%
Napa	1,251	1%	800	1%
Nevada	326	<1%	266	<1%
Orange	21,789	9%	13,682	10%
Placer	480	<1%	349	<1%
Plumas	46	<1%	37	<1%
Riverside	9,346	4%	4,657	3%
Sacramento	2,559	1%	1,506	1%
San Benito	583	<1%	688	1%
San Bernardino	10,519	5%	6,599	5%
San Diego	23,058	10%	16,256	12%
San Francisco	5,146	2%	3,374	2%
San Joaquin	3,875	2%	3,564	3%
San Luis Obispo	1,276	1%	1,215	1%
San Mateo	4,164	2%	1,758	1%
Santa Barbara	3,075	1%	3,188	2%
Santa Clara	6,734	3%	4,695	3%
Santa Cruz	2,347	1%	1,359	1%
Shasta	986	<1%	722	1%
Sierra/Yuba	378	<1%	304	<1%
Siskiyou	267	<1%	194	<1%
Solano	1,224	1%	867	1%
Sonoma	2,925	1%	2,075	2%
Stanislaus	4,001	2%	3,150	2%
Sutter	796	<1%	480	<1%
Tehama	283	<1%	208	<1%
Trinity	36	<1%	23	<1%
Tulare	4,496	2%	3,503	3%
Tuolumne	76	<1%	63	<1%
Ventura	5,964	3%	5,065	4%
Yolo	911	<1%	515	<1%
Unknown	728	<1%	394	<1%

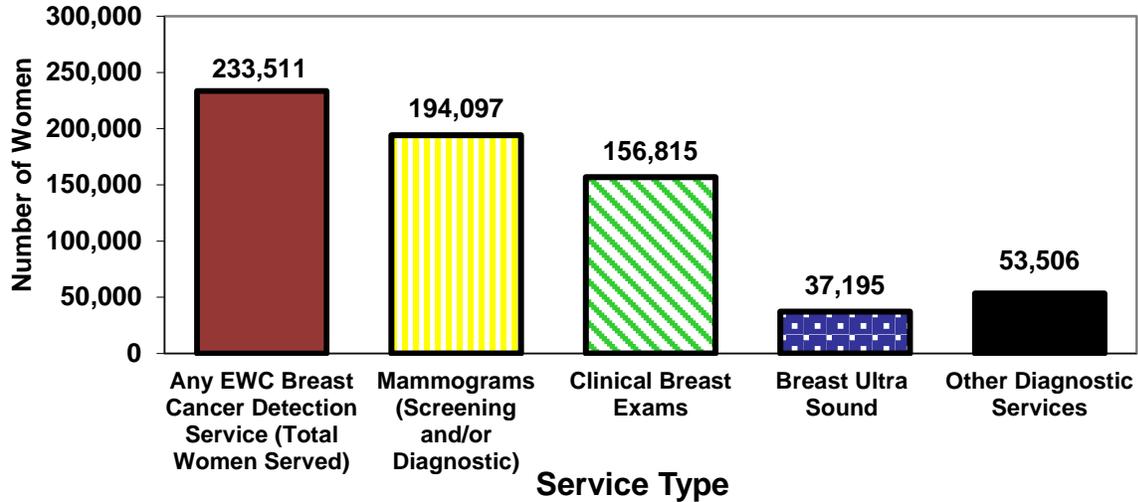
Note: Counties where number of women screened was less than 12 were combined with similar sized counties to safeguard program recipient privacy.

Figure 1. Breast and Cervical Cancer Screening and Diagnostic Service Recipients by County of Residence, Every Woman Counts, Fiscal Year 2012-2013



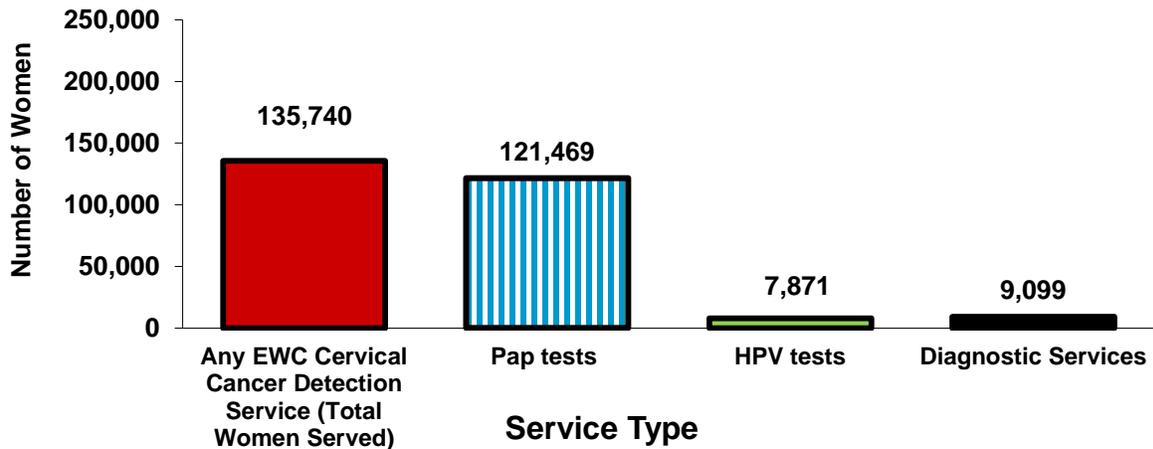
The numbers of screening and diagnostic tests provided through EWC are shown in Figures 2a and 2b. EWC provided breast cancer screening and diagnostic services to 233,511 uninsured and underinsured women. Approximately 156,815 women received clinical breast exams; 194,097 women received screening and/or diagnostic mammograms; 37,195 received an ultrasound; and 53,506 received other diagnostic services such as breast biopsy (e.g., fine needle aspiration, needle core/vacuum assisted biopsy, or excisional biopsy). For women receiving cervical cancer screening services, approximately 121,469 women received Pap tests; 7,871 received HPV tests and 9,099 received related diagnostic services including, but not limited to colposcopy with or without cervical biopsy(s), endocervical curettage and endometrial sampling. Services listed are not mutually exclusive.

Figure 2a. Number of Women by Breast Cancer Screening and Diagnostic Services, Every Woman Counts, Fiscal Year 2012-2013



Notes: 1) EWC clinical testing for FY 2012-2013, reported as of September 2014; 2) "Other Diagnostic Services" includes breast biopsy and other diagnostic procedures; 3) services listed are not mutually exclusive.

Figure 2b. Number of Women by Cervical Cancer Screening and Diagnostic Services, Every Woman Counts, Fiscal Year 2012-2013



Notes: 1) EWC clinical testing for FY 2012-2013, reported as of September 2014; 2) "Diagnostic Services" includes colposcopy with or without cervical biopsy(s), endocervical curettage, endometrial sampling and other diagnostic procedures; 3) services listed are not mutually exclusive.

CANCER DETECTION

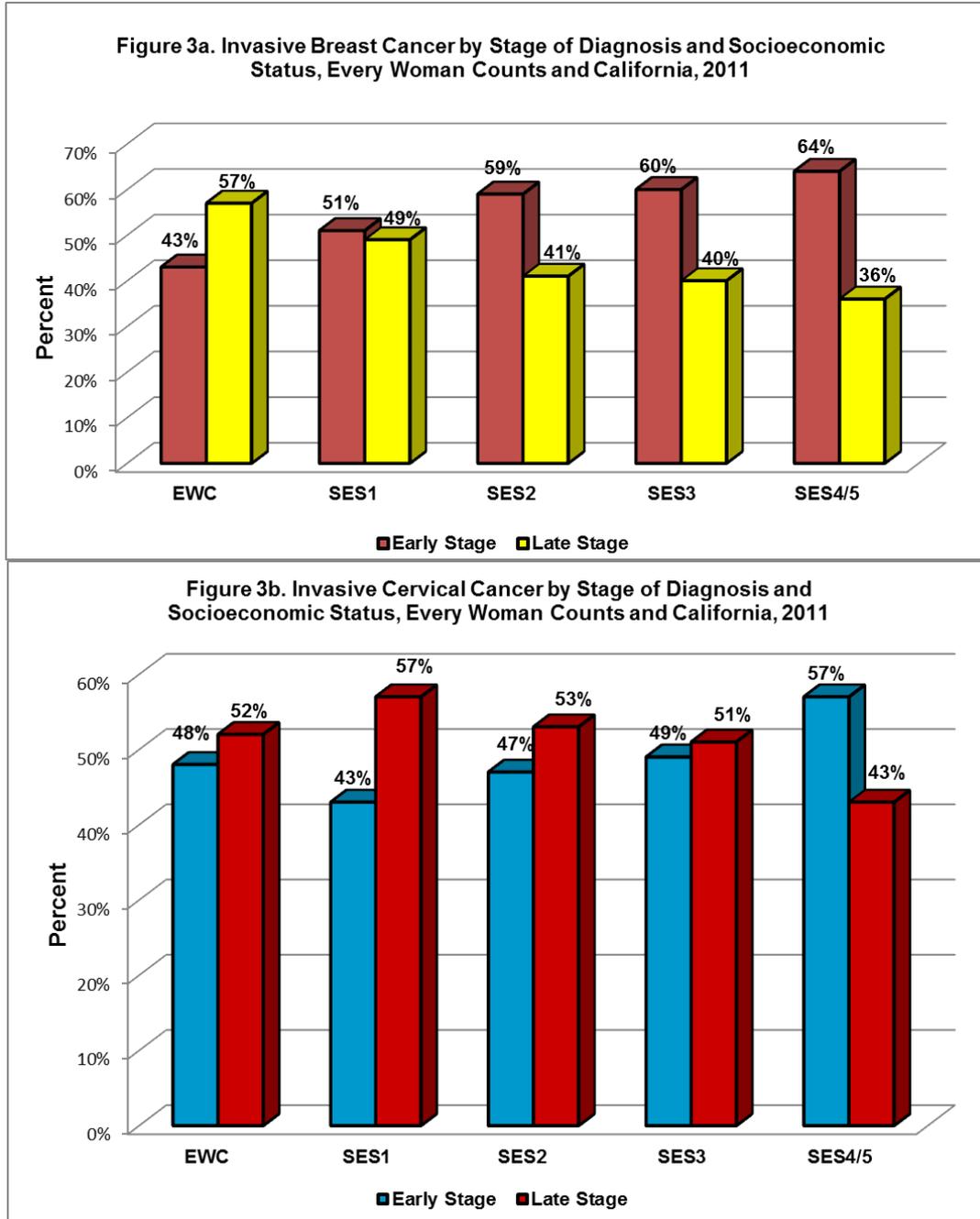
EWC clinical services diagnosed 1,241 women with breast cancer and 48 women with invasive cervical cancer in 2011. EWC diagnosed cases were validated through a record linkage with CCR. Data from CCR was used not just to validate cancer diagnoses, but recipient demographics, determine stage of diagnosis, source of treatment, and follow up.

The majority of EWC diagnosed breast cancers were among women 50-59 years old; for cervical cancer, the majority of cases were diagnosed among women aged 50 years and older (41 percent and 67 percent, respectively). For both breast and cervical cancer the majority of women diagnosed were Hispanic (53 percent and 58 percent, respectively). EWC breast cancer screening services diagnosed 164 women with *in situ* breast cancer and 1,077 with invasive (not shown). Forty-three percent of EWC diagnosed breast cancers and 48 percent of invasive cervical cancers were diagnosed at early stage, when timely and appropriate treatment leads to increased chance of survival (Table 2).

Table 2. Every Woman Counts Diagnosed Breast and Cervical Cancers by Recipient Demographics and Summary Stage of Diagnosis, 2011		
Breast Cancer (n=1,241)		
Age Group (years)	Number	Percent
40-49	425	34%
50-59	511	41%
60 and over	305	25%
Race/Ethnicity	Number	Percent
White, Non-Hispanic	282	23%
African American	75	6%
Hispanic	657	53%
Asian-Pacific Islander	160	13%
American Indian and Other	20	1%
Unknown	47	4%
Stage at Diagnosis (n=1,204)	Number	Percent
Early	523	43%
Late	681	57%
Cervical Cancer (n=48)		
Age Group (years)	Number	Percent
Less than 50	16	33%
50 and older	32	67%
Race/Ethnicity	Number	Percent
Hispanic	28	58%
All Others	20	42%
Stage at Diagnosis (n=46)	Number	Percent
Early	22	48%
Late	24	52%

Note: Summary stage of diagnosis, from Surveillance, Epidemiology and End Results Program (SEER) were collapsed into early versus late stage. Early stage includes *in situ* and localized stage; late stage includes regional and distant. Cases that were unstaged were omitted.

Figures 3a and 3b show the distribution of invasive breast and cervical cancers diagnosed in 2011, by socioeconomic status⁴ (SES) from the lowest (SES1) to the highest (SES5) and by stage at diagnosis for EWC recipients and all California women.⁵



⁴ Socioeconomic status (SES) was measured for 20,919 census block groups (2000 U.S. Census) categorized into quintiles, ranging from 1, the lowest to 5, the highest, using principal component analysis, which calculated standardized component scores. Variables used were: education, median income, median house value, median rent, proportion below 200 percent federal poverty level, proportion blue-collar workers, proportion in workforce. Yost, K., et al, Socioeconomic status and breast cancer incidence in California for different race/ethnic groups. *Cancer Causes and Control* 12, no. 8 (2001): 703-711.

⁵ Source: California Cancer Registry, California Department of Public Health's Chronic Disease Surveillance and Research Branch, summary stage of diagnosis by socioeconomic status data were obtained by request. November 2014.

Compared to all California women diagnosed with invasive breast cancer at the lowest SES, which appears to be comparable to EWC's service population, fewer EWC recipients were diagnosed with breast cancer at early stage (51 versus 43 percent, respectively); while diagnoses at late stage were slightly higher (49 versus 57 percent, respectively). The reverse pattern was seen for women diagnosed with invasive cervical cancers. More EWC women were diagnosed cervical cancer at early stage than California women at the lowest SES (48 versus 43 percent, respectively).

TREATMENT FOR EWC DIAGNOSED BREAST AND CERVICAL CANCER

Since January 2002, with the passage of Public Law 106-354⁶, women diagnosed with breast or cervical cancer through EWC have gained access to treatment through DHCS' state and federal funded, BCCTP. BCCTP is a state and federal Title XIX funded program that provides no-cost breast and cervical cancer treatment to eligible uninsured and underinsured Californians. BCCTP enrollees may receive full-scope Medi-Cal during their enrollment period for cancer treatment services. Of the 1,241 women diagnosed with breast cancer through EWC in 2011, 71 percent were referred to BCCTP for treatment, 27 percent received treatment through other health coverage as reported to the CCR, and 2 percent were lost to follow up. For the 48 EWC recipients diagnosed with cervical cancer, 65 percent were referred to BCCTP for treatment, 35 percent received treatment through other health coverage as reported to the CCR, while none were lost to follow up.

CONCLUSION

EWC provided potentially life-saving breast and cervical cancer screening and diagnostic services to approximately 266,081 women in FY 2012-2013, who would otherwise not have access to care. In 2011, EWC services lead to the diagnosis of 1,241 women with breast cancer, 1,077 invasive, accounting for 4.4 percent of all invasive breast cancers diagnosed in California that year.⁷ Of those EWC recipients diagnosed with breast cancer, 43 percent were diagnosed at early stage while 57 percent were diagnosed at late stage. Given that early stage breast cancer diagnosis increases the likelihood of survival and that EWC serves women from populations less likely to be diagnosed early, this program is serving a critical need for low-income women of California. The majority of EWC recipients (about 71 percent) diagnosed with breast cancer were referred to BCCTP for treatment.

EWC services lead to the diagnosis of invasive cervical cancer for 48 women, accounting for 3.5 percent of invasive cervical cancers diagnosed in California in 2011.⁸ Just under half of these invasive cervical cancers (48 percent) are found at early stage of diagnosis. EWC provides a critical need of low income women of California, who

⁶ 106th Congress, Oct 24, 2000, 114 STAT. 1381

⁷ California Department of Public Health, California Cancer Registry. Annual Statistical Tables by Site, Breast Cancer, http://www.ccrca.org/pdf/AnnualReport/1988-2011_BREAST.pdf Accessed January 21, 2015.

⁸ California Department of Public Health, California Cancer Registry. Annual Statistical Tables by Site, Cervical Uteri Cancer, http://www.ccrca.org/pdf/AnnualReport/1988-2011_CERVIX.pdf Accessed January 21, 2015.

otherwise would not have access to early stage cervical cancer diagnosis. The majority of EWC women (about 65 percent) diagnosed with cervical cancer were referred to the BCCTP for treatment.

ABOUT THE DATA

The information provided in the tables and figures regarding breast and cervical cancer screening and diagnostic services for this FY 2012-2013 report are based on adjudicated claims from the Medi-Cal fiscal intermediary, the Xerox Corporation reported as of September 2014. Women served using both state and federal funds are represented in this report. Program recipient date of birth and race/ethnicity at first clinical service, is self-reported. Those data are missing for women, who choose not to identify their age, year of birth, or race/ethnicity. The county of residence as presented in Table 1 was derived from the zip code of a woman's address at the time of first service during the reporting period.

The number of women served is a count of unique (or distinct) women from DETEC and EWC's adjudicated claims data. The identity of a unique woman is preserved through probabilistic matching. In the probabilistic matching process used in EWC, 62 different permutations and combinations of primary demographic data such as name, mother's maiden name, phone number, date of birth, address, etc. are used.

CCR data for CY 2011 was used to validate breast cancer and cervical cancer diagnoses and recipient demographics, and to determine stage of diagnosis, source of treatment, and follow up among women who received a EWC clinical service on the same day or up to one year prior to the diagnosis date recorded in CCR. Healthcare providers are mandated to report all cancers diagnosed among California residents to CCR. Due to the time needed to accurately collect and process cancer case information, the most recent complete data available from the CCR to link with EWC data was for CY 2011. In tables and figures specific to cancer diagnoses, the age at diagnosis was obtained from the medical record reported by CCR, while racial/ethnic group identification remained as identified by EWC clinical claims data and in DETEC.

DHCS data for BCCTP was used to validate the number of EWC recipients diagnosed with breast and cervical cancers, which were referred for treatment through BCCTP. These analyses were conducted by the Data Management, Evaluation, and Research Unit of the Cancer Detection and Treatment Branch, Benefits Division, DHCS.

All tables and figures in this report were designed and evaluated based on DHCS Public Aggregate Reporting Guidelines, issued April 2014.