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ORIGINAL REPORT

Quality of Care for Breast Cancer for Uninsured Women in California Under the Breast and Cervical Cancer Prevention Treatment Act

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ABSTRACT

Purpose
The objective of this study was to evaluate the quality of care provided to uninsured women with breast cancer who received treatment through the Breast and Cervical Cancer Prevention Treatment Program (BCCTP).

Methods
Participants included women with stage I to III breast cancer (n = 658) from a consecutive sample of women 18 years or older who received coverage through the California BCCTP between February 2003 and September 2005 who consented to a survey and medical record review (61% response rate). Quality of breast cancer care was evaluated using 29 evidence-based quality measures developed for the National Initiative for Cancer Care Quality (NICCQ). NICCQ, a largely insured cohort of women diagnosed with stage I to III breast cancer in 1998, was used to benchmark the results.

Results
Twenty-three percent of women presented with stage III disease compared with fewer than 10% nationally. Patients received 93% of recommended care (95% CI, 92% to 93%). Adherence to recommended care within domains ranged from 87% for post-treatment surveillance (95% CI, 84% to 90%) to 97% for diagnostic evaluation (95% CI, 96% to 97%). Compared to the NICCQ cohort, adherence to quality measures was as good or better for the BCCPT cohort in all domains except post-treatment surveillance.

Conclusion
The BCCTP has made important inroads in providing poor, uninsured women with access to high quality care when faced with the diagnosis of breast cancer; however, many present at an advanced stage, which is associated with worse outcomes.

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INTRODUCTION

The Centers for Disease Control established the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) in 1990 to provide breast and cervical cancer screening and diagnostic services to uninsured, low-income women.[1] Although the participating health agencies were charged with ensuring that patients with an abnormal screening test received diagnostic procedures and treatment, they did not cover the cost. During the initial years of the NBCCEDP, state programs used various public and private funds and made arrangements with providers willing to provide free or reduced-cost services to obtain the necessary treatment for patients. Despite these efforts, providers reported concerns about fragmented care, treatment delays, and barriers to care.[1]

In October 2000, Congress passed the Breast and Cervical Cancer Prevention Treatment Act authorizing states to provide Medicaid services for patients screened under the NBCCEDP; and by 2005, all states had elected to cover women eligible for treatment under the Act.[2] The federally funded Breast and Cervical Cancer Prevention Treatment Program (BCCTP) provided Medicaid coverage for the duration of treatment for uninsured women younger than 65 years with income lower than 200% of the federal poverty level, and found to be in need of treatment by a NBCCEDP provider.[3] Some states, California among them, used state funds to expand eligibility for BCCTP. The California state program provided BCCTP coverage for 18 months for breast

Table 1. Adherence to Breast Cancer Quality Measures (n = 658)

Parameter	No. Eligible	Adherence	Range
Diagnostic evaluation			
If a patient has stage 1-3 breast cancer and had a breast tumor removed,* then the pathology report should state the tumor size*	622	94	92-96
If a patient has stage 1-3 breast cancer and had a breast tumor removed,* then the pathology report should state the status of the margins*	619	100	99-100
If a patient has a diagnosis of stage 1-3 breast cancer and had a breast tumor removed,* then the hormone receptor status of the tumor should be checked and reported*	622	99	97-99
If a patient with a new diagnosis of stage 1-3 breast cancer undergoes an axillary lymph node dissection* then the pathology report should state the number of lymph nodes evaluated and the number of positive lymph nodes*	621	97	96-99
If a patient with a new diagnosis of stage 1-3 breast cancer and meets all of the following criteria: age < 70, tumor size > 1 cm, no evidence of metastatic disease within 3 months of diagnosis, and no documentation in the medical record that axillary lymph node sampling would not change treatment,* then the patient should have axillary lymph node sampling (either sentinel lymph node biopsy or lymph node dissection)*	593	99	98-100
If a patient has a sentinel node biopsy that is positive and no completion dissection,* then the lymph node should be negative*	162	87	81-92
If a patient has an axillary lymph node dissection,* then the patient should have at least six lymph nodes removed*	282	90	86-94
If a patient has a new diagnosis of stage I-III breast cancer and does not undergo axillary lymph node sampling,* then the patient should be informed about the option of a surgical check or removal of lymph nodes under the arm (ie, sentinel node biopsy or axillary dissection)*	10	70	35-93
If a patient newly diagnosed with stage I-III breast cancer,* then the medical record should document at least one of the following: AJCC stage or TNM stage or tumor size and lymph node status*	658	98	97-99
Surgery			
If a patient has a new diagnosis of stage I-III breast cancer,* then the patient should receive breast conserving surgery or mastectomy*	658	99	97-99
If a patient with a new diagnosis of stage I-III breast cancer undergoes surgical treatment with BCS (does not undergo mastectomy),* then the pathology report for the last cancer (final surgical excision) surgery should state that the surgical margins are clear or only focally involved with breast cancer*	344	100	99-100
If a patient with stage I-III breast cancer undergoes mastectomy as first therapeutic procedure then prior to undergoing mastectomy,* the patient should be informed about the option to have either breast conserving surgery followed by radiation therapy or mastectomy†	197	64	57-71
If a patient with stage I-III breast cancer undergoes mastectomy,* then prior to undergoing mastectomy the patient should be informed about the option of breast reconstruction after mastectomy*†	305	64	59-70
Adjuvant therapy			
If a patient newly diagnosed with stage I-III breast cancer meets all of the following criteria: ER+ or PR+ breast cancer, tumor size ≥ 1 cm or involved axillary lymph nodes, and was not taking tamoxifen prior to diagnosis,* then the patient should be started on tamoxifen or an aromatase inhibitor*	450	90	87-92
If a patient with stage I-III breast cancer who initiates treatment with tamoxifen or an aromatase inhibitor and there is no evidence of disease progression,*† then the patient should receive 5 years of treatment (% on treatment 3 years after BCCTP enrollment)†	340	84	80-88
If a patient newly diagnosed with stage II-III breast cancer is < 50 years old and the tumor is > 2 cm or the tumor involves the lymph nodes,* then the patient should receive chemotherapy with a standard regimen or be in a clinical trial*	208	80	74-85
If a patient is newly diagnosed with stage I-III breast cancer and the tumor is ≥ 1 cm or involves the lymph nodes,* then a physician should have a discussion with the patient regarding possible treatment with chemotherapy*†	654	97	95-98
If a patient newly diagnosed with stage II-III breast cancer is < 50 years old and the tumor is > 2 cm or the tumor involves the lymph nodes,* then the patient should start adjuvant chemotherapy within 8 weeks of the last therapeutic surgery*	151	73	65-80
If a patient with a diagnosis of stage I-III breast cancer is treated with radiation therapy,* then the radiation therapy medical record should document all of the following: the total radiation dose, the radiation dose per fraction or number of fractions given, the site*	98	92	85-96
If a patient with a diagnosis of stage I-III breast cancer has BCS,* then the patient should receive local radiation therapy*	336	99	97-100
If a patient with a diagnosis of stage I-III breast cancer has BCS and the patient received radiation therapy,* then the patient should receive local radiation therapy 45.0-50.4 Gy to the whole breast*	285	93	90-96
If a patient with invasive breast cancer who undergoes a mastectomy has positive margins on the surgical specimen, tumor size > 5 cm, 4 or more involved lymph nodes, or a T4 lesion,* then the patient should receive radiotherapy*†	115	85	77-91
If a patient with invasive breast cancer who undergoes a mastectomy has positive margins on the surgical specimen, tumor size > 5 cm, 4 or more involved lymph nodes, or a T4 lesion, and she received radiotherapy,* then she should receive radiotherapy 45.0-50.4 Gy to the chest wall*	98	91	83-96
If a patient begins radiation therapy treatments and was not hospitalized during treatment or experience grade IV toxicity* then the planned radiation therapy should be completed*	476	95	93-97
If a patient with stage I-III breast cancer undergoes BCS (does not have a mastectomy) and did not receive radiation therapy* then the patient should have a consultation with a radiation oncologist*†	10	70	35-93
If a patient with invasive breast cancer undergoes a mastectomy has positive margins on the surgical specimen, tumor size > 5 cm, 4 or more involved lymph nodes, or a T4 lesion and did not receive radiation therapy† then the patient should have a consultation with a radiation oncologist*†	5	100	48-100
Management of treatment toxicity			
If a patient ever receives highly emetogenic chemotherapy,* then the patient should receive potent anti-emetic therapy (eg, 5HT blockade)*	413	80	77-84
If a patient who is postmenopausal taking tamoxifen has vaginal bleeding* then the patient should have an endometrial biopsy or pelvic transvaginal ultrasound*	0	—	
Surveillance after initial therapy			
If a patient has been diagnosed with stage I-III breast cancer and has not had bilateral mastectomies (and has not had a recurrence)*† then the patient should have a mammogram in the last 12 months†	434	87	84-90

Abbreviations: AJCC, American Joint Commission on Cancer; BCS, breast-conserving surgery; ER, estrogen receptor; PR, progesterone receptor; BCCTP, Breast and Cervical Cancer Prevention Treatment Program.
*Data from medical record.
†Data from patient self-report.

cancer and 24 months for cervical cancer to women who were uninsured or 65 years or older with undocumented immigration status, not eligible for Medicare, or insured, but with expected premiums, copays, or deductibles higher than $750 per year; although, coverage was extended on a case by case basis.[4] Among women surveyed 3 years after enrollment, 21% reported that their BCCTP coverage had been terminated and 35% had obtained other coverage in the interim.

While the BCCTP was designed to provide women with breast or cervical cancer with access to needed cancer diagnostic and treatment services, the extent to which they received appropriate therapy is not known. We conducted this study to evaluate the quality of care provided to women with breast cancer who received treatment through the BCCTP using a set of evidence-based explicit quality measures.

METHODS

Study Sample

A consecutive sample of all women treated through the California BCCTP between February 2003 and September 2005 (n = 1,780) was recruited for this study. Women who did not speak English or Spanish (n = 183), had a previous history of breast cancer (n = 69), not cognitively able to participate (n = 13), or who were receiving treatment for another cancer (n = 7) were excluded. Eligible women were contacted by phone 6 months after their enrollment in BCCTP to solicit their participation in a study requiring an interview and review of their medical records. Women who participated in the initial interview in English or Spanish were subsequently approached to participate in additional interviews at 18 and 36 months. The study was approved by the University of California, Los Angeles Human Subjects Protection Committee.

A total of 921 women age 18 years or older recently diagnosed with breast cancer were initially recruited, with a 61% overall response rate. Compared with survey responders, nonresponders were older (52 *v* 50 years; $P < .001$), more likely to be Asian/Pacific Islanders, and less likely to be Latinas and whites (11.6%, 37.6%, 26.5% *v* 7.4%, 53.4%, 31.7%, respectively; $P < .05$). Further details of the design and flow of the parent study can be found in a previously published article.[5] Our study sample is confined to patients who had stage I to III breast cancer (n = 658).

Data Sources

Patients completed a telephone survey in English or Spanish about their treatment experience at 6, 18, and 36 months after enrollment in BCCTP. Of the 921 women who participated in the first interview, response rates at 18 and 36 months were 86% and 73%, respectively. The survey included questions regarding patients' initial therapy and experiences, knowledge about treatment options, perceived efficacy in patient-physician interactions, and symptoms related to cancer or its treatment. In addition, patients were asked to provide the names and contact information of all physicians involved with their cancer care.

With patient consent, we obtained and abstracted detailed clinical information from their medical records about the tumor characteristics, staging, referrals and decision making, initial cancer treatment, adjunctive medications, and comorbid conditions. Eight hundred (87%) patients consented to medical record review and we were able to successfully retrieve and abstract medical records for 97% (n = 776) of this group. The inter-rater reliability between abstractors for data on breast cancer characteristics and treatment data ranged from 0.68 to 1.00, indicating good to excellent agreement.

Quality Measures

We used 29 evidence-based quality measures (QMs) developed for the National Initiative for Cancer Care Quality (NICCQ) to evaluate the care of the women with early-stage breast cancer in this cohort.[6] These measures evaluate the process of care across the continuum of breast cancer care from diagnosis through post-treatment surveillance. Five of the 36 original NICCQ breast cancer QMs (ie, tumor margins inked, tumor grade documented, body-surface area, and planned chemotherapy dose documented, chemotherapy dose consistent with published regimens) were not included because the necessary data elements were not available. In addition, several other NICCQ measures had to be modified. Three NICCQ QMs addressing documentation of the tumor stage in each treating specialist's medical record (ie, surgeon, medical oncologist, and radiation oncologist) were collapsed into a single QM because the data collection for the BCCTP study did not attribute staging data to a specific provider's record. And, because the available data did not distinguish the results of sentinel lymph node biopsies and full axillary lymph node dissections, the NICCQ QM addressing the need for axillary lymph node dissection in patients in whom a sentinel lymph node biopsy was positive was modified to the following: if a patient has a sentinel lymph node biopsy without a completion dissection then the lymph node(s) should be free of cancer. Finally, the QMs addressing specific adjuvant systemic therapy were updated by American Society of Clinical Oncology and the National Comprehensive Cancer Network so that they reflect 2003 to 2005 treatment guidelines (eg, include aromatase inhibitors in addition to tamoxifen).[7] The individual QMs are described in the Table 1.

Benchmark Data

We used the results of the NICCQ study as a benchmark against which to compare the results of the BCCTP cohort.[8] The NICCQ study included English-speaking patients 21 to 80 years old, newly diagnosed with stage I to III breast cancer during 1998 sampled from American College of Surgeons–approved hospitals in Atlanta, GA, Cleveland, OH, Houston, TX, Kansas City, KS, and Los Angeles, CA. Among the 1,287 women in the study, 43% were younger than age 55, 28% were 55 to 64, and 29% were 65 to 80. Most of the cohort was white (85%) with 4% Hispanic, 7% African American, and 4% Asian. Only 1% reported being uninsured. Most patients had private insurance (71%), 21% had Medicare, 3% had other public health coverage, and insurance status was unknown for 5%. Fifty-four percent, 39%, and 5% had stage I, II, and III disease, respectively. Data for the QMs were obtained by review of patients' medical records and a mailed survey approximately 3 years after diagnosis.

Statistical Analyses

For each QM, we calculated the proportion of eligible patients who received the specified process of care. We also calculated the mean percent adherence for each of 29 QMs for each of five clinical domains: diagnostic evaluation, surgery, adjuvant therapy, management of treatment toxicity, and post-treatment surveillance. This method weights individual QMs in the domain-level scores on the basis of prevalence of eligibility, determined by the number of times that patients were eligible for measures within a domain, which we refer to as the number of eligible events. In addition, we calculated a quality score for each patient by determining percent adherence to the QMs for which each patient was eligible. In exploratory analyses, we compared the age, race, language, and education of women with quality scores at or below the 10th percentile with the rest of the cohort (*t*-test and χ^2 test), as well as the number of QMs for which they were eligible. All statistical analyses were conducted in SAS version 9.1 (SAS Institute, Cary, NC).

RESULTS

Characteristics of the study cohort (n = 658) are presented in Table 2. In this otherwise uninsured population, 63% of the women were younger than age 55 and 53% were Latinas. Approximately half of the patient surveys were conducted in Spanish. In the study sample, 29%, 48% and 23% had stage I, stage II, and stage III disease, respectively. Ninety percent of the women had none or only one comorbid condition.

There were 9,766 eligible events specified by 28QMs (no patients were eligible for one measure) for the 658 patients in the study sample (Table 3). The mean percent of patients eligible for a QM was 51% overall and ranged from 31% for management of treatment toxicity to

Table 2. Characteristics of the BCCPT Analytic Cohort and the NICCQ Cohort

Characteristic	BCCPT (n = 658)		NICCQ (n = 1,287)	
	No.	%	No.	%
Sociodemographic				
Age, years				
< 55	414	63	556	43
55-64	205	31	354	28
65-80	39	6	377	29
Ethnicity				
Latina	350	53	52	4
African American	34	5	88	7
White	222	34	1,096	85
Asian/Pacific Islander	52	8	51	4
Survey language				
English	341	52	1,287	100
Spanish	317	48	0	0
Education				
< high school	282	43	96	8
High school graduate	111	17	338	26
Some college	175	27	429	33
College graduate	90	14	412	32
Clinical				
Stage				
I	189	29	698	54
II	315	48	497	39
III	154	23	58	5
Recurrence				
At 18 months	20	3	NA	
At 36 months	62	9	52	4
Comorbidity count				
0	464	71	801	62
1	125	19	319	25
2	23	4	118	9
3+	46	7	49	4

Abbreviations: BCCPT, Breast and Cervical Cancer Prevention Treatment Program; NICCQ, National Initiative for Cancer Care Quality; NA, not available.

66% of patients for post-treatment surveillance. Compared with the NICCQ cohort, the mean percent of women eligible for a measure in the BCCPT cohort was greater in each of the domains except surveillance.

On average, patients received 93% of recommended care (95% CI, 93% to 94%). Among the domains of care assessed, diagnostic evaluation had the greatest number of eligible events (n = 4,189) and management of treatment toxicity had the fewest (n = 413). Adherence to recommended care within domains ranged from 87% (95% CI, 84% to 90%) for post-treatment surveillance to 97% (95% CI, 96% to 97%) for diagnostic evaluation. Adherence to QMs was as good or better for the BCCPT cohort compared with the NICCQ cohort in all domains except post-treatment surveillance.

Table 3. Quality of Care for Initial Treatment of Breast Cancer in BCCPT Compared With NICCQ Cohort As Benchmark

Quality of Care Domain	BCCPT (n = 658)					NICCQ (n = 1,287)				
	Measures (No.)	Eligible Events (No.)	Mean No. of Eligible Patients	Adherence		Measures (No.)	Eligible Events (No.)	Mean No. of Eligible Patients	Adherence	
				Mean	95% CI				Mean	95% CI
Diagnostic evaluation	9	4,189	64	97	96 to 97	13	9,887	59	88	88 to 89
Surgery	4	1,504	57	88	86 to 89	4	2,673	52	87	85 to 88
Adjuvant therapy	13	3,226	38	92	91 to 93	16	6,148	30	82	81 to 83
Management of treatment toxicity	2	413	31	80	76 to 84	2	378	15	73	69 to 78
Surveillance	1	434	66	87	84 to 90	1	1,195	93	94	92 to 95
Overall	29	9,766	51	93	93 to 94	36	20,281	44	86	86 to 87

Abbreviations: BCCPT, Breast and Cervical Cancer Prevention Treatment Program; NICCQ, National Initiative for Cancer Care Quality.

Adherence to the QMs was 90% or higher for 17 of the measures, 85% to 90% for three measures, and lower than 85% for eight measures (Table 1). Among the five QMs that addressed the need to provide patients information about diagnostic and treatment options, four had adherence lower than 85%. In particular, among women who had a mastectomy, only 64% had a discussion about breast reconstruction and just 64% reported that breast conserving surgery was discussed with them before undergoing a mastectomy as their first surgical procedure. Although 97% of women with stage II to III breast cancer received adjuvant chemotherapy, only 79% received a standard regimen (eg, anthracycline-based regimen with or without taxane with or without trastuzumab). Examples of alternate chemotherapy regimens used include gemcitibine and vinorelbine; paclitaxel, cisplatin, and fluorouracil; and single-agent capecitibine. Finally, just 73% of women eligible for adjuvant chemotherapy initiated chemotherapy within 8 weeks of their last surgical procedure suggesting that there may have been delays in obtaining care for some women. Timeliness of care was not addressed by any of the QMs in other domains.

The average patient quality score was 93% (standard deviation, 8%) and 38% received all recommended care. The quality score for patients at the 10th percentile was 83%. There were no statistically significant differences in age, race, language (survey completed in English or Spanish), or education between patients who scored above or below the 10th percentile; however, patients below the 10th percentile were, on average, eligible for fewer QMs (14.3 quality *v* 16.2 QM; $P < .001$).

DISCUSSION

We found that uninsured women who received coverage through the BCCTP when they were diagnosed with breast cancer received care comparable to that observed in a previous study of a largely insured population. When measured against a set of 29 evidence-based explicit quality measures, the cohort received 93% of recommended care. Adherence to quality measures for the BCCPT cohort met or exceeded the benchmark of NICCQ in all domains except post-treatment surveillance.

Prior studies have shown that women with breast cancer who lack health insurance may not receive recommended treatment and have worse survival.[9-11] In addition, nonwhite race is associated with worse breast cancer outcomes and underuse of appropriate treatments[12-135,21] and this appears to be mediated, at least in part, through socioeconomic status and lack of insurance.[14-17] Our findings thus suggest that the BCCTP may have had a large and salutary impact on the care of poor women with breast cancer who would otherwise have been uninsured. These findings are especially provocative because the limited data available to date has not provided assurance that such high quality care is occurring through the Medicaid program. Studies of patients with Medicaid coverage who have cancer suggests that they are diagnosed at a later stage and have worse survival.[9,17,18] We are not aware of any studies that have examined the quality of the process of care for patients with cancer with Medicaid.

The results of both the BCCTP and NICCQ are striking since several prior national studies have found the quality of care for a variety of chronic medical conditions to be less than optimal. A study by McGlynn et al[19] concluded that a representative sample of United States population received only 55% of recommended care for a wide variety of medical conditions. It is possible that the comprehensive data collection, including data from medical records and patient self-report, and precise eligibility criteria used in this study resulted in higher rates of measured quality care. Further research is needed to understand why quality of care may be different for cancer than for other types of chronic illness or delivery of preventive care.

Although overall adherence to recommended care was more than 90% in the BCCPT cohort, adherence was lower than 85% on one third of the quality measures. Adherence rates were lower than 85% on one half of the quality measures of the NICCQ cohort. Deviations from the use of evidence-based chemotherapy regimens are of particular concern. While virtually all women with stage II to III breast cancer received adjuvant chemotherapy, one in five did not receive a standard regimen and one in four had delays in initiating treatment. Further research is needed to understand what factors are contributing to the use of chemotherapy regimens that are not supported by medical evidence. These results highlight the need for ongoing quality improvement efforts even when the overall quality of care appears acceptable.

While the Centers for Disease Control's NBCCEDP was designed to overcome barriers to access to early detection for women who are uninsured, women referred to the BCCPT had more advanced-stage cancer than the general population. In the BCCPT cohort 29%, 48%, and 23% of women diagnosed with early-stage breast cancer had stage I, II, and III disease, respectively. In contrast, only 5% of women in the NICCQ study and 9% of women reported to the National Cancer Database in 1998 to 2003 had stage III disease.[8-9] Of note, 64% of women reported that their cancer was self-detected.[20] Three years after diagnosis, 9% of the BCCPT cohort had a breast cancer recurrence compared with 4% of the NICCQ cohort. Thus while incremental expansions of coverage to specific populations through programs like the BCCPT can provide access to needed medical care, our results suggest that policies aimed at providing coverage that is not tied to specific diagnoses are needed to overcome barriers to access and reduce health disparities.

Our data must be viewed in light of several limitations. First, this is a nonexperimental cohort study. We used data from NICCQ,[8] a national study of the quality of breast cancer care among women diagnosed in 1998, as a benchmark against which to compare the quality of care for women enrolled in the BCCTP in 2005 to 2006. Although adherence to recommended care in NICCQ was 86%, it is possible that the quality of care provided has improved and this benchmark may be an underestimate of the quality of care currently provided to women with breast cancer. In addition, patients in BCCTP were younger than NICCQ population and studies have found that older patients are less likely to receive recommended care.[17] Second, 61% of eligible patients agreed to participate and approximately 10% of the patients enrolled in the BCCTP were not eligible for this study because they did not speak English or Spanish, so our results potentially could overestimate the quality of care if nonresponders and patients who spoke languages other than the dominant languages of English or Spanish were less likely to get appropriate care. However, our response rate is comparable to that obtained in a number of similar studies.[8,19,21-23] And, although lower response rates raise the specter of selection bias, several recent studies provide reassurance that despite differences in the characteristics of respondents and nonrespondents, lower response rates do not necessarily bias results.[24,25]

Third, this study uses data abstracted from patients' medical records as well as patient self-report. To the extent that care is not accurately documented in the medical record, our results may not reflect the care actually provided to patients. This would most likely result in underestimating the quality of medical care. While patient self-report is subject to recall bias, it has been noted that people who have undergone a sudden and life-threatening health crisis manifest very clear recall of the details surrounding the event[26]; breast cancer patients, for example, can recall the precise time when they first noticed their symptoms and we recently reported high concordance of self-report of treatment with data abstracted from the medical record for this cohort.[27] Finally, these results may not be generalizable to other states (especially since California used state funds to expand eligibility for the BCCPT) or to other health conditions.

In summary, BCCPT provided approximately 5% of the 21,000 women diagnosed with breast cancer in California per year with access to needed care.[28] Women in the BCCPT cohort received 93% of indicated care and 38% of the women received all recommended care. The quality of breast cancer care for the BCCPT cohort was comparable or better than that received by the community-based cohort in NICCQ. The higher proportion of more advanced-stage cancers among the BCCPT cohort underscores the challenges in obtaining timely diagnosis in an uninsured population even with the availability of programs like the NBCCEDP that provide access to recommended screening. However, the results here suggest that the BCCPT program has made important inroads in providing poor uninsured women with access to the standard of care when faced with diagnosis of this common and life-threatening condition.

AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

The author(s) indicated no potential conflicts of interest.

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