

## Racial and Ethnic Disparities in the Use of Postmastectomy Breast Reconstruction: Results From a Population-Based Study

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### ABSTRACT

#### Purpose

There is concern that minority women have limited access to breast reconstruction. We described patterns of use, experiences with clinicians, and patients' satisfaction with treatment decisions for women of different race/ethnicities.

#### Methods

A total of 3,252 patients with breast cancer from Los Angeles and Detroit Surveillance, Epidemiology, and End Results registries were surveyed near the time of diagnosis ( $n = 2,260$ , response rate 72.2%). The primary outcomes were receipt of reconstruction, access to information about reconstruction, and decisional satisfaction. The primary independent variable was race/ethnicity (white, African American [AA], highly acculturated Latina [Latina-high], and less acculturated Latina [Latina-low]). Control variables included other sociodemographic and clinical factors.  $\chi^2$  and multivariate logistic regression were used for the analyses.

#### Results

Receipt of reconstruction varied significantly by patient race/ethnicity—40.9% of whites, 33.5% of AAs, 41.2% of Latina-high, and only 13.5% of Latina-low ( $P < .001$ )—and persisted when we controlled for demographic and clinical factors. Minority women were significantly less likely than whites to see a plastic surgeon before initial surgery and were more likely to desire more information about reconstruction (17.0% of whites v 27.0% of AAs, 30.0% of Latina-high, and 55.9% of Latina-low;  $P < .001$ ). Decisional satisfaction was lowest among minority women without reconstruction ( $P < .001$ ).

#### Conclusion

Minority women, particularly less acculturated Latinas, had low receipt of breast reconstruction, which may be related to limited information about the procedure and less access to plastic surgeons. Greater desire for information and lower satisfaction with surgical decisions among these patients motivate greater attention to treatment support for these patients.

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### INTRODUCTION

Postmastectomy reconstruction is an important treatment option for women with breast cancer.<sup>1,2</sup> However, concerns have been raised about access to the procedure, because overall, only 15% of women across the United States receive reconstruction within 4 months of the mastectomy (ie, immediate and early delayed reconstruction).<sup>3</sup> Advanced stage of disease and need for radiation are relative contraindications for immediate and early delayed breast reconstruction<sup>4,5</sup>; however, even controlling for those factors, use of breast reconstruction varies substantially by race/ethnicity and socioeconomic

status.<sup>3,6</sup> Latinas, particularly those who are less acculturated, have been largely omitted from prior research on reconstruction, although they are increasingly represented among women diagnosed with cancer.<sup>7</sup>

The decision-making process for postmastectomy breast reconstruction is complicated because there are several approaches to the procedure. Language barriers, especially for less acculturated Latinas, may reduce understanding of available reconstruction options and/or their ability to communicate about their interest in reconstruction. Latinas may also face financial barriers related to limited insurance coverage for reconstruction and access

to plastic surgeons. Together these factors may contribute to unmet need for reconstruction among Latinas, potentially leading to worse longer-term outcomes.

To address these issues, we evaluated variation in the use of immediate and early delayed breast reconstruction among racially/ethnically diverse patients with breast cancer in a population-based sample of mastectomy-treated patients. The research questions were as follows: (1) Are there racial/ethnic differences in receipt of breast reconstruction after mastectomy? (2) What are the underlying factors (eg, financial and knowledge barriers) that may explain these differences? and (3) Are there racial/ethnic differences in surgical decision satisfaction among those who did and did not receive reconstruction? We were particularly interested in whether Latinas with less acculturation would have the lowest rates of breast reconstruction and would face more informational or financial barriers to reconstructive services.

## METHODS

### Study Population

Women in the metropolitan areas of Los Angeles and Detroit aged 20 to 79 years diagnosed with primary ductal carcinoma in situ (DCIS) or invasive breast cancer (American Joint Committee on Cancer [AJCC] stage I to III)<sup>8</sup> from June 2005 through February 2007 were eligible for sample selection. We excluded patients with stage IV breast cancer, those who died before the survey, and those who could not complete a questionnaire in English or Spanish. Latinas and African Americans were oversampled.<sup>9</sup>

### Data Collection

Eligible patients were accrued via rapid case ascertainment described in prior work.<sup>9-11</sup> Eligible subjects were mailed an introductory letter, survey instrument with Spanish translation, and a \$10 cash gift.<sup>12</sup> The Dillman survey method was used to encourage survey response.<sup>13</sup> The average time between diagnosis and completion of the questionnaire was 9 months. The study

**Table 1.** Study Sample Characteristics of Mastectomy-Treated Breast Cancer Population From the Los Angeles and Detroit SEER Cancer Registries (n = 806)

Characteristic	% of Patients				P*
	Whites (n = 370)	African Americans (n = 202)	Highly Acculturated Latinas (n = 107)	Less Acculturated Latinas (n = 127)	
Receipt of reconstruction	40.9	33.5	41.2	13.5	< .001
SEER registry					< .001
Los Angeles	30.8	50.0	93.5	100.0	
Detroit	69.2	50.0	6.5		
Age, years					< .001
< 40	6.2	7.0	19.6	11.0	
40-49	24.6	26.4	20.6	26.0	
50-59	30.0	28.4	20.6	33.9	
60-69	21.6	25.9	19.6	23.6	
> 69	17.6	12.4	19.6	5.5	
Education					< .001
High school or less	6.0	14.0	25.2	70.1	
High school graduate	17.5	17.0	22.4	19.4	
Some college	40.5	38.0	32.7	8.1	
College graduate	35.9	31.0	19.6	2.4	
Insurance status					< .001
Private insurance/other	69.2	58.3	56.7	29.8	
Medicaid	3.3	12.9	13.5	29.0	
Medicare	25.1	24.7	22.1	14.9	
None	2.5	4.1	7.7	26.5	
Income					< .001
< \$20,000	11.4	27.2	15.9	39.4	
\$20,000 to \$69,999	34.9	36.6	39.3	24.4	
≥ \$70,000	38.4	23.8	24.3	1.6	
Missing	15.4	12.4	20.6	34.7	
Married/domestic partner, yes	63.8	36.1	60.8	62.2	< .001
AJCC stage					.625
0	14.0	15.8	17.0	15.9	
I	29.9	21.3	22.6	25.4	
II	33.2	40.1	38.7	37.3	
III	23.0	22.8	21.7	21.4	
Comorbid conditions					< .001
0	46.2	30.2	47.7	44.1	
1	25.7	27.2	18.7	30.7	
≥ 2	28.1	42.6	33.6	25.2	
Receipt of chemotherapy	62.3	63.5	64.8	70.1	.470
Receipt of radiation	37.5	34.9	29.8	33.1	.491

Abbreviations: SEER, Surveillance, Epidemiology, and End Results; AJCC, American Joint Committee on Cancer.

\*t test for the age comparison; Pearson  $\chi^2$  test for the other comparisons.

protocol was approved by the institutional review boards of the University of Michigan, University of Southern California, and Wayne State University.

Over the study period, 3,133 patients were included in the final accrued sample. A total of 432 patients (13.8%) could not be located, 411 patients (13.1%) were located and contacted but did not participate in the survey, and 29 patients (0.9%) completed the survey but this information could not be merged to SEER data. Thus 2,260 patients (72.2%) were included in the final analytic sample (96.5% completed a written survey and 3.5% completed a telephone survey). Information from the survey was merged to SEER data. An analysis of nonrespondents versus respondents showed that there were no significant differences by age at diagnosis or Hispanic ethnicity. However, compared with respondents, nonrespondents were more likely to be African American (34.9% v 26.2%;  $P < .001$ ), were more likely to have never married (23.0% v 19.3%;  $P = .01$ ), and were more likely to have stage II or stage III disease (43.4% v 40.5%;  $P = .005$ ). In addition, nonrespondents compared with respondents were less likely to receive breast-conserving surgery (54.5% v 63.2%;  $P = .02$ ). The patient sample used in the analyses for this article were those patients who received a mastectomy ( $n = 806$ ).

**Measures**

The patient questionnaire was developed based on a conceptual model and extensive prior work.<sup>10,11,14-17</sup> The primary outcome was receipt of breast reconstruction at any time since the mastectomy (yes/no). We evaluated three reasons why women did not have breast reconstruction: (1) considering getting reconstruction at a later time, (2) not considering reconstruction at all (didn't want more surgery, not important), and (3) they reported an access barrier (didn't know how to get it, worried about financial costs). In addition, we assessed patients' knowledge and informational needs regarding breast reconstruction. Patients were asked whether (1) their surgeon explained the treatment and timing options for breast reconstruction, (2) they consulted with a plastic surgeon preoperatively, and (3) they desired more information about breast reconstruction. All responses were dichotomized (yes/no).

A final outcome was related to the quality of the surgical decision and included multi-items from Holmes-Rovner's decisional satisfaction scale, which has been previously published by our group.<sup>9</sup> Responses ranged from 0 (low) to 5 (high) using a five-point Likert scale. For analytic purposes, these variables were dichotomized into low or moderate ( $\leq 3$ ) or high (4 to 5). Applying different categorizations did not significantly alter the results.

The independent variables included patients' demographic characteristics (race/ethnicity, age, education, insurance status, income, work status, and marital status) and clinical/treatment factors (AJCC stage, presence of comorbid conditions, and receipt of chemotherapy and/or radiation therapy). Race/ethnicity was categorized as white, African American, highly acculturated Latina, and less acculturated Latina. The determination of Latina acculturation was made based on The Short Acculturation for Hispanics Scale.<sup>12,18</sup> We applied a cutoff for high versus less acculturation ( $\geq 4$  on the summed scale) and conducted extensive validity and relativity testing of this measure by evaluating different cutoff points and comparing the values to other measures in the survey, such as years in the United States.<sup>19</sup> Age was self-reported and analyzed as a five-level categorical variable. Education was collapsed into four groups: (1) less than high school, (2) high school graduate, (3) some college, and (4) college graduate. Insurance status included Medicaid, Medicare, private insurance/other, and none. Income was grouped as (1) less than \$20,000, (2) \$20,000 to \$69,999, (3)  $\geq$  \$70,000, and (4) missing. Marital status was determined by whether the patient was living with a spouse or partner at the time of diagnosis (yes/no). The number of comorbid conditions was obtained from patient report based on a list of conditions from the National Health Interview Survey,<sup>20</sup> including cardiovascular and pulmonary disease, other cancer, diabetes, and arthritis. This measure was then categorized into a three-level variable reflecting total number of conditions (0, 1, or  $\geq 2$ ). Information on receipt of chemotherapy and radiation therapy was self-reported and categorized as yes versus no. The summary cancer stage was obtained from SEER and was classified using the AJCC staging system for breast carcinoma (DCIS [stage 0] or invasive carcinoma of stages I to III).<sup>21</sup> We could not include SEER site as a covariate because there was an insufficient number of Latinas in

Detroit. However, when Latinas were excluded from the analyses, receipt of breast reconstruction did not differ significantly by SEER site.

**Analyses**

*Descriptive.* We first described receipt of breast reconstruction (yes/no) across all sociodemographic and clinical factors by patients' race/ethnicity. Pearson  $\chi^2$  was used for the bivariate analyses between outcomes and categorical independent variables, and  $t$  tests were used for continuous variables.

*Multivariate regression.* We performed a multivariate logistic regression to evaluate factors associated with receipt of breast reconstruction. We controlled for clustering of patients within surgeon and found that this did not significantly change the results. The Wald  $\chi^2$  test and the likelihood ratio test were used to test the significance of individual predictive variables, and the model  $\chi^2$  statistic was applied to test the overall significance of the model. Point estimates were adjusted for design effects by using a sample population weight that accounted for differential selection by race, ethnicity, and nonresponse.

**Table 2.** Multivariate Analysis of Sociodemographic and Clinical Factors Associated With Receipt of Immediate Breast Reconstruction in the Los Angeles and Detroit SEER Cancer Registries ( $n = 806$ )

Factor	OR	95% CI	P*
Race/ethnicity			.027
Whites	1.00		
African Americans	0.73	0.45 to 1.20	
Highly acculturated Latinas	1.14	0.63 to 2.06	
Less acculturated Latinas	0.35	0.15 to 0.78	
Age, years			< .001
< 40	1.00		
40-49	1.04	0.53 to 2.21	
50-59	0.56	0.30 to 1.11	
60-69	0.18	0.08 to 0.40	
> 69	0.06	0.02 to 0.21	
Education			.193
High school or less	1.00		
High school graduate	1.14	0.50 to 2.60	
Some college	1.90	0.84 to 4.27	
College graduate	1.37	0.57 to 3.27	
Insurance status			.022
Private insurance/other	1.00		
Medicaid	0.32	0.15 to 0.72	
Medicare	0.76	0.35 to 1.67	
None	0.36	0.13 to 1.00	
Income			.550
< \$20,000	1.00		
\$20,000 to \$69,999	1.59	0.79 to 3.22	
$\geq$ \$70,000	1.79	0.79 to 4.09	
Missing	1.37	0.62 to 3.01	
Marital status			.831
No spouse or partner	1.00		
Married/domestic partner	0.95	0.60 to 1.50	
AJCC stage			.317
0	1.00		
I	0.81	0.43 to 1.52	
II	0.55	0.27 to 1.11	
III	0.52	0.22 to 1.22	
Comorbid conditions			.068
0	1.00		
1	0.89	0.56 to 1.42	
$\geq 2$	0.52	0.30 to 0.92	
Receipt of chemotherapy	0.45	0.26 to 0.79	.005
Receipt of radiation	0.53	0.31 to 0.89	.016

Abbreviations: SEER, Surveillance, Epidemiology, and End Results; OR, odds ratio; AJCC, American Joint Committee on Cancer.  
\*Controlled for patient characteristics and disease severity.

We tested for second order interactions between race/ethnicity and independent variables that were significant in the bivariate analyses. None of the interactions were statistically significant; therefore, results were presented without inclusion of interaction terms.

**Additional analyses.** We evaluated reasons for nonreceipt of breast reconstruction and patients' knowledge and informational needs regarding breast reconstruction by race/ethnicity. Pearson  $\chi^2$  was used to test for differences in response by race/ethnicity. We also looked at patients' satisfaction with their surgical decision by race/ethnicity and receipt of reconstruction and calculated adjusted proportions for those with and without breast reconstruction by race/ethnicity. We then evaluated factors associated with each outcome controlling for patient race/ethnicity and other demographic and clinical factors using logistic regression. All analyses were performed with STATA versus 8.0 (STATA, College Station, TX).

## RESULTS

Overall, 34.6% of the 806 patients treated with a mastectomy received breast reconstruction (Table 1); 84.5% had it at the time of the mastectomy (immediate), and 15.5% had it later (early delayed). Receipt of breast reconstruction varied significantly by patient race/ethnicity (40.9% of whites, 33.5% of African Americans, 41.2% of highly acculturated Latinas, and only 13.5% of less acculturated Latinas;  $P < .0001$ ). Less acculturated Latinas were younger, less likely to be high school graduates, and more likely to be without health insurance than other groups. African Americans reported having the most comorbid conditions. Stage of disease and receipt of adjuvant chemotherapy and radiation therapy did not differ significantly across patients' racial/ethnic backgrounds.

Table 2 shows the independent association of covariates with receipt of breast reconstruction. After controlling for demographic and clinical factors, less acculturated Latinas were significantly less likely to receive reconstruction compared with whites (odds ratio, 0.35; 95% CI, 0.15 to 0.78). Additional factors associated with lower likelihood of receiving reconstruction included advanced patient age, Medicaid or no insurance, and receipt of chemotherapy or radiation therapy.

Table 3 describes reasons why women reported they did not receive breast reconstruction at the time of the mastectomy. Approximately one quarter of women in each racial/ethnic group indicated they were planning on having reconstruction in the future. A slightly higher proportion of less acculturated Latinas (22.0%) and African Americans (20.0%) reported that they were still considering reconstruction compared with other groups ( $P = .043$ ). Approximately one third of all women reported not wanting more surgery. Half of whites

were significantly more likely to report that reconstruction was not important compared with roughly one third of the other racial/ethnic groups ( $P = .002$ ). Knowledge and financial issues emerged as access barriers to reconstruction for less acculturated Latinas. Nearly 14% of less acculturated Latinas said they did not know how to get breast reconstruction, compared with less than 2% for all other groups ( $P < .001$ ). As well, 16.5% of less acculturated Latinas were worried about the cost, compared with less than 7% of the other racial/ethnic groups ( $P = .005$ ).

Table 4 displays patient's informational needs regarding breast reconstruction. Less acculturated Latinas were significantly less likely to report that their surgeon explained the option of breast reconstruction (65.3% of less acculturated Latinas v 78% to 85% for other race/ethnic groups;  $P = .001$ ). In addition, only half of less acculturated Latinas, 67.4% of highly acculturated Latinas, and 73.8% of African Americans indicated they were informed about the timing options for reconstruction, compared with 80.3% of whites ( $P < .001$ ). All minority groups seemed to have had limited access to a plastic surgeon compared with whites: 18.1% of less acculturated Latinas, 36.0% of highly acculturated Latinas, and 53.9% of African Americans versus 72.6% of whites met with a plastic surgeon before the mastectomy ( $P < .0001$ ). In addition, between one third and one half of minorities desired more information about breast reconstruction, as compared with only 17.0% of whites ( $P < .0001$ ).

Figures 1 display patients' decision satisfaction with their surgical treatment, controlling for demographic and clinical factors. Patients' satisfaction with their surgical decision varied significantly by patient race/ethnicity and receipt of reconstruction, with the highest satisfaction among whites who received breast reconstruction (94% very satisfied) and the lowest among less acculturated Latinas without breast reconstruction (56% very satisfied). For every racial/ethnic group, having had breast reconstruction was associated with greater decisional satisfaction compared with not having had the procedure ( $P < .001$ ).

## DISCUSSION

This is among the first studies to describe minority patients' experience with postmastectomy breast reconstruction with sufficient representation of Latina patients with breast cancer to examine this group by level of acculturation. We found that Latinas with less acculturation, and African Americans, were much less likely than whites to receive breast reconstruction after mastectomy (immediate or early delayed). Yet the receipt of reconstruction for highly acculturated

**Table 3.** Reasons Why Women Did Not Receive Breast Reconstruction at the Time of the Mastectomy by Patient Race/Ethnicity (n = 525)

Reason	Whites (n = 218)*	African Americans (n = 134)*	Highly Acculturated Latinas (n = 63)*	Less Acculturated Latinas (n = 110)*	P†
Considering delayed reconstruction					
Planning on having it in the future	27.3	24.2	27.6	25.7	.929
Still considering it	13.0	20.0	8.6	22.0	.043
Not considering reconstruction					
Didn't want more surgery	32.1	30.0	31.0	28.4	.925
Not important	50.2	39.2	36.2	28.4	.002
Access barrier					
Didn't know how to get it	1.9	1.7	0.0	13.8	< .001
Worried about cost	5.3	6.7	6.9	16.5	.005

\*Includes the study population of mastectomy patients who did not undergo breast reconstruction.

†Pearson  $\chi^2$  test for differences in responses by race/ethnicity.

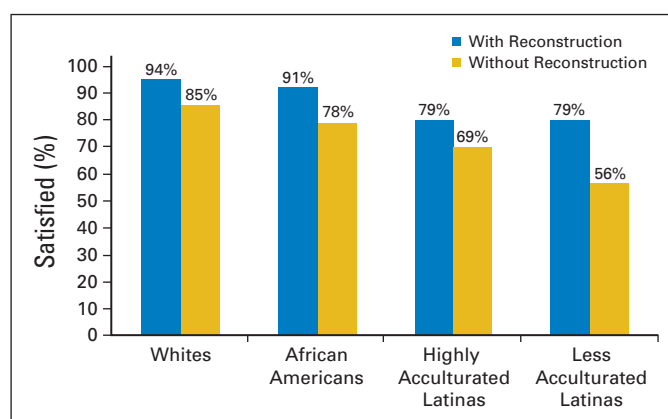
**Table 4.** Patients' Informational Status and Needs Regarding Postmastectomy Breast Reconstruction by Race/Ethnicity (n = 806)

Informational Status	% Yes				P†
	Whites (n = 370)*	African Americans (n = 202)*	Highly Acculturated Latinas (n = 107)*	Less Acculturated Latinas (n = 127)*	
Did any surgeon explain the options for breast reconstruction?	82.2	84.5	77.8	65.3	.001
Did any surgeon explain the timing options for breast reconstruction?	80.3	73.8	67.4	55.3	< .001
Did you consult with a plastic surgeon preoperatively?	72.6	53.9	36.0	18.1	< .001
Would you have liked more information about the different types of breast reconstruction?	17.0	27.0	30.0	55.9	< .001

\*Entire study population of mastectomy-treated patients with breast cancer with and without reconstruction.  
 †Pearson  $\chi^2$  test for differences in response by race/ethnicity.

Latinas was similar to that of whites. In addition, older women, those with Medicaid or no health insurance, and those requiring chemotherapy or radiation therapy were also less likely to receive reconstruction as compared with their counterparts.

Our results suggest that the low use of reconstruction for less acculturated Latinas and African Americans was not explained by lower demand for the procedure. Minority patients were the least likely to report that reconstruction was not important, were the most likely to desire more information about reconstruction, and were the least likely to be satisfied with their surgical treatment decision. It seems that minority patients were confronted with several informational barriers that may have limited their opportunities for reconstruction. Both African American and less acculturated Latinas had significantly less counseling from the general surgeon regarding the types and timing options for breast reconstruction. This is consistent with our prior research that found that only one third of patients with breast cancer reported having a discussion with their general surgeon about the option of breast reconstruction.<sup>22</sup> Minority patients were also less likely to be counseled about these options from a plastic surgeon, and they expressed the greatest desire for more information about breast reconstruction as compared with their counterparts.



**Fig 1.** Patient-reported satisfaction with the surgical decision by patient race/ethnicity and receipt of reconstruction. This graphically displays the adjusted proportion of patients who were “satisfied” or “strongly satisfied” with their surgical decision, information, and participation in the decision-making process. In the logistic regression model, receipt of reconstruction and race/ethnicity were both significant predictors of decisional satisfaction ( $P < .001$  for both), while controlling for age, education, insurance, income, marital status, stage, site, comorbidities, chemotherapy, and radiation.

These results suggest that there is substantial unmet need for information regarding reconstruction options among minorities. It is likely that the information barriers reported by less acculturated Latinas in our sample were compounded by language barriers and lower levels of educational attainment, which may contribute to lower health literacy and poorer comprehension of complex medical information.

Financial barriers also appeared to limit options for reconstruction, especially for less acculturated Latinas. Women with Medicaid or no insurance—which mostly comprised less acculturated Latinas—were significantly less likely to receive reconstruction as compared with those with private insurance or Medicare. Furthermore, less acculturated Latinas expressed the most concern regarding the financial costs of reconstruction. These financial barriers may account for the limited access minority women had to a preoperative consultation with a plastic surgeon and to reconstructive surgery, as many plastic surgeons have reported limiting their breast reconstructive practice because of poor third-party reimbursement.<sup>23</sup>

This study has some limitations. These results are limited to two metropolitan areas, Detroit and Los Angeles, and may not reflect national trends in breast cancer care. In particular, Latinas in the Los Angeles metropolitan area who are primarily of Mexican origin may not be representative of other Latina groups in the United States. However, the large racially and ethnically diverse population-based patient samples and the high response rate suggest that we have a sample that is well representative of patients with breast cancer in these racial/ethnic groups. Our study only addresses reconstruction at or near the time of the mastectomy and does not reflect practice patterns and decisions for delayed breast reconstruction. In addition, other factors may influence use of breast reconstruction that were unavailable to us, such as general surgeons' attitudes toward reconstruction and plastic surgeons' availability to perform these cases. The study was necessarily retrospective in design. Patients' recall of their encounters with clinicians may change over time. However, the survey was completed within 9 months of diagnosis on average and prior work has suggested this timeframe is adequate to produce good recall of treatment experiences. A small proportion of respondents (13%) indicated that they had help completing the questionnaire, possibly as a result of lower levels of literacy, which may contribute to less accurate responses.

Our findings have important implications for patient care and policy. Physicians, patients, and women's health advocates have devoted considerable energy toward ensuring women's access to postmastectomy breast reconstruction through the Women's Health

and Cancer Rights Act. We found that racial/ethnic variations in the use of this procedure persist, despite interest in the procedure across all racial/ethnic groups. In our study, less acculturated Latinas faced the greatest barriers to both information about and receipt of postmastectomy reconstruction, indicating substantial unmet need for the procedure in this racial/ethnic subgroup.

Efforts must be directed at reducing the informational and financial barriers faced by minority women who may be candidates for breast reconstruction. One approach is to develop and deploy decision tools that the surgeon could use to educate both patients and families about the risks and benefits of surgery. Decision tools have been associated with improved decisional quality for breast cancer care<sup>24</sup>; however, most existing decision support tools do not include information about reconstruction. Most tools are directed at higher literacy levels and are not available in different languages.<sup>24</sup> As well, research has shown that Latinas, especially those who are less acculturated, may rely heavily on family in breast cancer treatment decision making.<sup>25,26</sup> Thus it is important that tools are accessible and understandable by those involved in supporting the patients' decision making. Provision of professional translational services and/or decision-making and educational materials appropriate for patients and families of different literacy levels and languages may improve the quality of breast reconstruction decision making.

However, interventions will not fully address the gaps in information needs reported by minority women if they have limited access to plastic surgeons. A prior study showed that many surgeons who

treat patients with breast cancer reported that few of their patients receive consultations with plastic surgeons before surgery.<sup>27</sup> This suggests that more multidisciplinary approaches to treatment decision making may be another mechanism to improve access to care. Finally, financial access to breast reconstruction remains an important barrier for those uninsured or underinsured. Charity organizations such as the Susan G. Komen for the Cure Foundation have provided support through community grants that cover breast cancer-related treatment, including reconstruction, for medically underserved populations.<sup>28</sup> Taken together, these initiatives may improve the access of patients with breast cancer to reconstruction and potentially impact longer-term outcomes such as quality of life.

#### AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

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

#### AUTHOR CONTRIBUTIONS

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