Factors Associated with Discussion of Contralateral Prophylactic Mastectomy (CPM) During Surgical Consultations (A152409)

Neuman HB, Dickerson F, Saucke M, Breuer CR, Bozzuto L, Beck AC, Schumacher JR

Funded by: NCI R21CA283601, NCI UG1CA189823, AHRQ R01HS025194

Introduction

- Surgeons endorse that CPM should not be routinely performed but acknowledge that the perceived benefits of CPM can outweigh risks for some women.
- Little is known about how conversations about CPM occur in practice.

Objective

- To determine the frequency with which CPM is discussed in practice and identify patient factors associated with discussion.

Methods

- Secondary analysis of Alliance trial A231701CD
- Included women aged ≤65 years who underwent breast cancer surgery and whose transcript of the surgical consult was available
- Excluded women with indications for bilateral breast surgery (e.g. bilateral findings, genetic mutation)
- Transcripts were reviewed to determine whether CPM was discussed (primary outcome), who initiated the discussion, candidacy for breast conserving surgery, and family history
- Multivariable logistic regression was used to assess factors associated with CPM discussion. Based on the model, adjusted predictive probabilities of CPM by age and race were estimated to highlight model findings. Chi square test was used to assess initiation of CPM discussion by race

Results

Figure 1. Proportion of consults where CPM was discussed

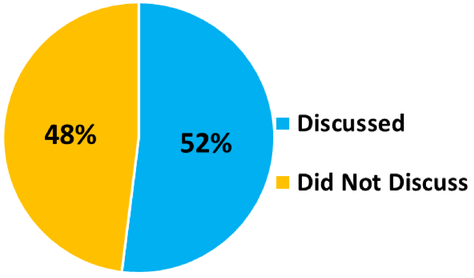


Table 1. Patient Characteristics and Factors Associated with Discussion of CPM

		% (n=340)	Odds Ratio (95% CI)
Age	**>55-64**	48.8% (n=166)	Ref
	>45-55	25.6% (n=87)	**4.4 (2.4-8.1)**
	≤45	25.6% (n=87)	**6.8 (3.6-12.9)**
Race	**Black**	23.2% (n=79)	Ref
	White	62.4% (n=212)	**5.0 (2.6-9.7)**
	Other	14.4% (n=49)	1.7 (0.7-4.0)
Socioeconomically disadvantaged		22.9% (n=78)	0.9 (0.5-1.6)
Not a BCS candidate		27.7% (n=94)	1.6 (0.9-2.9)
Family history		27.7% (n=94)	**2.5 (1.4-4.5)**
Invasive cancer		82.4% (n=280)	0.9 (0.5-1.7)

**Defined ≥8 using Area Deprivation Index*

Figure 2. Proportion of consults where surgeon initiated discussion about CPM, by race

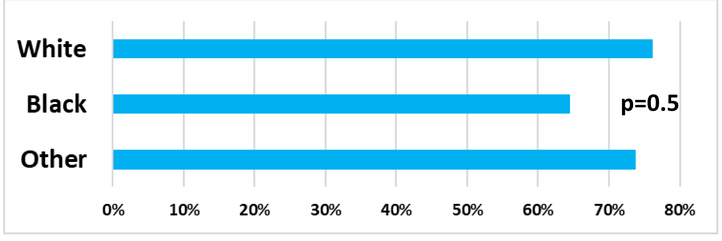


Table 2. Adjusted Predicted Probabilities of Discussing CPM*

	Race	Age at Diagnosis		
		≤45	**>45-55**	**>55-65**
No Family History, BCS Candidate	**White**	75% (64-87%)	67% (54-79%)	31% (22-40%)
	Black	38% (21-55%)	28% (14-43%)	8% (3-14%)
Family History, not a BCS Candidate	**White**	93% (87-98%)	89% (81-97%)	65% (48-81%)
	Black	71% (54-89%)	62% (40-82%)	27% (10-43%)

**Adjusted predicted probabilities with 95% confidence intervals; model additionally controlled for invasive versus in-situ cancer and area deprivation index*

Conclusion

- The likelihood of discussing CPM is greater for younger patients and those with a family history.
- There was a notable difference in the likelihood of discussing CPM for White versus Black patients. Surgeons initiated the consult in the majority of consults, making the differences between Black and White women unlikely to be simply related to patient motivation for CPM.
- Future work will focus on the CPM discussions themselves to understand the nature of the conversation, as this likely contributes to the high rates of CPM for White women.

Key Take-Aways:

- *Likelihood of discussing CPM is greater for patients with higher potential benefit of risk-reduction (i.e. young age, family history)*
- *Racial differences in likelihood of discussing CPM require additional exploration*