

Supplementary Table 3. Age-stratified adjusted rate ratios (RRs) Without Marital Status and Low-Income Subsidy.

Crude and adjusted rate ratios (RRs) and 95% confidence intervals (CIs) among women diagnosed with first primary invasive breast cancer between 2000-2017, captured in the SEER-Medicare database, with continuous fee-for-service Medicare coverage for at least 12 months prior and at least 3 months after index cancer diagnosis (n=215,605). *Denotes fewer than 11 patients per race-ethnicity group in one or both levels of the outcome.

**Denotes fewer than 11 patients per race-ethnicity group were eligible for analysis/outcome (i.e., across both levels of the outcome).

			Black	American Indian/ Alaska Native	Asian/Pacific Islander	Hispanic White
Mammography	66-69 (n=46002)	Adjusted ^a	0.95 (0.94-0.96)	0.94 (0.89-0.99)	0.94 (0.93-0.96)	0.97 (0.96-0.98)
	70-75 (n=65041)	Adjusted ^a	0.97 (0.96-0.98)	0.94 (0.9-0.98)	0.98 (0.97-0.99)	0.97 (0.96-0.98)
	76-80 (n=46243)	Adjusted ^a	0.97 (0.95-0.98)	0.93 (0.88-0.99)	0.98 (0.96-0.99)	1.00 (0.99-1.02)
	81+ (n=58319)	Adjusted ^a	0.98 (0.97-0.998)	1.02 (0.96-1.08)	0.97 (0.95-0.99)	1.01 (0.99-1.03)
Initial needle breast biopsy	66-69 (n=46002)	Adjusted ^a	0.94 (0.92-0.95)	0.96 (0.9-1.01)	0.97 (0.96-0.99)	0.97 (0.95-0.99)
	70-75 (n=65041)	Adjusted ^a	0.96 (0.95-0.97)	0.92 (0.87-0.97)	0.98 (0.97-0.996)	0.99 (0.97-1.001)
	76-80 (n=46243)	Adjusted ^a	0.98 (0.96-0.99)	0.91 (0.84-0.99)	1.01 (0.99-1.03)	1.02 (1.001-1.04)
	81+ (n=58319)	Adjusted ^a	0.99 (0.97-1.01)	1.03 (0.95-1.11)	1.01 (0.98-1.03)	1.03 (1.01-1.05)
Node biopsy	66-69 (n=46002)	Adjusted ^a	0.98 (0.97-0.99)	1.01 (0.97-1.05)	0.99 (0.98-1.01)	1.00 (0.99-1.02)
	70-75 (n=65041)	Adjusted ^a	0.99 (0.97-0.997)	0.98 (0.94-1.02)	0.99 (0.98-1.005)	1.00 (0.98-1.01)
	76-80 (n=46243)	Adjusted ^a	0.99 (0.97-1.003)	0.9 (0.84-0.98)	1.00 (0.98-1.02)	1.03 (1.01-1.05)
	81+ (n=58319)	Adjusted ^a	0.98 (0.96-1.01)	0.99 (0.89-1.11)	1.06 (1.02-1.09)	1.04 (1.01-1.07)
Stage known	66-69 (n=46002)	Adjusted ^a	1.00 (0.99-1.01)	1.00 (0.97-1.03)	1.00 (0.99-1.01)	0.99 (0.98-1.002)
	70-75 (n=65041)	Adjusted ^a	0.99 (0.99-1.002)	0.99 (0.96-1.02)	0.99 (0.98-1.001)	0.99 (0.99-1.003)
	76-80 (n=46243)	Adjusted ^a	1.00 (0.99-1.01)	0.99 (0.95-1.03)	1.00 (0.99-1.01)	0.99 (0.98-1.001)
	81+ (n=58319)	Adjusted ^a	1.01 (0.99-1.02)	0.91 (0.84-0.98)	1.02 (1.01-1.03)	1.00 (0.99-1.02)
Grade known	66-69 (n=46002)	Adjusted ^a	0.97 (0.96-0.98)	1.04* (1.01-1.06)	1.02 (1.005-1.03)	0.99 (0.98-1.01)
	70-75 (n=65041)	Adjusted ^a	0.98 (0.97-0.99)	0.99 (0.96-1.03)	1.02 (1.01-1.03)	0.99 (0.98-1.004)
	76-80 (n=46243)	Adjusted ^a	0.98 (0.97-0.99)	1.03 (0.99-1.07)	1.02 (1.01-1.04)	0.99 (0.98-1.01)
	81+ (n=58319)	Adjusted ^a	0.98 (0.97-0.997)	1.00 (0.94-1.07)	1.03 (1.01-1.04)	1.01 (0.997-1.03)
HR documentation	66-69 (n=46002)	Adjusted ^a	0.98 (0.97-0.99)	1.00 (0.97-1.04)	1.01 (0.996-1.02)	0.98 (0.97-0.99)
	70-75	Adjusted ^a	0.99	0.97	1.01	0.99

	(n=65041)		(0.98-0.9998)	(0.94-1.01)	(1.003-1.02)	(0.98-0.998)
	76-80 (n=46243)	Adjusted ^a	0.99 (0.98-1.003)	1.03 (0.99-1.08)	1.01 (0.99-1.02)	0.99 (0.98-1.01)
	81+ (n=58319)	Adjusted ^a	0.99 (0.97-0.999)	0.94 (0.87-1.01)	1.01 (0.995-1.03)	0.99 (0.97-1.01)
HER2 documentation	66-69 (n=21947)	Adjusted ^a	0.99 (0.98-1.01)	1.01* (0.97-1.06)	1.00 (0.98-1.01)	0.99 (0.97-1.004)
	70-75 (n=29447)	Adjusted ^a	1.00 (0.99-1.01)	0.97 (0.93-1.02)	1.00 (0.99-1.02)	0.99 (0.97-1.004)
	76-80 (n=18579)	Adjusted ^a	1.00 (0.99-1.02)	0.99* (0.93-1.06)	1.00 (0.99-1.02)	1.00 (0.98-1.02)
	81+ (n=24291)	Adjusted ^a	1.00 (0.99-1.02)	0.96 (0.87-1.06)	1.02 (0.99-1.04)	1.01 (0.99-1.03)
Surgery	66-69 (n=46002)	Adjusted ^b	1.00 (0.99-1.01)	0.996 (0.97-1.02)	1.01 (0.998-1.01)	1.01 (1.01-1.02)
	70-75 (n=65041)	Adjusted ^b	1.00 (0.99-1.01)	1.00 (0.98-1.03)	1.00 (0.99-1.01)	1.00 (0.99-1.01)
	76-80 (n=46243)	Adjusted ^b	0.99 (0.98-1.003)	0.95 (0.90-0.99)	1.01 (0.99-1.02)	1.01 (1-1.02)
	81+ (n=58319)	Adjusted ^b	0.95 (0.94-0.97)	1.00 (0.93-1.08)	0.996 (0.98-1.01)	1.01 (0.99-1.03)
Radiation among BCS-treated	66-69 (n=5988)	Adjusted ^b	0.94 (0.91-0.98)	0.96 (0.83-1.11)	1.005 (0.97-1.04)	1.03 (1.01-1.06)
	70-75 (n=6117)	Adjusted ^b	0.997 (0.96-1.04)	1.06 (0.96-1.17)	1.03 (0.99-1.07)	1.01 (0.97-1.05)
	76-80 (n=5128)	Adjusted ^b	0.99 (0.94-1.05)	0.88 (0.65-1.19)	1.04 (0.98-1.1)	1.01 (0.94-1.08)
	81+ (n=3616)	Adjusted ^b	0.98 (0.89-1.08)	0.96 (0.65-1.41)	1.00 (0.89-1.12)	0.98 (0.87-1.10)
Radiation among Mastectomy- treated N2+ or T3	66-69 (n=4021)	Adjusted ^b	0.96 (0.9-1.02)	0.94* (0.75-1.17)	0.94 (0.86-1.03)	0.98 (0.91-1.06)
	70-75 (n=5383)	Adjusted ^b	1.07 (1.01-1.14)	1.06* (0.83-1.34)	1.06 (0.97-1.15)	0.99 (0.92-1.07)
	76-80 (n=3938)	Adjusted ^b	1.10 (1.01-1.21)	1.10* (0.77-1.57)	1.24 (1.12-1.37)	1.06 (0.94-1.2)
Radiation among no surgery patients	66-69 (n=507)	Adjusted ^b	1.14 (0.8-1.61)	0.998* (0.25-4.00)	1.36 (0.89-2.07)	0.44 (0.19-1.003)
	70-75 (n=519)	Adjusted ^b	1.00 (0.70-1.44)	--	0.94 (0.48-1.82)	1.17 (0.62-2.19)
Chemotherapy among triple- negative	66-69 (n=1916)	Adjusted ^a	1.11 (1.05-1.17)	0.86** (0.53-1.38)	1.04 (0.94-1.14)	1.12 (1.03-1.2)
	70-75 (n=2463)	Adjusted ^a	1.04 (0.96-1.11)	0.82* (0.56-1.2)	0.99 (0.88-1.12)	1.00 (0.91-1.11)
	76-80 (n=1523)	Adjusted ^a	1.07 (0.93-1.22)	1.22** (0.56-2.67)	1.25 (1.07-1.47)	1.07 (0.88-1.29)
	81+ (n=1951)	Adjusted ^a	1.25 (1.005-1.56)	2.17** (1.18-4)	0.67 (0.46-0.97)	1.46 (1.07-1.98)
HER2-targeted therapy among HER2+	66-69 (n=2473)	Adjusted ^b	0.95 (0.87-1.04)	0.74* (0.47-1.16)	1.05 (0.96-1.14)	1.13 (1.04-1.23)
	70-75 (n=2989)	Adjusted ^b	0.94 (0.85-1.03)	0.80* (0.52-1.22)	0.97 (0.88-1.07)	0.98 (0.89-1.08)
	76-80 (n=1836)	Adjusted ^b	0.87 (0.75-1.02)	0.79* (0.42-1.5)	1.12 (0.98-1.28)	1.11 (0.95-1.29)
	81+	Adjusted ^b	1.06	0.85**	1.15	1.17

	(n=2343)		(0.87-1.28)	(0.17-4.38)	(0.92-1.43)	(0.91-1.51)
Hormone therapy among HR+	66-69 (n=15657)	Adjusted ^a	0.98 (0.95-1.01)	0.95 (0.84-1.06)	1.03 (1-1.06)	1.00 (0.97-1.03)
	70-75 (n=20982)	Adjusted ^a	1.02 (0.99-1.04)	0.97 (0.87-1.07)	1.00 (0.97-1.03)	1.02 (0.99-1.05)
	76-80 (n=13374)	Adjusted ^a	1.01 (0.97-1.05)	0.81 (0.66-0.99)	1.08 (1.04-1.11)	1.02 (0.98-1.06)
	81+ (n=17103)	Adjusted ^a	1.06 (1.02-1.10)	0.88 (0.7-1.11)	0.99 (0.94-1.04)	1.03 (0.98-1.08)

^aAdjusted model includes: marital, low-income subsidy, hospitalizations, year, age, stage, PCP count, NCI index, frailty. ^b

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Bolded values reflect significant associations, with respect to non-Hispanic White patients, at the 0.05 significance level.

HER2 status was first made available for cases diagnosed in 2010; HER2 status available refers to patients from the Primary cohort diagnosed 2010 or later. Part D eligible patients were those with at least three months of continuous Part D prescription drug coverage after diagnosis. Radiation was analyzed within subgroups of surgery type; mastectomy-treated patients were further restricted to patients for whom radiation with mastectomy is indicated (AJCC \geq N2 or T3).

Abbreviations: Hormone receptor (HR), Human epidermal growth factor receptor 2 (HER2), Breast conserving surgery (BCS), HR-positive (HR+), HR-negative (HR-), HER2-positive (HER2+), HER2-negative (HER2-), Triple negative (HR- & HER2-).