

Socioeconomic Factors are Associated with the Prognosis of Thyroid Cancer

Supplementary Materials

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Abbreviation: OS: Overall Survival; CSS: Cancer-specific Survival; OR: Odds Ratio; HR: Hazard Ratio; 95%CI: 95% confidence interval; Ref: Reference; NH: non-Hispanic; API: Asian or Pacific Islander; AI/AN: American Indian/Alaska Native; RUCA: Rural Urban Commuting Area.

Table S1. Comparison of survival outcomes by different factors in patient with primary thyroid cancer^a.

Characteristics	10-year OS (N of Events = 5,473)			5-year CSS (N of Events = 1,706)			5-year OS (N of Events = 3,663)		
	n of Events (%)	OR (95%CI)	P	n of Events (%)	OR (95%CI)	P	n of Events (%)	OR (95%CI)	P
Gender									
Female	3,289 (3.3)	1.00 (Ref.)	/	964 (1.0)	1.00 (Ref.)	/	2,161 (2.2)	1.00 (Ref.)	/
Male	2,184 (7.8)	2.46 (2.32-2.60)	<0.001	742 (2.7)	2.76 (2.50-3.05)	<0.001	1,502 (5.5)	2.53 (2.37-2.71)	<0.001
Race/Ethnicity									
NH White	3,745 (4.6)	1.00 (Ref.)	/	1,092 (2.3)	1.00 (Ref.)	/	2,461 (3.0)	1.00 (Ref.)	/
NH Black	511 (6.0)	1.34 (1.22-1.47)	<0.001	123 (1.5)	0.62 (0.51-0.74)	<0.001	352 (4.2)	1.40 (1.24-1.57)	<0.001
NH API	481 (3.6)	0.78 (0.71-0.86)	<0.001	205 (1.5)	0.66 (0.56-0.75)	<0.001	322 (2.4)	0.80 (0.71-0.90)	<0.001
NH AI/AN	26 (4.6)	1.00 (0.65-1.48)	1.00	11 (1.9)	1.46 (0.72-2.64)	0.29	19 (3.3)	1.12 (0.67-1.76)	0.73
Hispanic	705 (3.5)	0.75 (0.69-0.82)	<0.001	274 (1.3)	1.01 (0.88-1.16)	0.89	506 (2.5)	0.82 (0.75-0.91)	<0.001
NH Unknown	5 (0.3)	/	/	1 (0.1)	/	/	3 (0.2)	/	/
Insurance Status									
Insured	2138 (2.7)	1.00 (Ref.)	/	738 (0.9)	1.00 (Ref.)	/	1,655 (2.1)	1.00 (Ref.)	/
Medicaid	508 (5.3)	2.03 (1.84-2.25)	<0.001	169 (1.8)	1.92 (1.61-2.28)	<0.001	411 (4.3)	2.12 (1.89-2.36)	<0.001
Uninsured	76 (3.1)	1.16 (0.91-1.46)	0.24	29 (1.2)	1.28 (0.85-1.86)	0.24	56 (2.3)	1.10 (0.82-1.44)	0.53
Unknown	2751 (7.9)	/	/	770 (2.2)	/	/	1541 (4.4)	/	/
Marital Status									
Married	2,679 (3.5)	1.00 (Ref.)	/	842 (1.1)	1.00 (Ref.)	/	1721 (2.2)	1.00 (Ref.)	/
Single	874 (3.2)	0.91 (0.85-0.99)	0.03	256 (0.9)	0.85 (0.74-0.98)	0.03	634 (2.3)	1.04 (0.94-1.14)	0.46
Divorced	504 (6.0)	1.76 (1.59-1.94)	<0.001	142 (1.7)	1.55 (1.28-1.85)	<0.001	320 (3.8)	1.72 (1.52-1.95)	<0.001
Widowed	1,090 (20.2)	7.00 (6.58-7.57)	<0.001	380 (7.0)	6.83 (6.02-7.75)	<0.001	763 (14.1)	7.18 (6.56-7.87)	<0.001
Separated	49 (4.5)	1.32 (0.96-1.76)	0.08	10 (0.9)	0.84 (0.40-1.57)	0.70	35 (3.2)	1.46 (1.01-2.05)	0.04
Unmarried ^b	1 (0.5)	0.13 (0.00-0.72)	0.01	0 (0.0)	/	/	1 (0.5)	0.20 (0.01-1.13)	0.10
Unknown	276 (4.0)	/	/	76 (1.1)	/	/	189 (2.7)	/	/
RUCA Category									
Urban	4,650 (4.1)	1.00 (Ref.)	/	1,468 (1.3)	1.00 (Ref.)	/	3,147 (2.8)	1.00 (Ref.)	/
Rural	528 (6.6)	1.69 (1.53-1.85)	<0.001	148 (1.9)	1.43 (1.20-1.70)	<0.001	325 (4.1)	1.48 (1.31-1.66)	<0.001
Unknown	295 (5.3)	/	/	90 (1.6)	/	/	191 (3.5)	/	/
YOST tertile									
Low	1700 (5.9)	1.00 (Ref.)	/	505 (1.8)	1.00 (Ref.)	/	1,155 (4.0)	1.00 (Ref.)	/
Middle	1,833 (4.6)	0.77 (0.72-0.83)	<0.001	581 (1.5)	0.83 (0.74-0.94)	0.003	1,245 (3.1)	0.77 (0.71-0.84)	<0.001
High	1,586 (3.1)	0.52 (0.48-0.55)	<0.001	510 (1.0)	0.57 (0.50-0.65)	<0.001	1,029 (2.0)	0.50 (0.46-0.54)	<0.001
Unknown	354 (4.7)	/	/	110 (1.5)	/	/	234 (3.11)	/	/

^a Patients were classified as ICD-O-3 codes “8140-8389: adenomas and adenocarcinomas” and registered as “One primary only” in SEER database.

^b Unmarried status included “domestic partner”.

Table S2. Univariate and multivariate overall survival analysis of primary thyroid cancer patients ^a in entire cohort and who underwent surgery.

Characteristics	Entire Cohort (n = 126,160)				Surgery (n = 122,675)			
	Crude HR _{OS} (95%CI)	<i>P</i>	Adjusted HR _{OS} (95%CI)	<i>P</i>	Crude HR _{OS} (95%CI)	<i>P</i>	Adjusted HR _{OS} (95%CI)	<i>P</i>
Gender								
Male	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Female	0.43 (0.41-0.45)	<0.001	0.42 (0.39-0.45)	<0.001	0.43 (0.41-0.46)	<0.001	0.38 (0.35-0.42)	<0.001
Race/Ethnicity								
NH White	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
NH Black	1.36 (1.25-1.49)	<0.001	1.06 (0.93-1.20)	0.39	1.55 (1.42-1.70)	<0.001	1.05 (0.89-1.24)	0.56
NH API	0.91 (0.87-0.95)	<0.001	0.70 (0.62-0.80)	<0.001	0.97 (0.93-1.02)	0.26	0.62 (0.53-0.74)	<0.001
NH AI/AN	1.04 (0.92-1.18)	0.51	0.80 (0.47-1.35)	0.39	1.09 (0.97-1.23)	0.16	0.80 (0.43-1.50)	0.49
Hispanic	0.97 (0.95-0.99)	<0.001	0.65 (0.58-0.72)	<0.001	1.00 (0.98-1.02)	0.90	0.65 (0.57-0.75)	<0.001
NH Unknown	0.64 (0.54-0.75)	<0.001	/	/	0.66 (0.56-0.77)	<0.001	/	/
Insurance Status								
Insured	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Medicaid	2.42 (2.20-2.67)	<0.001	1.70 (1.53-1.88)	<0.001	2.94 (2.67-3.25)	<0.001	2.05 (1.81-2.31)	<0.001
Uninsured	1.12 (1.00-1.26)	0.048	1.01 (0.81-1.27)	0.91	1.23 (1.10-1.38)	<0.001	1.13 (0.85-1.49)	0.41
Marital								
Married	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Single	0.96 (0.89-1.03)	0.21	0.84 (0.76-0.93)	<0.001	1.07 (1.00-1.15)	0.06	0.85 (0.76-0.97)	0.01
Divorced	1.34 (1.28-1.40)	<0.001	1.73 (1.54-1.94)	<0.001	1.41 (1.35-1.48)	<0.001	1.72 (1.48-1.99)	<0.001
Widowed	1.87 (1.83-1.92)	<0.001	4.70 (4.26-5.18)	<0.001	1.95 (1.91-2.00)	<0.001	5.44 (4.82-6.15)	<0.001
Separated	1.08 (1.01-1.16)	0.02	1.15 (0.81-1.63)	0.44	1.12 (1.04-1.19)	0.001	1.20 (0.77-1.84)	0.42
Unmarried ^b	0.78 (0.53-1.16)	0.22	0.60 (0.15-2.42)	0.48	0.82 (0.56-1.22)	0.33	0.47 (0.07-3.33)	0.45
RUCA Category								
Urban	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Rural	1.44 (1.33-1.57)	<0.001	1.09 (0.95-1.24)	0.21	1.50 (1.37-1.64)	<0.001	1.06 (0.90-1.25)	0.47
Yost tertile								
Low	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Middle	0.76 (0.71-0.80)	<0.001	0.79 (0.72-0.86)	<0.001	0.87 (0.82-0.93)	<0.001	0.82 (0.73-0.91)	<0.001
High	0.70 (0.68-0.72)	<0.001	0.58 (0.52-0.63)	<0.001	0.75 (0.73-0.78)	<0.001	0.60 (0.53-0.67)	<0.001
Stage								
Localized	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Regional	1.53 (1.44-1.63)	<0.001	1.48 (1.36-1.61)	<0.001	1.62 (1.52-1.72)	<0.001	1.55 (1.40-1.72)	<0.001
Distant	3.93 (3.81-4.05)	<0.001	11.10 (10.15-12.15)	<0.001	4.04 (3.92-4.17)	<0.001	11.64 (10.37-13.07)	<0.001
In situ	0.99 (0.80-1.23)	0.95	/	/	1.00 (0.80-1.24)	1.00	/	/

^a Patients were classified as ICD-O-3 codes “8140-8389: adenomas and adenocarcinomas” and registered as “One primary only” in SEER database.

^b Unmarried status included “domestic partner”.

Table S3. Univariate and multivariate survival analysis of primary thyroid cancer patients ^a who underwent surgery and radiation (n = 60,062) by different factors.

Characteristics	Cancer-specific Survival				Overall Survival			
	Crude HR _{CSS} (95%CI)	<i>P</i>	Adjusted HR _{CSS} (95%CI)	<i>P</i>	Crude HR _{OS} (95%CI)	<i>P</i>	Adjusted HR _{OS} (95%CI)	<i>P</i>
Gender								
Male	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Female	0.36 (0.32-0.40)	<0.001	0.44 (0.36-0.53)	<0.001	0.41 (0.38-0.44)	<0.001	0.39 (0.35-0.45)	<0.001
Race/Ethnicity								
NH White	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
NH Black	1.00 (0.85-1.19)	0.97	0.95 (0.63-1.42)	0.80	1.59 (1.45-1.75)	<0.001	0.85 (0.65-1.12)	0.26
NH API	1.11 (1.03-1.18)	0.003	0.65 (0.48-0.87)	0.005	0.99 (-.94-1.03)	0.54	0.60 (0.48-0.75)	<0.001
NH AI/AN	1.09 (0.91-1.31)	0.37	1.48 (0.47-4.61)	0.503	1.10 (0.97-1.24)	0.12	1.37 (0.61-3.06)	0.45
Hispanic	1.03 (1.00-1.06)	0.09	0.72 (0.55-0.93)	0.01	1.01 (0.99-1.03)	0.55	0.66 (0.54-0.79)	<0.001
NH Unknown	0.67 (0.53-0.84)	<0.001	/	/	0.66 (0.56-0.78)	<0.001	/	/
Insurance Status								
Insured	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Medicaid	2.28 (1.93-2.71)	<0.001	1.56 (1.18-2.07)	0.002	3.02 (2.70-3.37)	<0.001	1.79 (1.48-2.16)	<0.001
Uninsured	1.20 (1.00-1.42)	0.046	1.55 (0.93-2.57)	0.09	1.25 (1.11-1.41)	<0.001	1.14 (0.76-1.70)	0.52
Marital								
Married	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Single	0.68 (0.60-0.77)	<0.001	0.52 (0.39-0.68)	<0.001	1.02 (0.94-1.11)	0.60	0.77 (0.65-0.92)	0.005
Divorced	1.15 (1.06-1.24)	<0.001	1.70 (1.26-2.29)	<0.001	1.38 (1.32-1.45)	<0.001	1.84 (1.50-2.27)	<0.001
Widowed	1.72 (1.65-1.78)	<0.001	3.32 (2.52-4.37)	<0.001	1.92 (1.87-1.97)	<0.001	4.81 (4.00-5.79)	<0.001
Separated	0.93 (0.82-1.06)	0.30	1.04 (0.43-2.53)	0.93	1.10 (1.03-1.18)	0.004	1.28 (0.70-2.33)	0.42
Unmarried ^b	/	/	/	/	0.82 (0.55-1.21)	0.31	0.92 (0.13-6.52)	0.93
RUCA Category								
Urban	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Rural	1.31 (1.08-1.59)	0.007	0.87 (0.57-1.30)	0.49	1.42 (1.25-1.62)	<0.001	1.01 (0.79-1.30)	0.94
Yost tertile								
Low	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Middle	0.84 (0.74-0.96)	0.010	0.90 (0.71-1.15)	0.41	0.95 (0.87-1.04)	0.24	0.83 (0.71-0.98)	0.02
High	0.78 (0.73-0.84)	<0.001	0.76 (0.60-0.98)	0.03	0.79 (0.75-0.82)	<0.001	0.62 (0.52-0.74)	<0.001
Stage								
Localized	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/	1.00 (Ref.)	/
Regional	5.44 (4.59-6.44)	<0.001	5.58 (4.04-7.71)	<0.001	2.05 (1.89-2.22)	<0.001	1.81 (1.56-2.11)	<0.001
Distant	9.30 (8.57-10.08)	<0.001	77.92 (56.75-106.99)	<0.001	4.47 (4.29-4.66)	<0.001	14.64 (12.44-17.24)	<0.001
In situ	/	/	/	/	1.03 (0.83-1.28)	0.79	/	/

^a Patients were classified as ICD-O-3 codes “8140-8389: adenomas and adenocarcinomas” and registered as “One primary only” in SEER database.

^b Unmarried status included “domestic partner”.

Table S4. Comparison of 5-year and 10-year survival outcomes by different factors in all patients with thyroid cancer ^a.

Characteristics	Thyroid Cancer ^a (N = 136,313)	5-year CSS (Events = 1,919)			5-year OS (Events = 4,679)			10-year CSS (Events = 2,572)			10-year OS (Events = 7,348)		
		N of events (%)	OR (95%CI)	<i>P</i>	N of events (%)	OR (95%CI)	<i>P</i>	N of events (%)	OR (95%CI)	<i>P</i>	N of events (%)	OR (95%CI)	<i>P</i>
Gender													
Female	105,508 (77.4)	1082 (1.03)	1.00 (Ref.)	/	2771 (2.63)	1.00 (Ref.)	/	1452 (1.38)	1.00 (Ref.)	/	4449 (4.22)	1.00 (Ref.)	/
Male	30,805 (22.6)	837 (2.72)	2.70 (2.46-2.96)	<0.001	1908 (6.19)	2.45 (2.30-2.60)	<0.001	1120 (3.64)	2.70 (2.50-2.93)	<0.001	2899 (9.41)	2.36 (2.25-2.48)	<0.001
Race/Ethnicity													
NH White	89,388 (65.6)	1242 (1.39)	1.00 (Ref.)	/	3200 (3.58)	1.00 (Ref.)	/	1656 (1.85)	1.00 (Ref.)	/	5121 (5.73)	1.00 (Ref.)	/
NH Black	9,165 (6.7)	139 (1.52)	1.09 (0.91-1.31)	0.35	442 (4.82)	1.36 (1.23-1.51)	<0.001	175 (1.91)	1.03 (0.88-1.21)	0.73	666 (7.27)	1.29 (1.18-1.40)	<0.001
NH API	14,244 (10.4)	225 (1.58)	1.14 (0.98-1.32)	0.08	402 (2.82)	0.78 (0.70-0.87)	<0.001	324 (2.27)	1.23 (1.09-1.39)	<0.001	633 (4.44)	0.77 (0.70-0.83)	<0.001
NH AI/AN	607 (0.4)	11 (1.81)	1.31 (0.65-2.37)	0.48	24 (3.95)	1.11 (0.70-1.67)	0.70	14 (2.31)	1.25 (0.68-2.12)	0.50	33 (5.43)	0.95 (0.64-1.35)	0.82
Hispanic	21,433 (15.7)	301 (1.40)	1.01 (0.89-1.15)	0.89	608 (2.84)	0.79 (0.72-0.86)	<0.001	401 (1.87)	1.01 (0.90-1.13)	0.88	890 (4.15)	0.71 (0.66-0.77)	<0.001
NH Unknown	1,476 (1.1)	1 (0.07)	0.05 (0.00-0.27)	<0.001	3 (0.20)	0.05 (0.01-0.16)	<0.001	2 (0.14)	0.07 (0.01-0.26)	<0.001	5 (0.34)	0.06 (0.02-0.13)	<0.001
Insurance Status													
Insured	84,228 (61.8)	841 (1.00)	1.00 (Ref.)	/	2193 (2.60)	1.00 (Ref.)	/	1009 (1.20)	1.00 (Ref.)	/	2917 (3.46)	1.00 (Ref.)	/
Medicaid	10,008 (7.3)	188 (1.88)	1.90 (1.61-2.23)	<0.001	480 (4.80)	1.88 (1.70-2.09)	<0.001	216 (2.16)	1.82 (1.56-2.11)	<0.001	605 (6.05)	1.79 (1.64-1.96)	<0.001
Uninsured	2,559 (1.9)	33 (1.29)	1.30 (0.88-1.84)	0.18	70 (2.74)	1.05 (0.81-1.34)	0.73	38 (1.48)	1.24 (0.87-1.72)	0.22	95 (3.71)	1.07 (0.86-1.32)	0.53
Unknown	39,518 (29.0)	857 (2.17)	/	/	1936 (4.90)	/	/	1309 (3.31)	/	/	3731 (9.44)	/	/
Marital Status													
Married	83,265 (61.1)	960 (1.15)	1.00 (Ref.)	/	1178 (1.41)	1.00 (Ref.)	/	1360 (1.63)	1.00 (Ref.)	/	3772 (4.53)	1.00 (Ref.)	/
Single	28,796 (21.1)	285 (0.99)	0.86 (0.75-0.98)	0.03	760 (2.64)	1.89 (1.72-2.07)	<0.001	361 (1.25)	0.76 (0.68-0.86)	<0.001	1095 (3.80)	0.83 (0.78-0.89)	<0.001
Divorced	9,249 (6.8)	162 (1.75)	1.53 (1.28-1.81)	<0.001	426 (4.61)	3.36 (3.00-3.77)	<0.001	220 (2.38)	1.47 (1.26-1.70)	<0.001	686 (7.42)	1.69 (1.55-1.84)	<0.001
Widowed	6,177 (4.5)	412 (6.67)	6.13 (5.43-6.91)	<0.001	934 (15.12)	12.41 (11.33-13.60)	<0.001	501 (8.11)	5.32 (4.77-5.91)	<0.001	1384 (22.41)	6.09 (5.68-6.52)	<0.001
Separated	1,170 (0.9)	14 (1.20)	1.04 (0.56-1.76)	1.00	46 (3.93)	2.85 (2.06-3.85)	<0.001	18 (1.54)	0.94 (0.55-1.50)	0.89	66 (5.64)	1.26 (0.97-1.62)	0.08
Unmarried ^b	225 (0.2)	0 (0)	/	/	2 (0.89)	0.62 (0.08-2.29)	0.78	0 (0)	/	/	2 (0.89)	0.19 (0.02-0.69)	0.004
Unknown	7,431 (5.5)	86 (1.16)	/	/	233 (3.14)	/	/	112 (1.51)	/	/	343 (4.62)	/	/
RUCA Category													
Urban	121,526 (89.2)	1651 (1.36)	1.00 (Ref.)	/	4010 (3.30)	1.00 (Ref.)	/	2205 (1.81)	1.00 (Ref.)	/	6231 (5.13)	1.00 (Ref.)	/
Rural	8,783 (6.4)	165 (1.88)	1.39 (1.18-1.63)	<0.001	426 (4.85)	1.49 (1.35-1.66)	<0.001	230 (2.62)	1.46 (1.26-1.67)	<0.001	714 (8.13)	1.64 (1.51-1.78)	<0.001
Unknown	6,004 (4.4)	103 (1.72)	/	/	243 (4.05)	/	/	137 (2.28)	/	/	403 (6.71)	/	/
Yost tertile													
Low	30,991 (22.7)	555 (1.79)	1.00 (Ref.)	<0.001	1462 (4.72)	1.00 (Ref.)	<0.001	711 (2.29)	1.00 (Ref.)	<0.001	2254 (7.27)	1.00 (Ref.)	<0.001
Middle	42,613 (31.3)	654 (1.53)	0.85 (0.76-0.96)	0.008	1573 (3.69)	0.77 (0.72-0.83)	<0.001	855 (2.01)	0.87 (0.79-0.97)	0.008	2403 (5.64)	0.76 (0.72-0.81)	<0.001
High	54,583 (40.0)	586 (1.07)	0.60 (0.53-0.67)	<0.001	1351 (2.48)	0.51 (0.48-0.55)	<0.001	843 (1.54)	0.67 (0.60-0.74)	<0.001	2209 (4.05)	0.54 (0.51-0.57)	<0.001
Unknown	8,126 (6.0)	124 (1.53)	/	/	293 (3.61)	/	/	163 (2.01)	/	/	482 (5.93)	/	/

^a Patients were classified as ICD-O-3 codes “8140-8389: adenomas and adenocarcinomas”.

^b Unmarried status included “domestic partner”.

Table S5. Multivariate survival analysis of all thyroid cancer patients ^a by different factors

Characteristics	Cancer-specific Survival		Overall Survival	
	Adjusted HR _{CSS} (95%CI)	<i>P</i>	Adjusted HR _{OS} (95%CI)	<i>P</i>
Gender				
Male	Ref.	/	Ref.	/
Female	0. 38 (0.35-0.41)	<0.001	0.45 (0.43-0.47)	<0.001
Race/Ethnicity				
NH White	Ref.	/	Ref.	/
NH Black	1.11 (0.96-1.29)	0.18	1.33 (1.23-1.43)	<0.001
NH API	1.15 (1.08-1.21)	<0.001	0.92 (0.88-0.95)	<0.001
NH AI/AN	1.12 (0.94-1.33)	0.19	1.04 (0.93-1.15)	0.50
Hispanic	1.05 (1.02-1.08)	<0.001	0.96 (0.94-0.97)	<0.001
NH Unknown	0.67 (0.53-0.83)	<0.001	0.61 (0.52-0.72)	<0.001
Insurance Status				
Insured	Ref.	/	Ref.	/
Medicaid	2.12 (1.83-2.45)	<0.001	2.16 (1.98-2.35)	<0.001
Uninsured	1.16 (0.99-1.36)	0.07	1.09 (0.98-1.21)	0.10
Marital Status				
Married	Ref.	/	Ref.	/
Single	0.79 (0.71-0.89)	<0.001	0.88 (0.82-0.93)	<0.001
Divorced	1.23 (1.15-1.31)	<0.001	1.30 (1.25-1.35)	<0.001
Widowed	1.74 (1.69-1.80)	<0.001	1.77 (1.74-1.80)	<0.001
Separated	1.00 (0.90-1.12)	0.96	1.08 (1.02-1.14)	0.01
Unmarried ^b	/	/	0.86 (0.66-1.14)	0.31
RUCA Category				
Urban	Ref.	/	Ref.	/
Rural	1.31 (1.15-1.49)	<0.001	1.44 (1.34-1.54)	<0.001
Yost tertile				
Low	Ref.	/	Ref.	/
Middle	0.83 (0.76-0.92)	<0.001	0.75 (0.71-0.79)	<0.001
High	0.78 (0.75-0.82)	<0.001	0.72 (0.70-0.73)	<0.001

^a Patients were classified as ICD-O-3 codes “8140-8389: adenomas and adenocarcinomas”.

^b Unmarried status included “domestic partner”.