

Supplementary Table S3. In patients who underwent radiation at the diagnosing facility, Univariate and multivariate logistic regression for variables associated with >50 miles traveled, in the year 2018–2019

| | Univariate | | Multivariate | |
|---|---------------------|--------------|---------------------|---------|
| | OR (95% CI) | Wald p-value | OR (95% CI) | p-value |
| Age (continuous variable) | 0.993 (0.992–0.994) | <0.0001 | 0.992 (0.990–0.993) | <0.001 |
| Sex | | <0.0001 | | |
| Female (vs. male) | 0.70 (0.69–0.71) | | 0.79 (0.77–0.81) | <0.001 |
| Area of residence category | | <0.0001 | | |
| Metropolitan | 1 (Reference) | | 1 (Reference) | |
| Urban | 7.3 (7.1–7.4) | | 10.6 (10.3–10.9) | <0.001 |
| Rural | 13.8 (13.2–14.5) | | 21.4 (20.2–22.6) | <0.001 |
| Race | | <0.0001 | | |
| White | 1 (Reference) | | 1 (Reference) | |
| Black | 0.50 (0.39–0.52) | | 0.48 (0.45–0.50) | <0.001 |
| Native American | 3.0 (2.7–3.4) | | 1.53 (1.32–1.76) | <0.001 |
| Asian/Pacific islander | 0.40 (0.37–0.43) | | 0.54 (0.49–0.59) | <0.001 |
| Other/unrecorded | 0.94 (0.89–1.01) | | 1.10 (1.01–1.19) | 0.03 |
| Location treated | | <0.0001 | | |
| New England (CT, MA, ME, NH, RI, VT) | 1 (Reference) | | 1 (Reference) | |
| Middle Atlantic (NJ, NY, PA) | 1.17 (1.09–1.25) | | 1.26 (1.17–1.36) | <0.001 |
| South Atlantic (DC, DE, FL, GA, MD, NC, SC, VA, WV) | 2.44 (2.28–2.60) | | 2.65 (2.46–2.86) | <0.001 |
| East North Central (IL, IN, MI, OH, WI) | 1.71 (1.60–1.83) | | 1.70 (1.57–1.83) | <0.001 |
| East South Central (AL, KY, MS, TN) | 2.77 (2.58–2.98) | | 1.80 (1.65–1.95) | <0.001 |
| West North Central (IA, KS, MN, MO, ND, SD) | 5.37 (5.02–5.74) | | 4.86 (4.50–5.25) | <0.001 |
| West South Central (AR, LA, OK, TX) | 6.67 (6.24–7.13) | | 7.36 (6.81–7.95) | <0.001 |
| Mountain (AZ, CO, ID, MT, NM, NV, UT, WY) | 5.65 (5.27–6.06) | | 7.56 (6.95–8.21) | <0.001 |
| Pacific (AK, CA, HI, OR, WA) | 1.85 (1.72–1.99) | | 3.13 (2.89–3.39) | <0.001 |
| Average income of area of residence (US dollars) | | <0.0001 | | |
| < 50,353 | 1 (Reference) | | 1 (Reference) | |
| > 50,353 | 0.42 (0.41–0.42) | | 0.59 (0.58–0.61) | <0.001 |
| Insurance | | <0.0001 | | |
| Not insured | 1 (Reference) | | 1 (Reference) | |
| Private insurance/managed care | 1.03 (0.96–1.10) | | 1.62 (1.49–1.76) | <0.001 |
| Medicaid | 0.83 (0.77–0.90) | | 1.16 (1.05–1.27) | 0.002 |
| Medicare | 0.99 (0.93–10.6) | | 1.68 (1.54–1.83) | <0.001 |
| Other government | 1.61 (1.49–1.75) | | 1.61 (1.45–1.79) | <0.001 |
| Insurance status unknown | 0.94 (0.84–1.05) | | 1.65 (1.44–1.90) | <0.001 |
| Type of diagnosing facility | | <0.0001 | | |
| Community cancer program | 1 (Reference) | | 1 (Reference) | |
| Comprehensive community cancer program | 1.38 (1.30–1.46) | | 3.66 (3.41–3.93) | <0.001 |
| Academic/research program (includes NCI designated CCC) | 4.04 (3.82–4.27) | | 23.26 (21.67–24.97) | <0.001 |
| Integrated network cancer program ^{a)} | 1.31 (1.23–1.39) | | 4.9 (4.55–5.29) | <0.001 |
| Stage | | <0.0001 | | |
| Stage 0 | 0.49 (0.46–0.53) | | 0.59 (0.54–0.64) | <0.001 |
| Stage I | 1 (Reference) | | 1 (Reference) | |
| Stage II | 1.21 (1.18–1.25) | | 1.09 (1.05–1.13) | <0.001 |
| Stage III | 1.21 (1.18–1.25) | | 1.02 (0.98–1.06) | 0.263 |
| Stage IV | 1.40 (1.36–1.44) | | 1.15 (1.11–1.19) | <0.001 |
| Occult (lung only) | 1.44 (0.51–4.07) | | 1.19 (0.36–3.95) | 0.078 |
| AJCC staging not applicable | 1.87 (1.81–1.93) | | 1.47 (1.41–1.54) | <0.001 |

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Supplementary Table S3. Continued

| | Univariate | | Multivariate | |
|--------------------------|------------------|--------------|-------------------|---------|
| | OR (95% CI) | Wald p-value | OR (95% CI) | p-value |
| AJCC stage group unknown | 1.16 (1.09–1.23) | | 1.09 (1.01–1.17) | 0.026 |
| Comorbidity score | | 0.0001 | | |
| 0 | 1 (Reference) | | 1 (Reference) | |
| 1 | 1.05 (1.02–1.08) | | 0.98 (0.94–1.01) | 0.149 |
| 2 | 0.99 (0.95–1.04) | | 0.92 (0.87–0.96) | 0.001 |
| ≥ 3 | 0.94 (0.90–0.99) | | 0.87 (0.892–0.92) | <0.001 |

NCI, National Cancer Institute; CCC, comprehensive cancer center; AJCC, American Joint Committee on Cancer; OR, odds ratio; CI, confidence interval.

^aFacilities belonging to an organization that owns a group of facilities that offer integrated and comprehensive cancer care services and is overseen by a centralized governance structure/board and CEO.