Supplementary Online Content

Deeb S, Chino FL, Diamond LC, et al. Disparities in care management during terminal hospitalization among adults with metastatic cancer from 2010 to 2017. JAMA Netw Open. 2021;4(9):e2125328. doi: 10.1001/jamanetworkopen.2021.25328

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This supplementary material has been provided by the authors to give readers additional information about their work.
Diagnosis and procedures

The NIS includes the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis and procedure codes prior to October 1, 2015 and International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System (ICD-9-CM/PCS) diagnosis and procedure codes beginning October 1, 2015. The US transitioned to the ICD-10-CM/PCS coding scheme on October 1, 2015, at the juncture of the third and fourth discharge quarters reported in each NIS patient record; our analysis includes records containing ICD-9-CM codes as well as records containing ICD-10-CM/PCS codes. As recommended by HCUP guidelines, we analyzed data from 2015, the year of this transition, by discharge quarter in order to assess changes in reported frequencies of diagnosis and procedure codes of interest due to the change in classification scheme. We found the reporting of metastatic cancer diagnoses and procedures of interest, according to the ICD codes listed in eTable 1, to be continuous across this transition. We therefore report compiled data spanning years 2010-2017. The NIS includes codes for a variable number of procedures depending on the state of origin of the record; we analyzed the first 15 procedures, which was the maximum number of reported procedures through 2015.

Exposures

Socioeconomic status

The HCUP reports the estimated median household income of residents in a patient's ZIP code, based on values derived from ZIP code-demographic data obtained from Claritas. The HCUP uses a categorical quartile classification, with the fourth quartile representing the wealthiest population. These estimates update annually and the dollar value ranges represented by each quartile vary between the 2010-2017 span of our dataset; this is reported in eTable 2.

Payer status

The HCUP coding combines detailed payer categories into more broad groups to allow uniformity of coding across records from different states. "Medicare" as primary expected payer includes both fee-for-service and managed care Medicare patients. "Medicaid" includes both fee-for-service and managed care Medicaid patients. “Private insurance” includes Blue Cross, commercial carriers, and private HMOs and PPOs. “Other” includes Worker's Compensation, CHAMPUS, CHAMPVA, Title V, and other government programs. For this study, these categories were further combined into three payer groups: (1) Medicare or Medicaid, (2) private insurance, or (3) self-pay, no charges, or other.

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Hospital characteristics

The HCUP obtained hospital location and teaching status from the AHA Annual Survey of Hospitals, and defined “urban” hospitals as being located in a metropolitan statistical area and “rural” hospitals as being located in a non-metropolitan statistical area. Urban hospitals were subdivided according to teaching status, with “urban teaching” hospitals defined as either having an AMA-approved residency program, being a member of the Council of Teaching Hospitals (COTH), or having a ratio of full-time equivalent interns and residents to beds of .25 or higher. Rural hospitals were not subdivided by teaching status because this category was rare. The HCUP also obtained hospital census region from the AHA Annual Survey of Hospitals, with census region defined by the U.S. Census Bureau as either Northeast, Midwest, South, or West.

Outcomes

Admission through the ED

The HCUP defines a data element indicating records with evidence of emergency department (ED) services, and guidelines indicate this data element as the most comprehensive indicator available in the NIS of inpatient admissions through the ED. Services captured by this data element include ED revenue codes of 450-459 on record, a positive ED charge (when revenue center codes are not available), ED CPT codes (99281-99285) reported on record, a condition code of P7 reported on record, point of origin of ED, or admission source of ED. Alternative non-ED admission sources include transfers from a different acute care hospital, transfers from a different health facility including long-term care facilities, admission from court or law enforcement, admission from an outpatient facility or clinic, or physician referral. The HCUP acknowledges the possibility of a patient incurring ED services with coding information that may not have been captured in the HCUP record, and therefore the possible under-representation of ED admissions based on HCUP coding. We utilized this data element as an indicator of patient admission from the ED.

Time from hospital admission to death

The HCUP codes the length of the inpatient stay in days, calculated by subtracting the admission date from the discharge date, ranging from 0 (same-day stay) to 365 days, and without subtracting leave days. The HCUP utilizes the length of stay supplied from the data source if it cannot be calculated, and codes it as missing if it cannot be calculated and is not supplied.

Total charges billed to insurance

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The HCUP reports total charges billed to insurance, generally not including professional fees and non-covered charges. These NIS reported total charges may include emergency department charges incurred prior to hospital admission, as Medicare requires a bundled bill for patients admitted to the hospital through the emergency department. HCUP coding rounds charges to the nearest dollar and sets zero charges as missing; HCUP coding of total charges was analyzed in this study.

**Systemic therapy**

Patients were coded as receiving systemic therapy during their inpatient stay if one of the first 15 coded HCUP procedure CCS codes was 224 (“cancer chemotherapy”), a category which includes both systemic chemotherapy and immunotherapy procedures. The ICD-9-CM and ICD-10-CM/PCS codes corresponding to specific procedures within this category are listed in eTable 1.

**Invasive mechanical ventilation**

Patients were coded as receiving invasive mechanical ventilation during their inpatient stay if one of the first 15 coded ICD-9-CM and ICD-10-CM/PCS procedures was one of the codes corresponding to this intervention, listed in eTable 1. These codes were selected based on their inclusion in the HCUP procedure CCS category 216 (“respiratory intubation and mechanical ventilation”), with specific ICD codes indicating non-invasive mechanical ventilation removed.

**Statistical analysis**

(Multicollinearity analysis was run prior to performing the multivariable binomial logistic regressions, using dummy variables representing each covariate and linear regression. For each model, all VIF values were less than 5 indicating no multicollinearity. Additionally, standardized residuals with a value greater than 2.5 standard deviations were assessed and reported. Significance was assessed according to Omnibus tests for each model, and accuracy was evaluated by generating ROC curves to obtain AUC values. The SPSS syntax utilized in this analysis is available upon request.)
**eTable 1. ICD Diagnosis and Procedure Codes Used to Define the Cohort and Outcomes**

| Diagnosis/Intervention | Source | System | Codes included |
|------------------------|--------|--------|----------------|
| Metastatic cancer      | Primary diagnosis | ICD-9 diagnosis codes | '1960' '1961' '1962' '1963' '1965' '1966' '1968' '1969' '1970' '1971' '1972' '1973' '1974' '1975' '1976' '1977' '1978' '1980' '1981' '1982' '1983' '1984' '1985' '1986' '1987' '19881' '19882' '19889' '20971' '20972' '20973' '20974' '51181' '78951' '1990' '20970' '20975' '20979' |
|                        |        | ICD-10 diagnosis codes | 'C770' 'C771' 'C772' 'C773' 'C774' 'C775' 'C778' 'C779' 'C7800' 'C7801' 'C7802' 'C7811' 'C7812' 'C782' 'C7830' 'C7839' 'C784' 'C785' 'C786' 'C787' 'C7880' 'C7889' 'C7900' 'C7901' 'C7902' 'C7910' 'C7911' 'C7919' 'C792' 'C7931' 'C7932' 'C7940' 'C7949' 'C7951' 'C7952' 'C7960' 'C7961' 'C7962' 'C7970' 'C7971' 'C7972' 'C7981' 'C7982' 'C7989' 'C799' 'C800' 'C7B00' 'C7B01' 'C7B02' 'C7B03' 'C7B04' 'C7B09' 'C7B11' 'C7B8' |
| Admission from ED      | HCUP ED admission data element |        | 1: 'ED revenue code on record'  
2: 'Positive ED charge (when revenue center codes not available)'  
3: 'ED CPT procedure code on record'  
4: 'Condition code P7, indication of ED admission, point of origin of ED, or admission source of ED' |
| Invasive Mechanical Ventilation | Procedures 1-15 | ICD-9 procedure codes | '9392' '9601' '9602' '9603' '9604' '9605' '9670' '9671' '9672' |
|                        |        | ICD-10 procedure codes | '09HN7BZ' '09HN8BZ' '0BH13EZ' '0BH17EZ' '0BH18EZ' '0CHY7BZ' '0CHY8BZ' '0DH57BZ' '0DH58BZ' '0WHQ73Z' '0WHQ7YZ' '5A1935Z' '5A1955Z' |
| Systemic Therapy       | Procedures 1-15 | HCUP CCS category | '224' |
|                        |        | ICD-9 procedure codes | '0010' '0015' '1770' '9925' '9928' |
|                        |        | ICD-10 procedure codes | '3E00X05' '3E00X0M' '3E01305' '3E0130M' '3E02305' '3E0230M' '3E03002' '3E03003' '3E03005' '3E0300M' '3E0300P' '3E030GN' '3E03302' '3E03303' '3E03305' '3E0330M' '3E0330P' '3E033GN' '3E04002' '3E04003' '3E04005' '3E0400M' '3E0400P' '3E0400G' '3E04302' '3E04303' '3E04305' '3E0430M' '3E0430P' '3E043GN' '3E05002' '3E05003' '3E05005' '3E0500M' '3E0500P' '3E050GN' '3E05302' '3E05303' '3E05305' '3E0530M' '3E0530P' '3E053GN' '3E06002' '3E06003' '3E06005' '3E0600M' '3E0600P' '3E060GN' '3E06302' '3E06303' '3E06305' '3E0630M' '3E0630P' '3E063GN' '3E06905' '3E0690M' '3E0690P' '3E09705' '3E0970M' '3E0970P' '3E0970X' '3E09X0M' '3E0A305' '3E0A30M' '3E0B305' '3E0B30M' '3E0B705' '3E0B70M' '3E0BX05' '3E0BX0M' '3E0C305' '3E0C30M' '3E0C30P' '3E0C705' '3E0C70M' '3E0CX05' '3E0CX0M' '3E0D035' '3E0D03M' '3E0D070' '3E0D07M' '3E0D0X0' '3E0D0X0M' '3E0E035' '3E0E03M' '3E0E070' '3E0E70M' '3E0E70P' '3E0E805' '3E0E80M' '3E0F305' '3E0F30M' '3E0F705' '3E0F70M' |
| 3E0F805 | 3E0F80M | 3E0G305 | 3E0G30M | 3E0G705 | 3E0G70M | 3E0G805 | 3E0G80M | 3E0H305 | 3E0H30M | 3E0H705 | 3E0H70M | 3E0H805 | 3E0H80M | 3E0J305 | 3E0J30M | 3E0J705 | 3E0J70M | 3E0J805 | 3E0J80M |
| 3E0K305 | 3E0K30M | 3E0K705 | 3E0K70M | 3E0K805 | 3E0K80M | 3E0L305 | 3E0L30M | 3E0L705 | 3E0L70M | 3E0M305 | 3E0M30M | 3E0M705 | 3E0M70M | 3E0N305 | 3E0N30M | 3E0N705 | 3E0N70M | 3E0N805 | 3E0N80M |
| 3E0P305 | 3E0P30M | 3E0P705 | 3E0P70M | 3E0P805 | 3E0P80M | 3E0Q005 | 3E0Q00M | 3E0Q305 | 3E0Q30M | 3E0Q705 | 3E0Q70M | 3E0R302 | 3E0R303 | 3E0R305 | 3E0R30M | 3E0S302 | 3E0S303 | 3E0S305 | 3E0S30M |
| 3E0U305 | 3E0U30M | 3E0V305 | 3E0V30M | 3E0W305 | 3E0W30M | 3E0Y305 | 3E0Y30M | 3E0Y705 | 3E0Y70M | 3XW03351 | 3XW033B3 | 3XW033C3 | 3XW033Q5 | 3XW033S5 | 3XW04351 | 3XW043B3 | 3XW043C3 | 3XW043Q5 | 3XW043S5 |
eTable 2. Yearly Quartile Ranges ($) of Median Household Income According to Zip Code

| Year | Quartile 1   | Quartile 2   | Quartile 3   | Quartile 4   |
|------|-------------|-------------|-------------|-------------|
| 2010 | 1 - 40,999  | 41,000 - 50,999 | 51,000 - 66,999 | 67,000+     |
| 2011 | 1 - 38,999  | 39,000 - 47,999 | 48,000 - 63,999 | 64,000+     |
| 2012 | 1 - 38,999  | 39,000 - 47,999 | 48,000 - 62,999 | 63,000+     |
| 2013 | 1 - 37,999  | 38,000 - 47,999 | 48,000 - 63,999 | 64,000+     |
| 2014 | 1 - 39,999  | 40,000 - 50,999 | 51,000 - 65,999 | 66,000+     |
| 2015 | 1 - 41,999  | 42,000 - 51,999 | 52,000 - 67,999 | 68,000+     |
| 2016 | 1 - 42,999  | 43,000 - 53,999 | 54,000 - 70,999 | 71,000+     |
| 2017 | 1 - 43,999  | 44,000 - 55,999 | 56,000 - 73,999 | 74,000+     |
**eTable 3. Chi-squared Comparisons of Outcomes by Demographic Characteristics**

| Characteristicsa | Systemic therapy (N/Ntot (%))b | p value | Invasive ventilation (N/Ntot (%))b | p value | Admission from ED (N/Ntot (%))b | p value |
|------------------|-------------------------------|---------|----------------------------------|---------|-------------------------------|---------|
| **Age (y)**      |                               |         |                                  |         |                               |         |
| 18-49            | 241/2710 (8.9)                | <0.0001 | 705/2710 (26.0)                  | <0.0001 | 1704/2710 (62.9)              | 0.78    |
| 50-59            | 245/4450 (5.5)                |         | 948/4450 (21.3)                  |         | 2839/4450 (63.8)             |         |
| 60-69            | 302/6103 (4.9)                |         | 1194/6103 (19.6)                 |         | 3838/6103 (62.9)             |         |
| ≥70              | 198/8072 (2.5)                |         | 1240/8072 (15.4)                 |         | 5108/8072 (63.3)            |         |
| **Sex**          |                               |         |                                  |         |                               |         |
| Male             | 404/9800 (4.1)                | 0.0015  | 1925/9800 (19.6)                 | 0.10    | 6101/9800 (62.3)             | 0.0071  |
| Female           | 582/11529 (5.0)               |         | 2162/11529 (18.8)                |         | 7384/11529 (64.0)           |         |
| **Race/ethnicity** |                             |         |                                  |         |                               |         |
| White            | 633/14066 (4.5)               | 0.063   | 2391/14066 (17.0)                | <0.0001 | 8659/14066 (61.6)            | <0.0001 |
| Black            | 126/3011 (4.2)                |         | 822/3011 (27.3)                  |         | 2080/3011 (69.1)            |         |
| Hispanic         | 90/1609 (5.6)                 |         | 346/1609 (21.5)                  |         | 1154/1609 (71.7)            |         |
| API              | 37/696 (5.3)                  |         | 146/696 (21.0)                   |         | 512/696 (73.6)              |         |
| NA               | 5/101 (5.0)                   |         | 17/101 (16.8)                    |         | 54/101 (53.5)               |         |
| Other            | 42/661 (6.4)                  |         | 169/661 (25.6)                   |         | 456/661 (69.0)              |         |
| **Payer**        |                               |         |                                  |         |                               |         |
| Public           | 493/12424 (4.0)               | <0.0001 | 2505/12424 (20.2)                | <0.0001 | 8677/12424 (69.8)           | <0.0001 |
| Private          | 432/7074 (6.1)                |         | 1324/7074 (18.7)                 |         | 3975/7074 (56.2)            |         |
| Other            | 59/1770 (3.3)                 |         | 254/1770 (14.4)                  |         | 808/1770 (45.6)            |         |
| **Income quartile** |                           |         |                                  |         |                               |         |
| First            | 236/5555 (4.2)                | 0.0025  | 1178/5555 (21.2)                 | <0.0001 | 3420/5555 (61.6)            | <0.0001 |
| Second           | 194/4963 (3.9)                |         | 942/4963 (19.0)                  |         | 2974/4963 (59.9)            |         |
| Third            | 255/5015 (5.1)                |         | 926/5015 (18.5)                  |         | 3181/5015 (63.4)            |         |
| Fourth           | 276/5281 (5.2)                |         | 919/5281 (17.4)                  |         | 3554/5281 (67.3)            |         |
| **Location/teaching** |                    |         |                                  |         |                               |         |
| Rural            | 29/1763 (1.6)                 | <0.0001 | 142/1763 (8.1)                   | <0.0001 | 969/1763 (55.0)             | <0.0001 |
| UNT              | 238/5757 (4.1)                |         | 1014/5757 (17.6)                 |         | 3850/5757 (66.9)            |         |
| UT               | 714/13738 (5.2)               |         | 2910/13738 (21.2)                |         | 8633/13738 (62.8)           |         |
| **Region**       |                               |         |                                  |         |                               |         |
| NE               | 262/5479 (4.8)                | 0.0032  | 1045/5479 (19.1)                 | 0.696   | 3978/5479 (72.6)            | <0.0001 |
| MW               | 148/4049 (3.7)                |         | 752/4049 (18.6)                  |         | 1891/4049 (46.7)            |         |
| South            | 359/7750 (4.6)                |         | 1497/7750 (19.3)                 |         | 4788/7750 (61.8)            |         |
| West             | 217/4057 (5.3)                |         | 793/4057 (19.5)                  |         | 2832/4057 (69.8)           |         |

a Abbreviations: White = White, non-Hispanic; Black = Black, non-Hispanic; API = Asian/Pacific Islander; NA = Native American; public = Medicare or Medicaid; UNT = urban non-teaching; UT = urban teaching; NE = Northeast; MW = Midwest.
b Ntot for subgroups differ as missing values were excluded case-wise from analysis.
### eTable 4. Mann-Whitney U Test Used for Comparison of Medians by Sex and Kruskal-Wallis Test Used for All Other Comparisons

| Characteristics\(^a\) | N\(^b\) | Median (Q1, Q3) time until death (days) | p value | N\(^b\) | Median (Q1, Q3) total charges ($) | p value |
|------------------------|--------|---------------------------------------|---------|--------|--------------------------------|---------|
| Age (y)                |        |                                       |         |        |                                |         |
| 18-49                  | 2710   | 7 (3, 14)                             | <0.0001 | 2662   | 57003.50 (24664.25, 129909.00)  | <0.0001 |
| 50-59                  | 4449   | 6 (3, 12)                             |         | 4374   | 47259.00 (18864.75, 106084.00)  |         |
| 60-69                  | 6103   | 7 (3, 12)                             |         | 5989   | 46230.00 (18976.50, 99161.00)   |         |
| ≥70                    | 8072   | 6 (3, 11)                             |         | 7911   | 37174.00 (15339.00, 81681.00)   |         |
| Sex                    |        |                                       |         |        |                                |         |
| Male                   | 9800   | 6 (3, 12)                             | 0.13    | 9629   | 44256.00 (17988.50, 100878.50)  | 0.10    |
| Female                 | 11528  | 6 (3, 12)                             |         | 11301  | 43352.00 (17950.50, 94474.00)   |         |
| Race/ethnicity         |        |                                       |         |        |                                |         |
| White                  | 14065  | 6 (3, 11)                             | <0.0001 | 13840  | 40032.00 (16579.50, 89859.00)   | <0.0001 |
| Black                  | 3011   | 7 (3, 14)                             |         | 2949   | 49184.00 (20593.50, 108463.00)  |         |
| Hispanic               | 1609   | 7 (3, 14)                             |         | 1550   | 63313.00 (27446.00, 135367.75)  |         |
| API                    | 696    | 7 (3, 13)                             |         | 653    | 67812.00 (28576.50, 135849.50)  |         |
| NA                     | 101    | 5 (2, 9)                              |         | 101    | 33374.00 (11554.00, 75928.50)   |         |
| Other                  | 661    | 8 (4, 14)                             |         | 660    | 68016.50 (29067.00, 140791.25)  |         |
| Payer                  |        |                                       |         |        |                                |         |
| Public                 | 12423  | 7 (3, 12)                             | <0.0001 | 12214  | 48056.50 (22315.50, 100691.25)  | <0.0001 |
| Private                | 7074   | 6 (3, 11)                             |         | 6890   | 41287.50 (15179.50, 97783.25)   |         |
| Other                  | 1770   | 5 (2, 10)                             |         | 1765   | 22862.00 (4990.50, 71455.00)    |         |
| Income quartile        |        |                                       |         |        |                                |         |
| First                  | 5554   | 6 (3, 12)                             | <0.0001 | 5490   | 41035.00 (17180.25, 91646.50)   | <0.0001 |
| Second                 | 4963   | 6 (3, 11)                             |         | 4891   | 39112.00 (15953.00, 85570.00)   |         |
| Third                  | 5015   | 6 (3, 12)                             |         | 4917   | 44655.00 (18998.50, 101563.50)  |         |
| Fourth                 | 5281   | 7 (3, 12)                             |         | 5122   | 50785.50 (20093.75, 110014.50)  |         |
| Location/teaching      |        |                                       |         |        |                                |         |
| Rural                  | 1763   | 5 (2, 8)                              | <0.0001 | 1756   | 17527.50 (8115.00, 38271.00)    | <0.0001 |
| UNT                    | 5757   | 6 (3, 11)                             |         | 5680   | 40229.50 (15906.50, 89772.25)   |         |
| UT                     | 13737  | 7 (3, 13)                             |         | 13423  | 50754.00 (21790.00, 109227.00)  |         |
| Region                 |        |                                       |         |        |                                |         |
| NE                     | 5479   | 7 (3, 13)                             | <0.0001 | 5475   | 48739.00 (20722.00, 109539.00)  | <0.0001 |
| MW                     | 4049   | 6 (3, 10)                             |         | 3999   | 33742.00 (14228.00, 71620.00)   |         |
| South                  | 7749   | 6 (3, 12)                             |         | 7742   | 37754.50 (14815.25, 83514.50)   |         |
| West                   | 4057   | 6 (3, 12)                             |         | 3720   | 66825.00 (28995.50, 144213.25)  |         |

\(^a\) Abbreviations: White = White, non-Hispanic; Black = Black, non-Hispanic; API = Asian/Pacific Islander; NA = Native American; public = Medicare or Medicaid; UNT = urban non-teaching; UT = urban teaching; NE = Northeast; MW = Midwest.

\(^b\) N for subgroups differ as missing values were excluded case-wise from analysis.
eFigure. Median Time (Days) From Hospital Admission Until Death Greater Than Median for Overall Cohort

| Factors                          | N/Nref(%) | OR (95% CI) | p value | Odds ratios |
|---------------------------------|-----------|-------------|---------|-------------|
| Age (y)                         |           |             |         |             |
| 18-49                           | 1399/2710 (51.6) | 1           |         |             |
| 50-59                           | 2204/4449 (49.5) | 0.98 (0.89-1.09) | 0.74    |             |
| 60-69                           | 3098/6103 (50.8) | 0.98 (0.89-1.08) | 0.68    |             |
| ≥70                             | 3701/8072 (45.8) | 0.75 (0.68-0.83) | <0.0001 |             |
| Sex                             |           |             |         |             |
| Male                            | 4725/9800 (48.2) | 1           |         |             |
| Female                          | 5674/11528 (49.2) | 1.01 (0.96-1.07) | 0.62    |             |
| Race/ethnicity                  |           |             |         |             |
| White                           | 6619/14065 (47.1) | 1           |         |             |
| Black                           | 1622/3011 (53.9) | 1.21 (1.11-1.32) | <0.0001 |             |
| Hispanic                        | 826/1609 (51.3) | 1.10 (0.99-1.23) | 0.078  |             |
| API                             | 371/696 (53.3) | 1.21 (1.03-1.41) | 0.021  |             |
| NA                              | 40/101 (39.6) | 0.73 (0.47-1.14) | 0.16    |             |
| Other                           | 392/661 (59.3) | 1.48 (1.25-1.75) | <0.0001 |             |
| Payer                           |           |             |         |             |
| Public                          | 6399/12423 (51.5) | 1           |         |             |
| Private                         | 3310/7074 (46.8) | 0.72 (0.67-0.77) | <0.0001 |             |
| Other                           | 674/1770 (38.1) | 0.54 (0.48-0.60) | <0.0001 |             |
| Income quartile                 |           |             |         |             |
| First                           | 2698/5554 (48.6) | 1           |         |             |
| Second                          | 2296/4963 (46.3) | 0.97 (0.89-1.05) | 0.41    |             |
| Third                           | 2463/5015 (49.1) | 1.04 (0.96-1.13) | 0.34    |             |
| Fourth                          | 2659/5281 (50.4) | 1.06 (0.98-1.16) | 0.16    |             |
| Location/teaching               |           |             |         |             |
| Rural                           | 641/1763 (36.4) | 1           |         |             |
| UNT                             | 2531/5757 (44.0) | 1.29 (1.15-1.46) | <0.0001 |             |
| UT                              | 7191/13737 (52.3) | 1.72 (1.54-1.93) | <0.0001 |             |
| Region                          |           |             |         |             |
| NE                              | 2935/5479 (53.6) | 1           |         |             |
| MW                              | 1789/4049 (44.2) | 0.77 (0.70-0.84) | <0.0001 |             |
| South                           | 3732/7749 (48.2) | 0.87 (0.81-0.94) | 0.00032 |             |
| West                            | 1948/4057 (48.0) | 0.85 (0.78-0.93) | 0.00025 |             |

Abbreviations: White = White, non-Hispanic; Black = Black, non-Hispanic; API = Asian/Pacific Islander; NA = Native American; public = Medicare or Medicaid; UNT = urban non-teaching; UT = urban teaching; NE = Northeast; MW = Midwest.

Nref for subgroups differ as missing values were excluded case-wise from analysis.
eReferences

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