

Appendix:

Table S1: Characteristics Stratified by Area Deprivation Index (ADI) State Deciles, 2017

Characteristics by ADI State Decile <i>n (%) or mean (SD)</i>	Decile 1 (Lowest Disadvantage)	Decile 5 (Medium Disadvantage)	Decile 10 (Highest Disadvantage)	SMD (Decile 1 vs. 10)
N (total N 831,625)	27129 (3.3%)	76695 (9.2%)	129786 (15.6%)	
Age (years)	44.4 (18.4)	42.8 (17.5)	42.7 (17.4)	-0.09
Sex				0.10
...Female	14445 (53.2)	44160 (57.6)	75048 (57.8)	
...Male	12683 (46.8)	32535 (42.4)	54737 (42.2)	
...Missing	1 (0.0)	0 (0.0)	1 (0.0)	
Race				0.61
...Alaskan Native / American Indian	593 (2.2)	2748 (3.6)	8253 (6.4)	
...Asian	3706 (13.7)	6639 (8.7)	2690 (2.1)	
...Black	2204 (8.1)	7475 (9.7)	6255 (4.8)	
...White	16705 (61.6)	48869 (63.7)	88019 (67.8)	
...Other	2241 (8.3)	8260 (10.8)	21537 (16.6)	
...Missing	1680 (6.2)	2704 (3.5)	3032 (2.3)	
Ethnicity				0.67
...Non-Hispanic	19081 (70.3)	60844 (79.3)	92946 (71.6)	
...Hispanic	1931 (7.1)	7837 (10.2)	30429 (23.4)	
...Missing	6117 (22.5)	8014 (10.4)	6411 (4.9)	
Charlson Comorbidity Index	0.5 (1.4)	0.5 (1.4)	0.6 (1.6)	0.11
Individual Federal Poverty Level (%)	34.1 (47.5)	36.8 (48.6)	35.5 (47.7)	0.03
Primary Spoken Language				0.22
...English	25742 (94.9)	71750 (93.6)	118938 (91.6)	
...Non-English	1129 (4.2)	4443 (5.8)	9925 (7.6)	
...Missing	258 (1.0)	502 (0.7)	923 (0.7)	
Homeless	1384 (5.1)	3888 (5.1)	9467 (7.3)	0.09
Residing in a Rural Area	338 (1.2)	6201 (8.1)	36496 (28.1)	0.82
Had ED Visit(s)	6024 (22.2)	23084 (30.1)	50729 (39.1)	0.37
Had Low Acuity ED Visit(s)	1112 (4.1)	4659 (6.1)	11933 (9.2)	0.21
Was Hospitalized At Least Once	2113 (7.8)	7545 (9.8)	14884 (11.5)	0.13

Was Hospitalized At Least Once for an ACSC*	174 (0.6)	680 (0.9)	1555 (1.2)	0.06
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SMD=Standardized Mean Difference

ED=Emergency Department

ACSC=Ambulatory Care Sensitive Condition

Table S2: Characteristics Stratified by Area Deprivation Index State Deciles, 2021

Characteristics by ADI State Decile <i>n (%) or mean (SD)</i>	Decile 1 (Lowest Disadvantage)	Decile 5 (Medium Disadvantage)	Decile 10 (Highest Disadvantage)	SMD (Decile 1 vs. 10)
N (total N 1,096,756)	41215 (3.8%)	96137 (8.8%)	165121 (15.1%)	
Age (years)	42.8 (17.7)	41.7 (17.4)	41.2 (17.2)	-0.09
Sex				0.06
...Female	21677 (52.6)	54427 (56.6)	93156 (56.4)	
...Male	19526 (47.4)	41687 (43.4)	71926 (43.6)	
...Missing	12 (0.0)	23 (0.0)	39 (0.0)	
Race				0.66
...Alaskan Native / American Indian	1063 (2.6)	3070 (3.2)	10655 (6.5)	
...Asian	5699 (13.8)	8021 (8.3)	2332 (1.4)	
...Black	4236 (10.3)	9095 (9.5)	6163 (3.7)	
...White	23455 (56.9)	59625 (62.0)	110577 (67.0)	
...Other	4060 (9.9)	12526 (13.0)	31921 (19.3)	
...Missing	2702 (6.6)	3800 (4.0)	3473 (2.1)	
Ethnicity				0.68
...Non-Hispanic	28783 (69.8)	73344 (76.3)	109333 (66.2)	
...Hispanic	3628 (8.8)	12425 (12.9)	48604 (29.4)	
...Missing	8804 (21.4)	10368 (10.8)	7184 (4.4)	
Charlson Comorbidity Index	0.4 (1.2)	0.4 (1.3)	0.5 (1.3)	0.09
Individual Federal Poverty Level (FPL %)	38.0 (54.7)	42.9 (56.4)	40.9 (53.1)	0.05
Primary Spoken Language				0.24
...English	38366 (93.1)	87102 (90.6)	145477 (88.1)	
...Non-English	1847 (4.5)	7018 (7.3)	16335 (9.9)	
...Missing	1002 (2.4)	2017 (2.1)	3309 (2.0)	
Homeless	2229 (5.4)	4563 (4.7)	11503 (7.0)	0.06
Residing in a Rural Area	0 (0.0)	6429 (6.7)	61462 (37.2)	1.09
Had ED Visit(s)	7667 (18.6)	24227 (25.2)	52210 (31.6)	0.30
Had Low Acuity ED Visit(s)	975 (2.4)	3192 (3.3)	8024 (4.9)	0.13
Was Hospitalized At Least Once	2438 (5.9)	7575 (7.9)	14103 (8.5)	0.10

Was Hospitalized At Least Once for an ACSC	197 (0.5)	663 (0.7)	1252 (0.8)	0.04
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SMD=Standardized Mean Difference

ED=Emergency Department

ACSC=Ambulatory Care Sensitive Condition

Table S3: Multivariable Logistic Regression Results by Healthcare Utilization Outcome (Sensitivity Analysis Using Complete Case Analysis)

Outcome <i>Adjusted OR (95% CI)</i>	Any Emergency Department (ED) Visit	Low Acuity ED Visit	Any Hospitalization
Area Deprivation Index (ADI) by Decile	1.05 (1.05-1.06)	1.07 (1.07-1.07)	1.01 (1.01-1.02)
Age	1.01 (1.01-1.01)	1.02 (1.02-1.02)	0.97 (0.97-0.97)
Race			
<i>White</i>	<i>Ref</i>	<i>Ref</i>	<i>Ref</i>
<i>AI/AN</i>	1.24 (1.23-1.25)	1.23 (1.21-1.25)	1.20 (1.18-1.22)
<i>Asian</i>	0.52 (0.51-0.52)	0.46 (0.45-0.47)	0.60 (0.59-0.61)
<i>Black</i>	1.24 (1.24-1.26)	1.19 (1.17-1.21)	1.06 (1.05-1.08)
<i>Other</i>	0.93 (0.92-0.94)	0.93 (0.92-0.95)	0.97 (0.96-0.98)
Ethnicity			
<i>Hispanic</i>	<i>Ref</i>	<i>Ref</i>	<i>Ref</i>
<i>Non-Hispanic</i>	0.93 (0.92-0.94)	0.96 (0.95-0.98)	0.91 (0.90-0.92)
Sex			
<i>Male</i>	<i>Ref</i>	<i>Ref</i>	<i>Ref</i>
<i>Female</i>	1.31 (1.30-1.31)	1.26 (1.25-1.27)	1.64 (1.63-1.66)
Primary Language			
<i>Non-English</i>	<i>Ref</i>	<i>Ref</i>	<i>Ref</i>
<i>English</i>	1.26 (1.25-1.27)	1.37 (1.34-1.41)	0.85 (0.84-0.86)
Homeless	2.01 (2.00-2.03)	1.89 (1.86-1.92)	1.69 (1.67-1.71)
Urban Residence	1.07 (1.06-1.08)	1.10 (1.09-1.11)	1.11 (1.10-1.13)
Federal Poverty Level, %	0.997 (0.997-0.997)	1.00 (1.00-1.00)	1.00 (1.00-1.00)
CCI	1.28 (1.28-1.28)	1.17 (1.17-1.17)	1.43 (1.43-1.44)
Year	.	.	
<i>2017</i>	<i>Ref</i>		
<i>2018</i>	0.98 (0.98-0.99)	0.92 (0.91-0.94)	1.00 (1.00-1.00)
<i>2019</i>	0.99 (0.98-1.00)	0.90 (0.88-0.91)	1.01 (1.00-1.02)
<i>2020</i>	0.79 (0.78-0.79)	0.65 (0.64-0.66)	0.90 (0.89-0.91)
<i>2021</i>	0.79 (0.78-0.80)	0.55 (0.54-0.55)	0.82 (0.82-0.83)

AI/AN=American Indian/Alaska Native

CCI=Charlson Comorbidity Index