

Supplemental Materials for “US-county level variation in intersecting individual, household, and community characteristics relevant to COVID-19 and planning an equitable response: A cross-sectional analysis”

Taylor Chin, doctoral student^{1*}, Rebecca Kahn, doctoral student^{1*}, Ruoran Li, doctoral student¹, Jarvis T. Chen, research scientist², Nancy Krieger, professor², Caroline O. Buckee, associate professor¹, Satchit Balsari, assistant professor^{3,4†}, Mathew V. Kiang, visiting scholar and postdoctoral research fellow^{4,5,6†}

* shared first authorship

† shared last authorship

1. Center for Communicable Disease Dynamics, Department of Epidemiology, Harvard TH Chan School of Public Health, Boston, MA
2. Department of Social and Behavioral Sciences, Harvard TH Chan School of Public Health, Boston, MA
3. Emergency Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School
4. FXB Center for Health and Human Rights, Harvard University
5. Center for Population Health Sciences, Stanford University School of Medicine, Palo Alto, CA
6. Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Palo Alto, CA

Corresponding author: taylorchin@g.harvard.edu

Supplemental Text S1. Interactive results viewer with reproducible code and data.

For interested readers, we provide an interactive results viewer at <https://ccdd-hsph-harvard.shinyapps.io/county-risk/> which allows readers to select any combination of covariates discussed in this paper as well as a range of thresholds. This tool allows selecting a number of other important factors as well as filtering counties by population size. We also provide data and code to reproduce this paper at https://github.com/mkiang/county_preparedness/.

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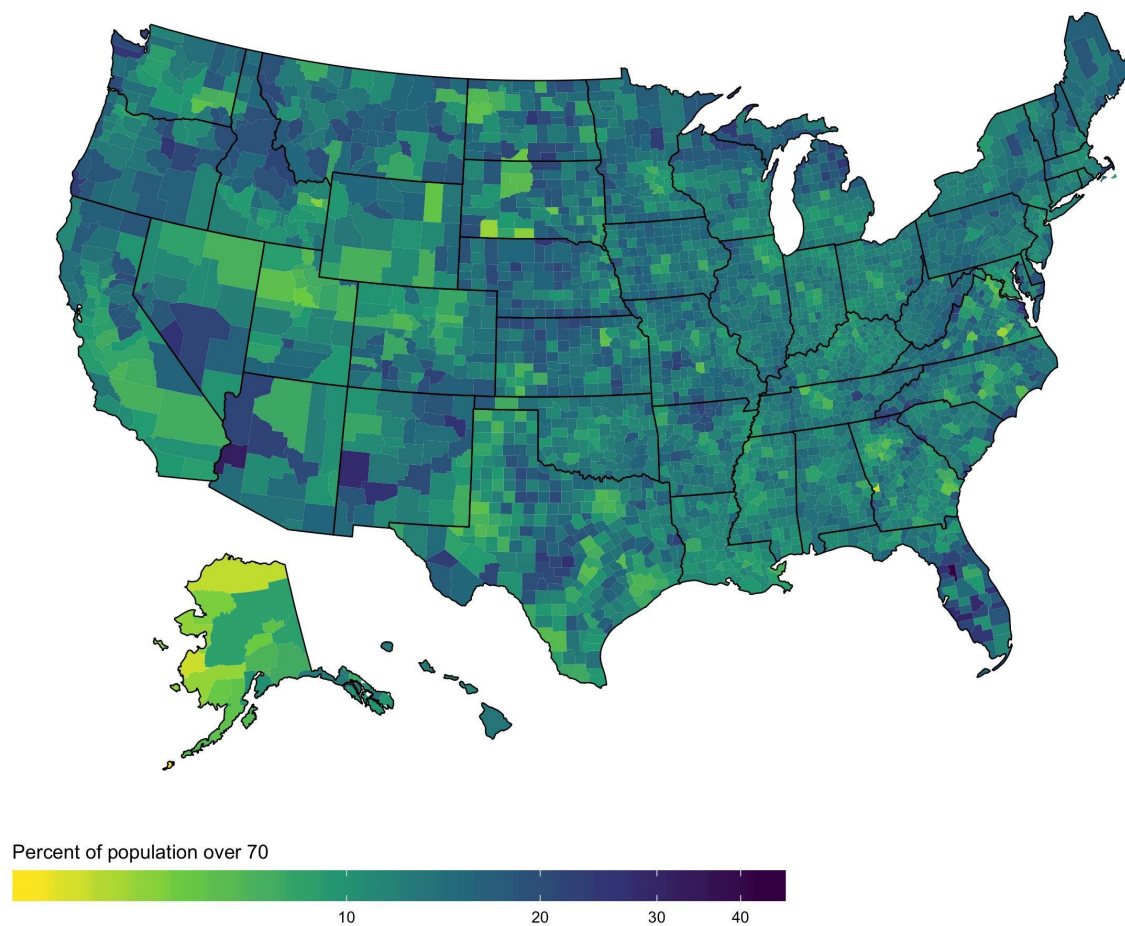


Figure S1. Percentage of population 70 years or older, 2018. Source: National Center for Health Statistics Bridged Race Population Estimates 2018, Vintage 2018.

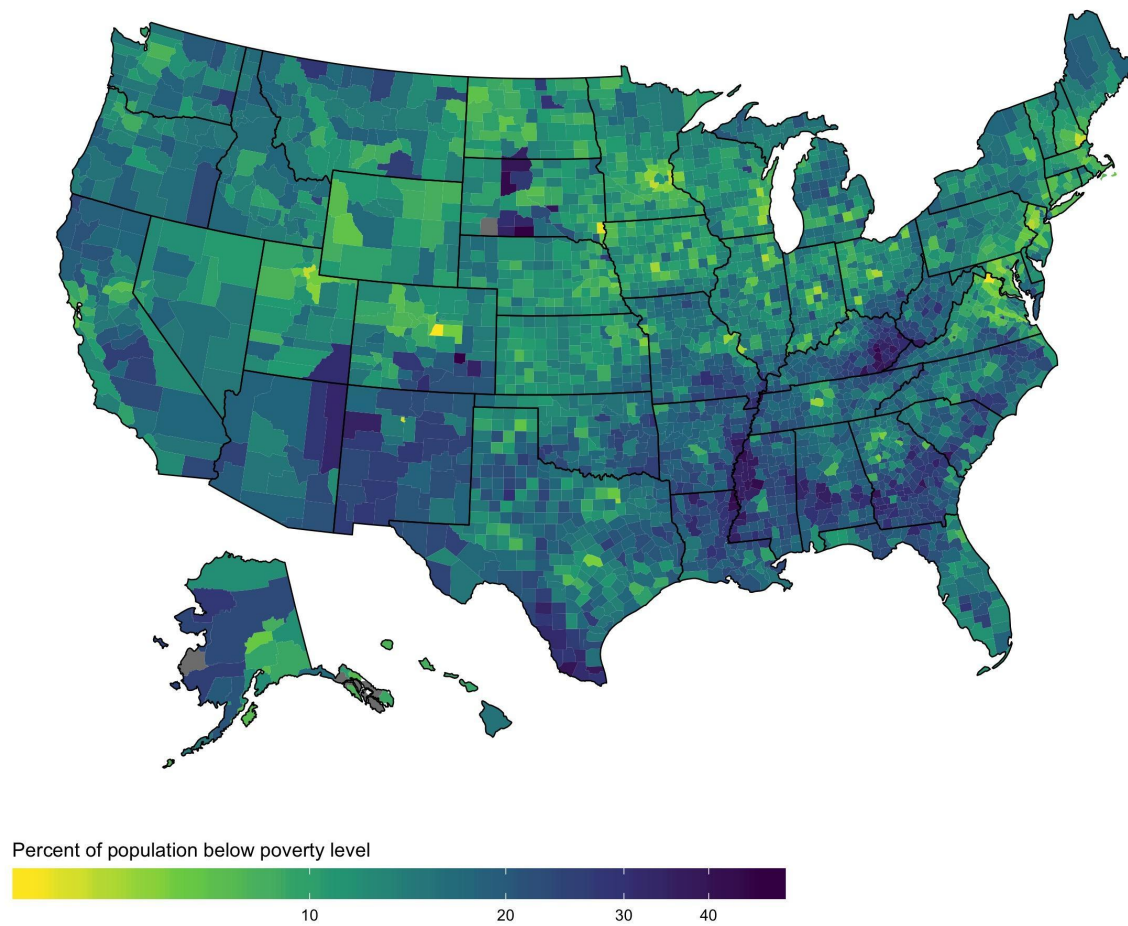


Figure S2. Percentage of households living in poverty, 2016. Source: CDC Atlas via the Census Small Area Income and Policy Estimates.

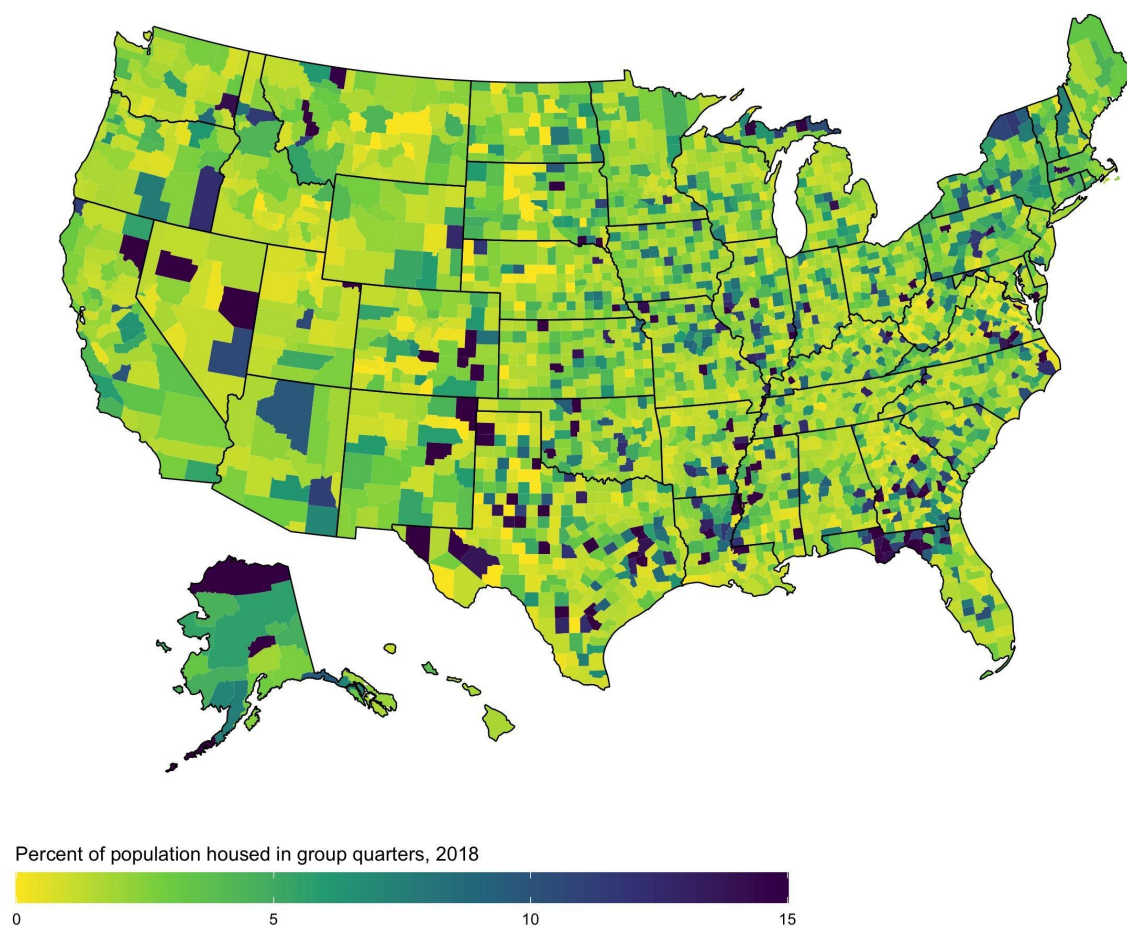


Figure S3. Percentage of population living in group quarters, 2018. Group quarters are defined by the US Census Bureau and include both institutional group quarters such as correctional facilities, nursing homes, or mental hospitals, as well as non-institutional facilities such as military bases, group homes, college dormitories, or shelters. Source: US Census Bureau's American Community Survey 5-year, 2018 (variable S1101_C01_020E).

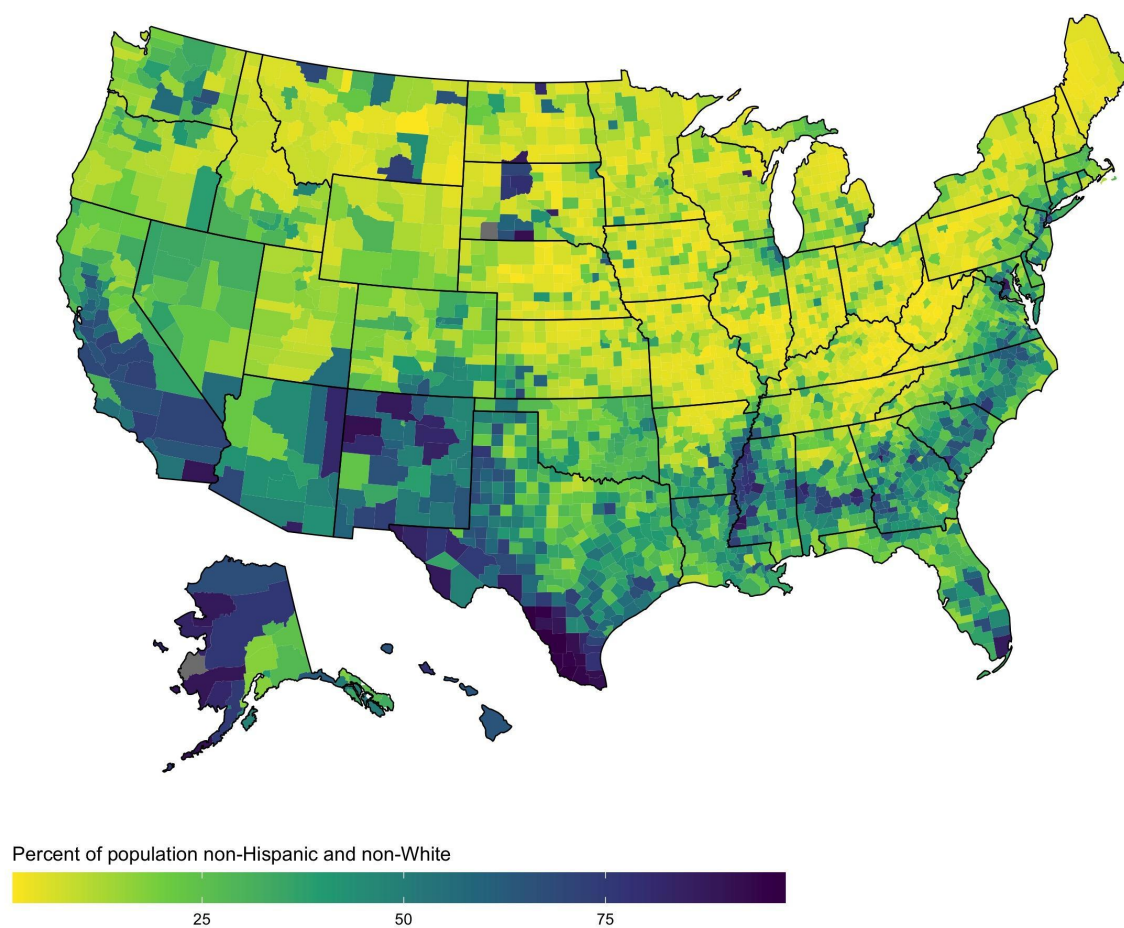


Figure S4. Percentage of population that is non-Hispanic and non-White, 2018. Source: National Center for Health Statistics (Bridged Race Estimates, Vintage 2018)

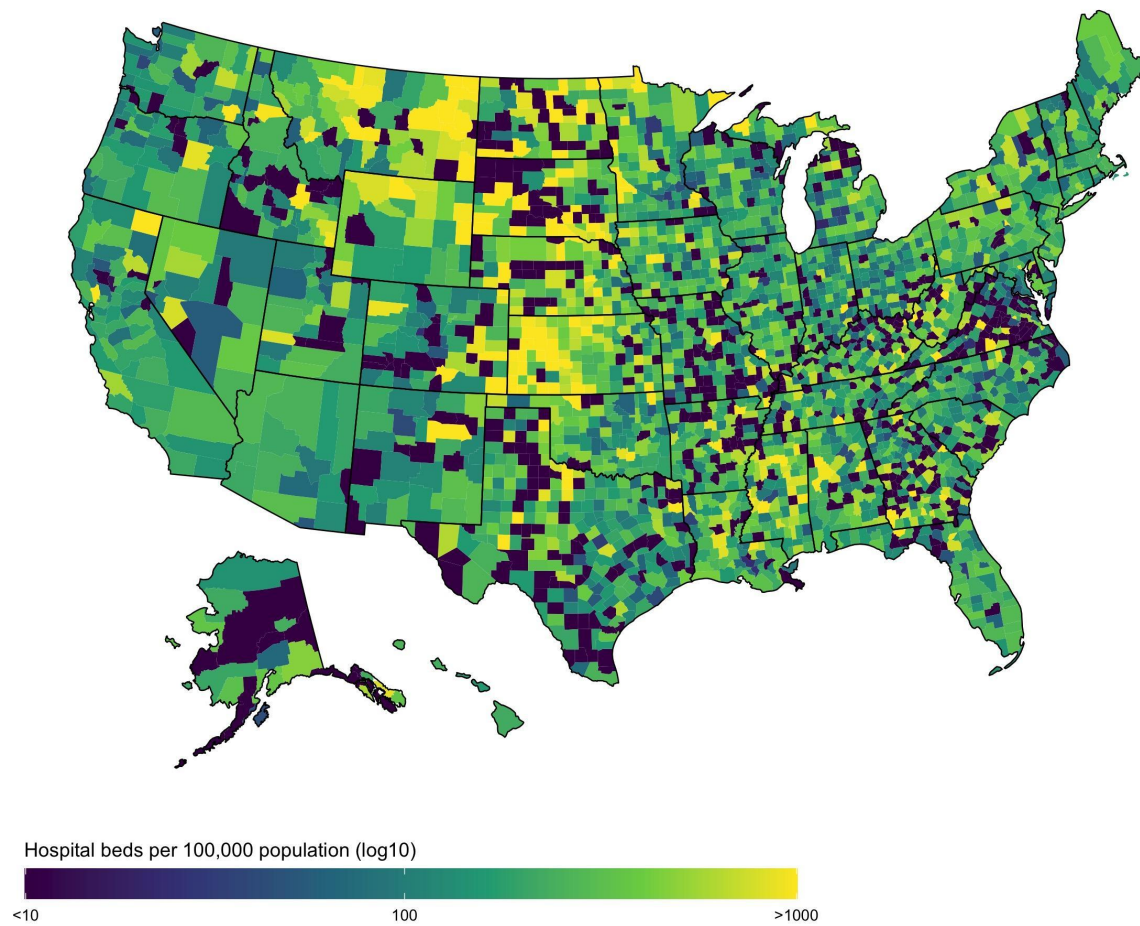


Figure S5. Hospital beds per 100,000 population, 2017 Source: Area Health Resources Files (variable F08921-17).

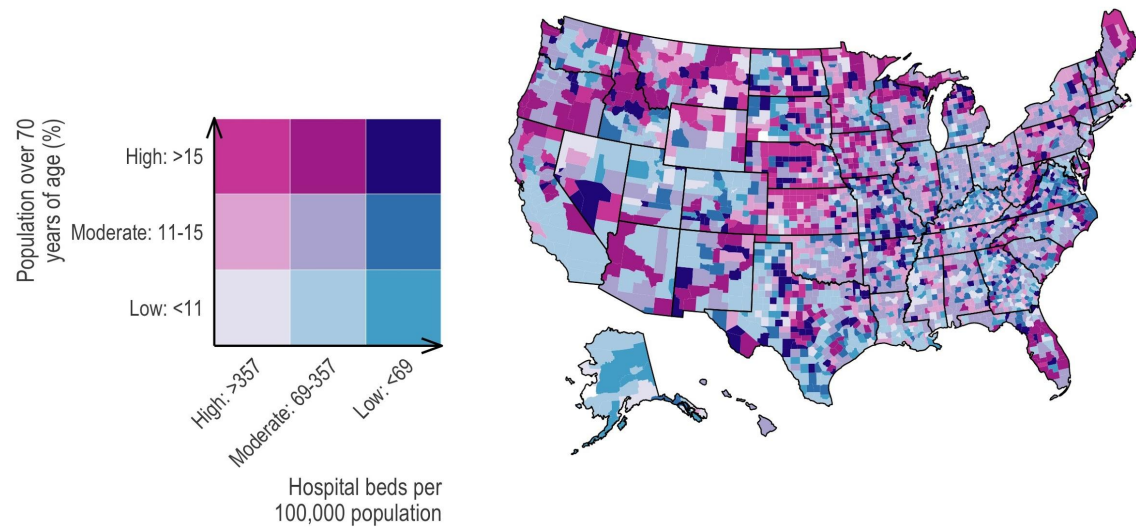


Figure S6. Percentage of population 70 years or older, 2018. Source: National Center for Health Statistics Bridged Race Population Estimates 2018, Vintage 2018. **Hospital beds per 100,000 population, 2017.** Source: Area Health Resources Files (variable F08921-17).

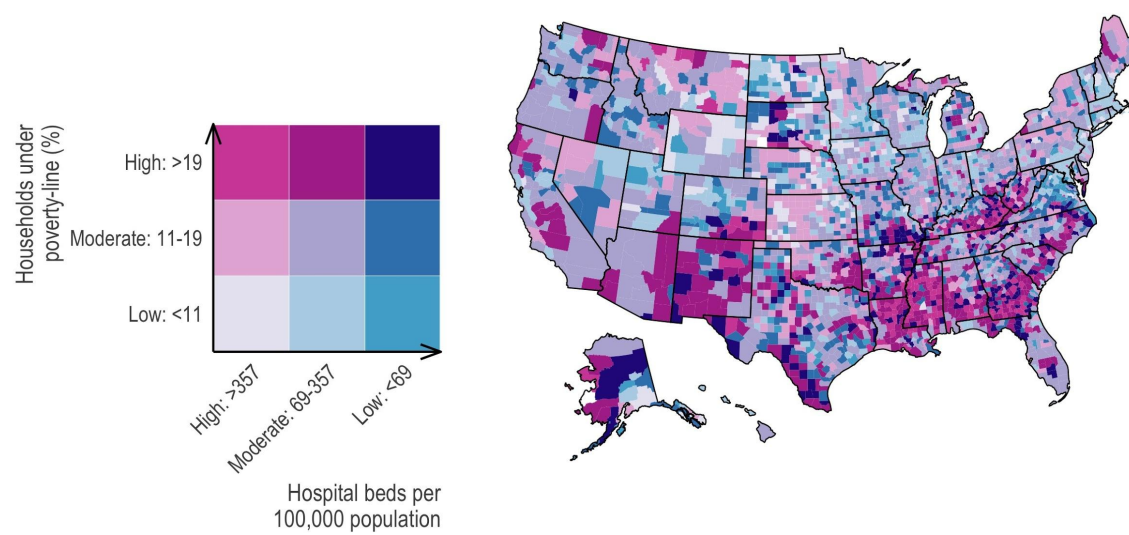


Figure S7. Percentage of households living in poverty, 2016. Source: CDC Atlas via the Census Small Area Income and Policy Estimates. **Hospital beds per 100,000 population, 2017.** Source: Area Health Resources Files (variable F08921-17).

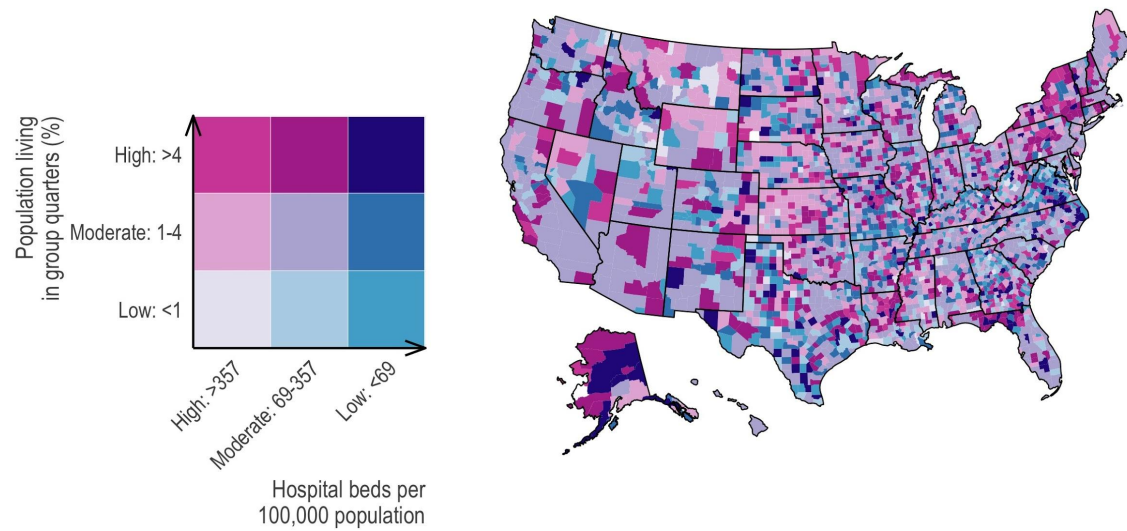


Figure S8. Percentage of population living in group quarters, 2018. Group quarters are defined by the US Census Bureau and include both institutional group quarters such as correctional facilities, nursing homes, or mental hospitals, as well as non-institutional facilities such as military bases, group homes, college dormitories, or shelters. Source: US Census Bureau's American Community Survey 5-year, 2018 (variable S1101_C01_020E). **Hospital beds per 100,000 population, 2017.** Source: Area Health Resources Files (variable F08921-17).

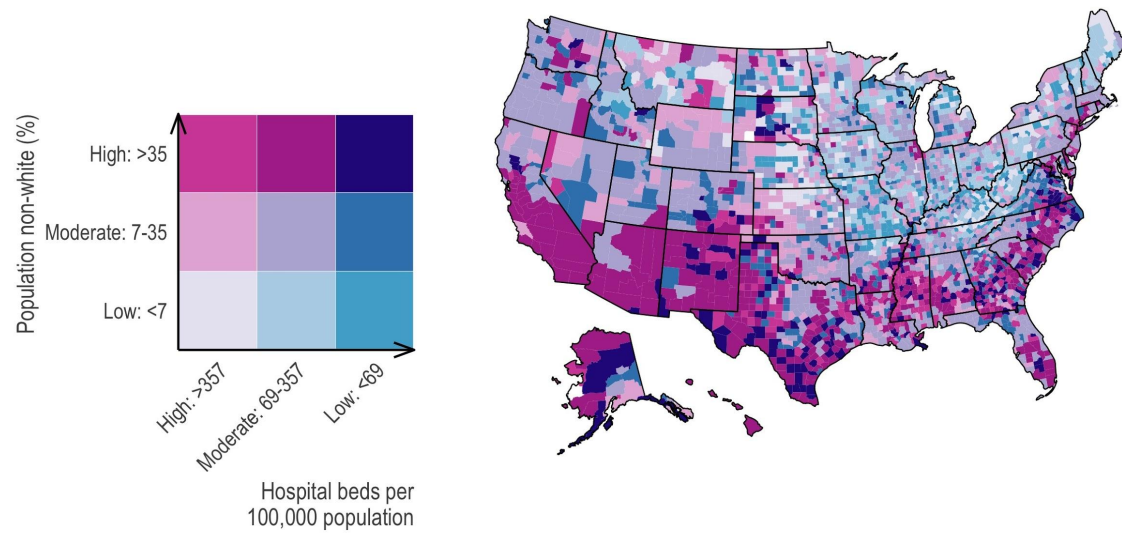


Figure S9. Percentage of population that is non-Hispanic and non-White, 2018. Source: National Center for Health Statistics (Bridged Race Estimates, Vintage 2018). **Hospital beds per 100,000 population, 2017.** Source: Area Health Resources Files (variable F08921-17).

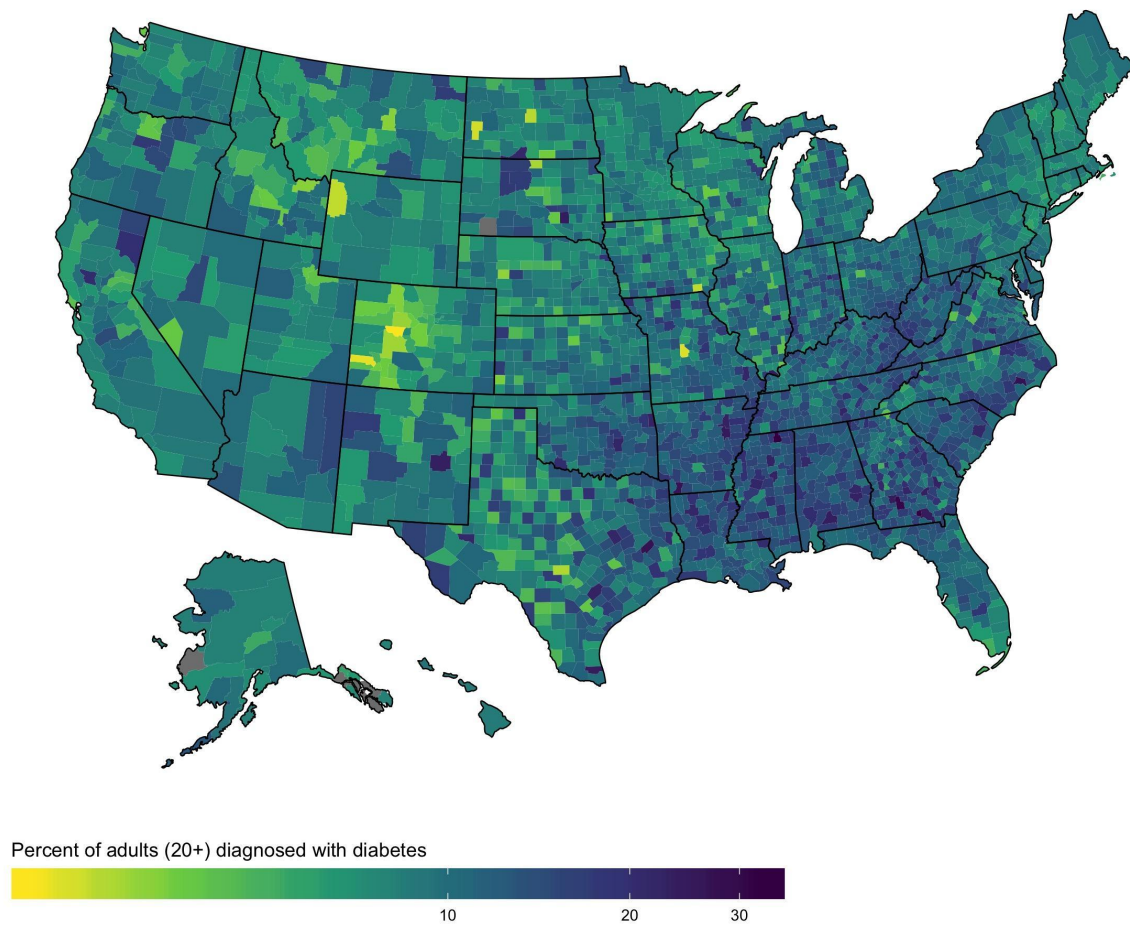


Figure S10. Age-adjusted percentage of adults over 20 years old who are diagnosed with diabetes, 2016. Source: CDC Atlas via the Behavioral Risk Factor Surveillance System.

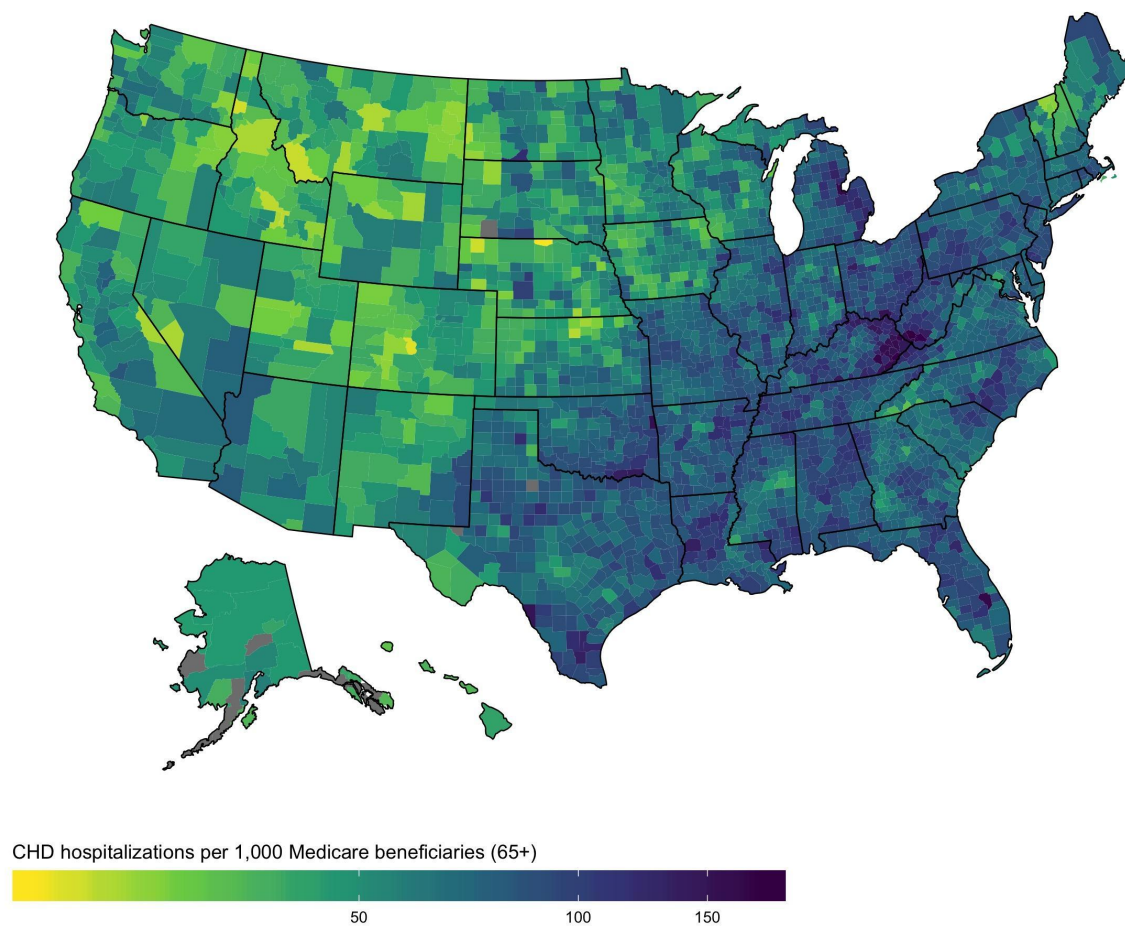


Figure S11. Coronary heart disease-related hospitalizations per 1,000 Medicare beneficiaries (65+), 2014-2016. Source: CDC Atlas via the Centers for Medicare and Medicaid Services Medicare Provider Analysis and Review file.

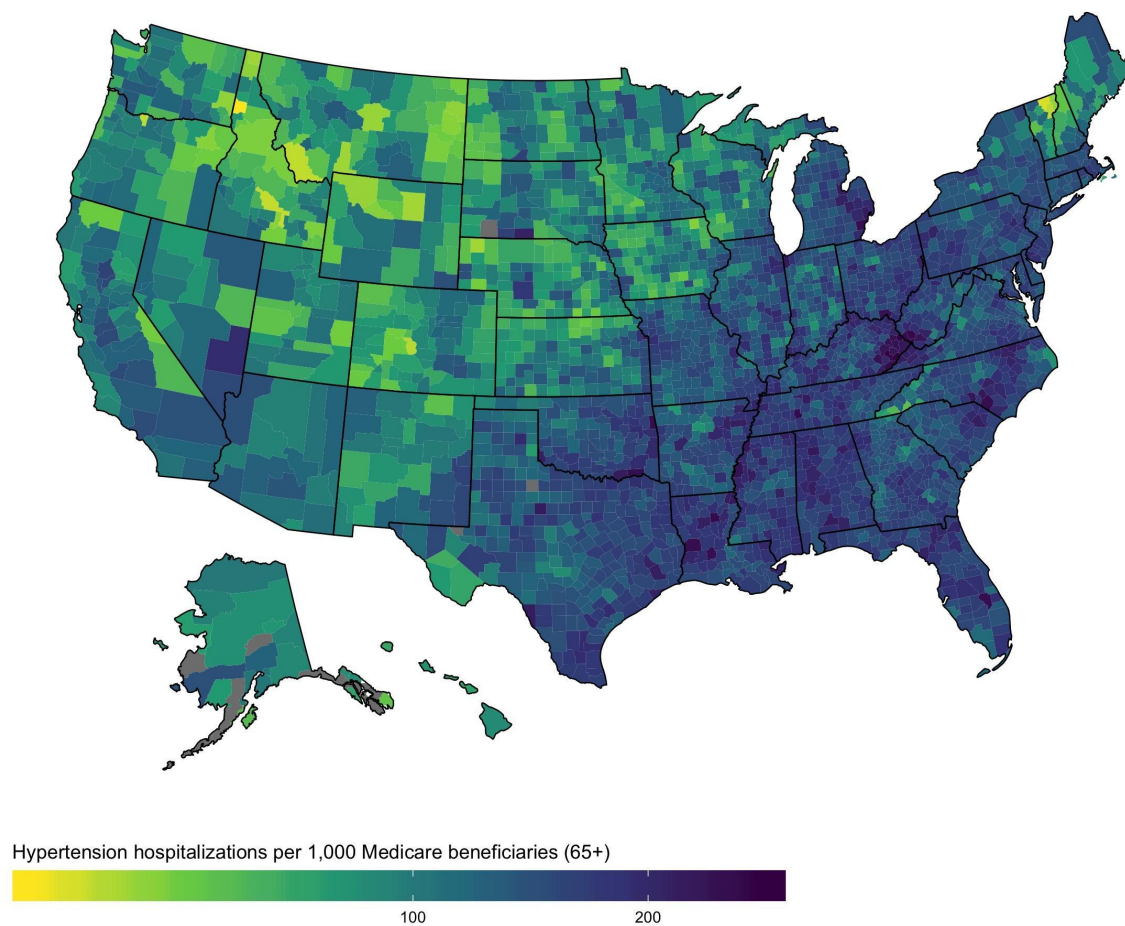


Figure S12. Hypertension hospitalization rate per 1,000 Medicare beneficiaries (65+), 2014-2016.
Source: CDC Atlas via the Centers for Medicare and Medicaid Services Medicare Provider Analysis and Review (MEDPAR) file.

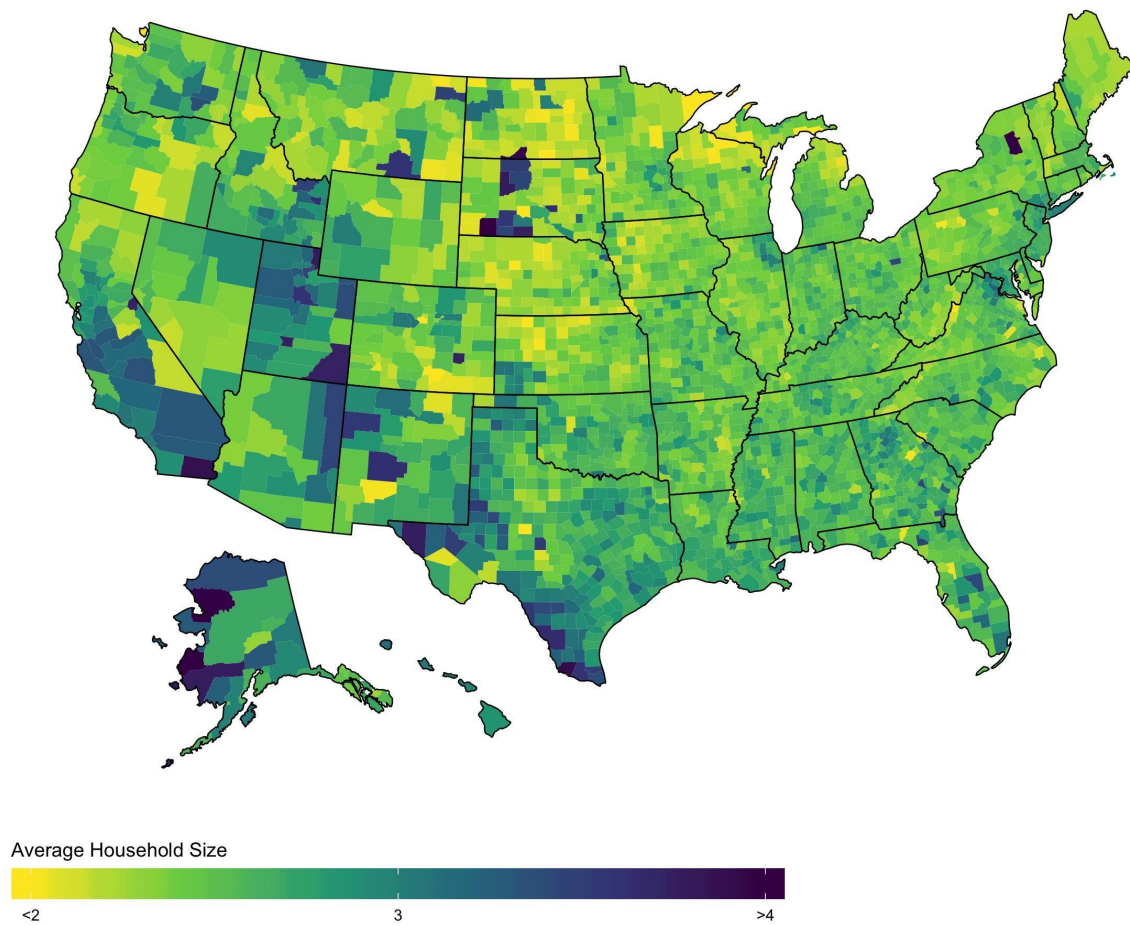


Figure S13. Average household size, 2018. Source: US Census Bureau's American Community Survey 5-year, 2018 (variable DP02_0015E).

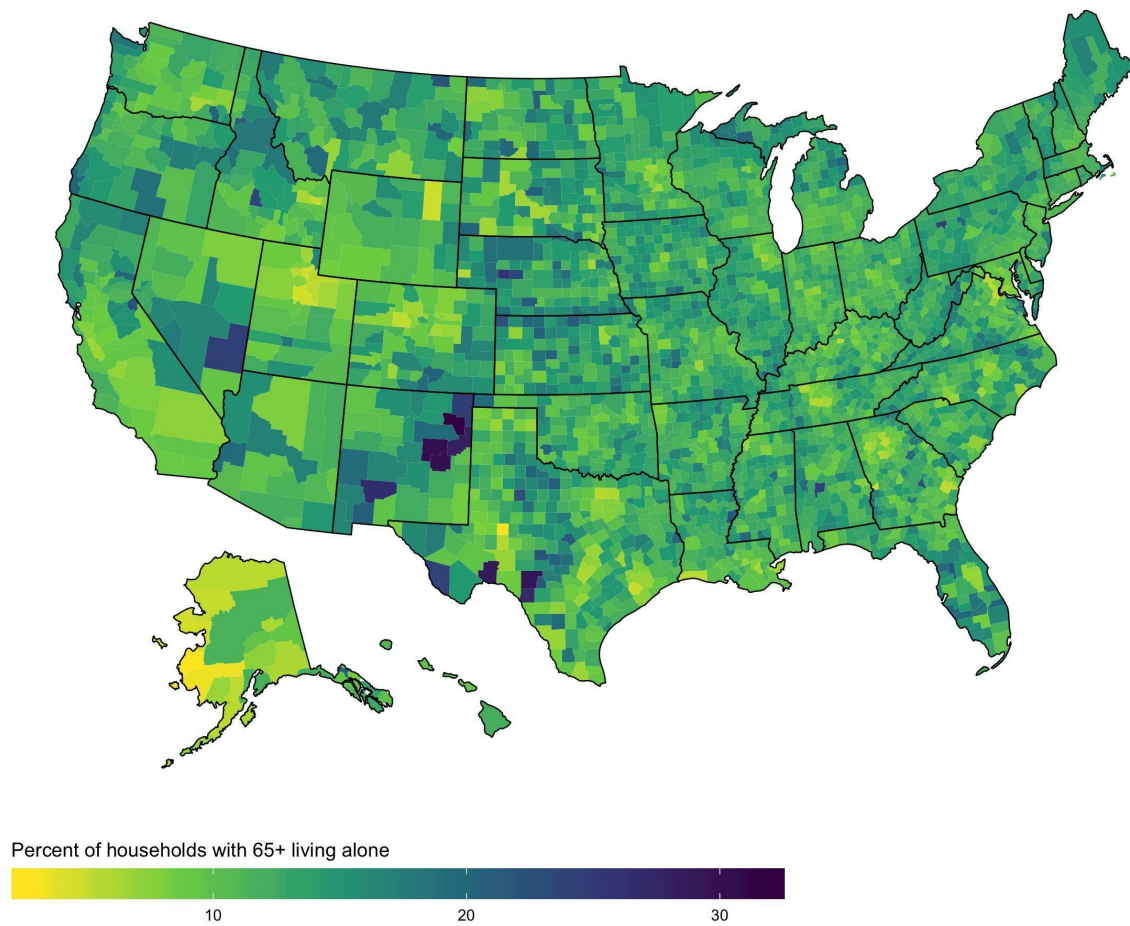


Figure S14. Percentage of households with 65+ year olds living alone, 2018. Source: US Census Bureau's American Community Survey 5-year, 2018 (variable DP02_0012PE).

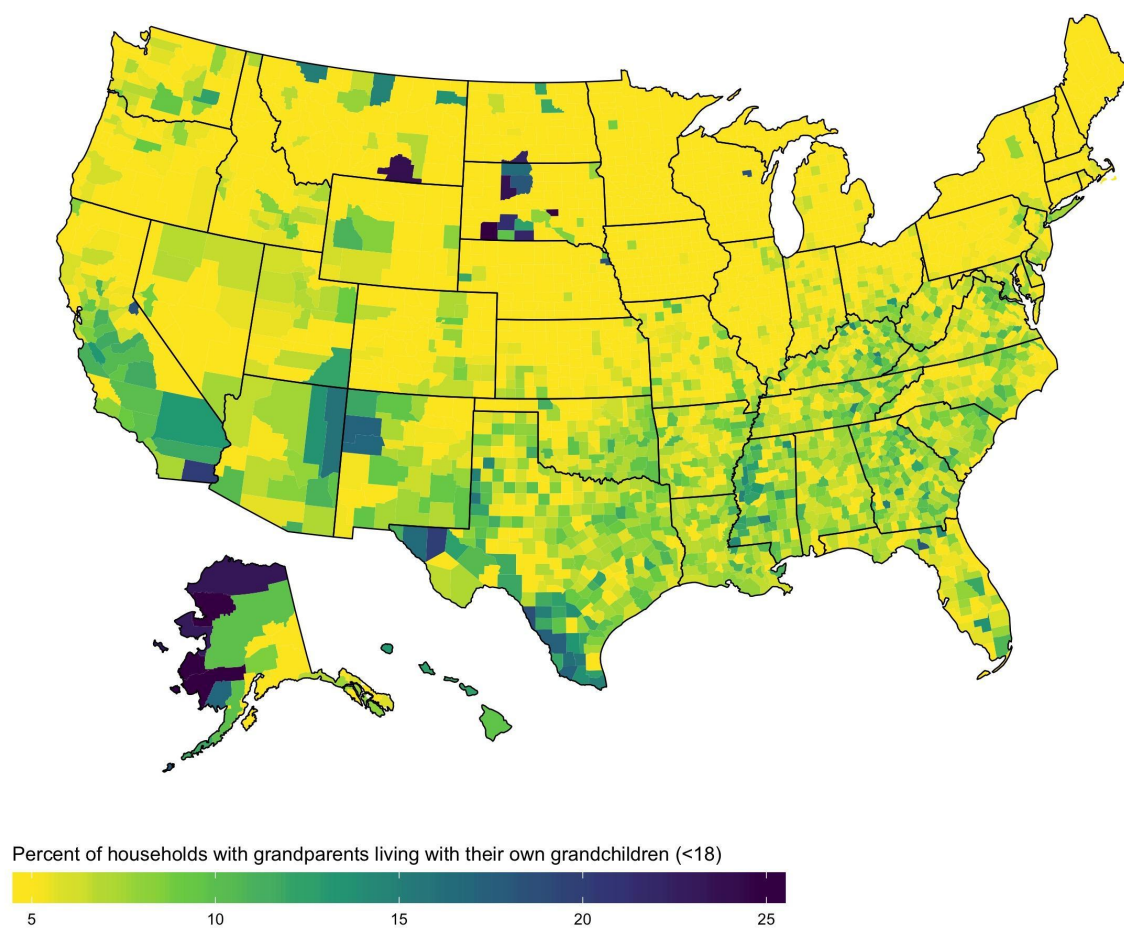


Figure S15. Percentage of households with grandparents living with their own grandchildren (<18 years old), 2018. Source: US Census Bureau's American Community Survey 5-year, 2018 (variable DP02_0043PE).

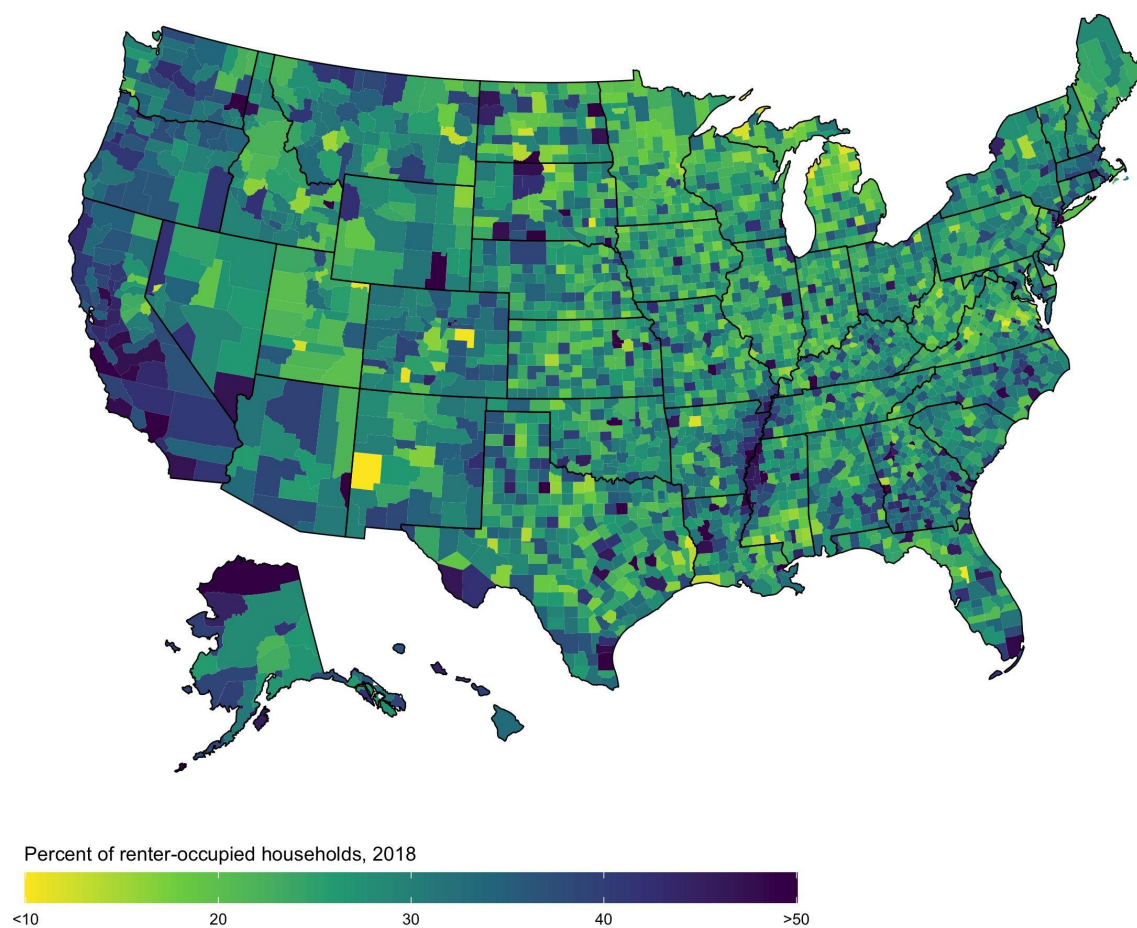


Figure S16. Percentage of renter-occupied households, 2018. Source: US Census Bureau's American Community Survey 5-year, 2018 (variable S1101_C01_020E).

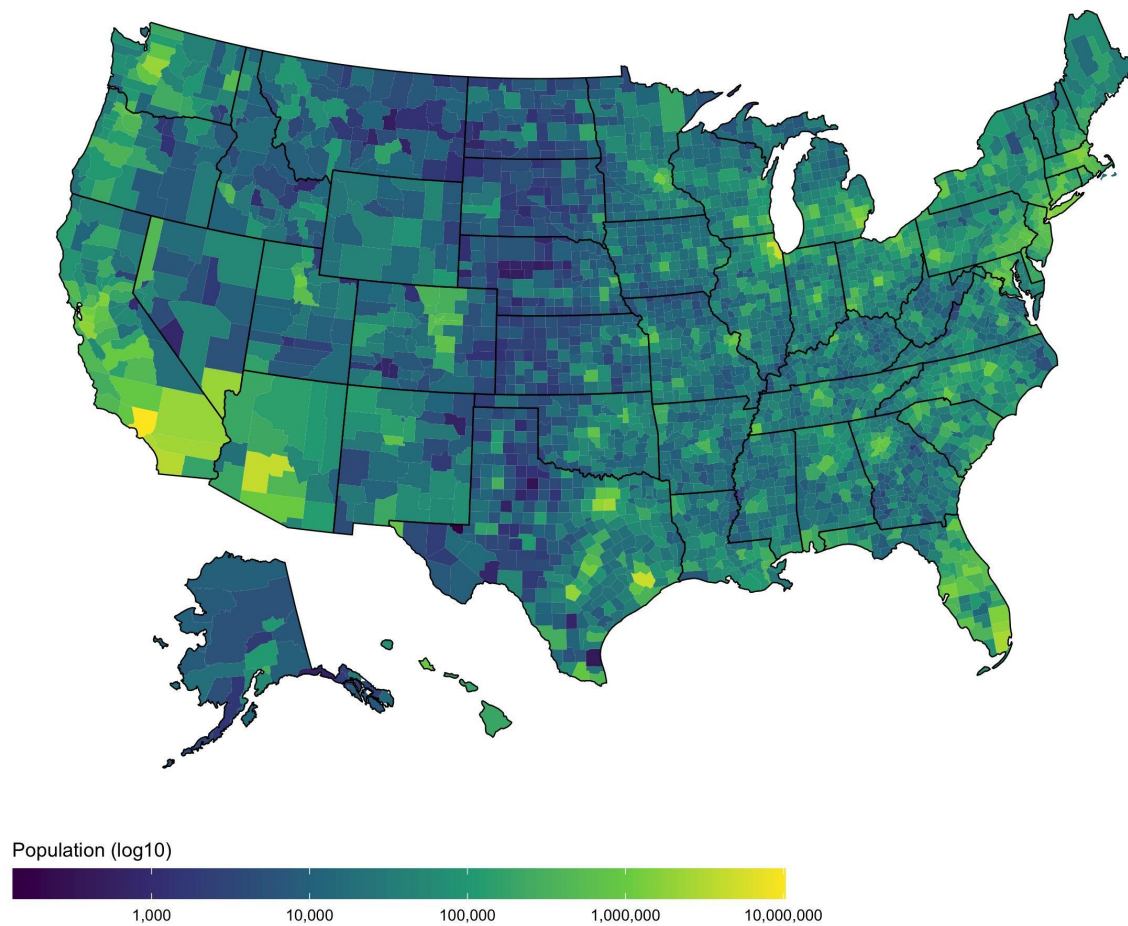


Figure S17. Population estimates (log 10), 2018 Source: National Center for Health Statistics (Bridged Race Estimates, Vintage 2018)

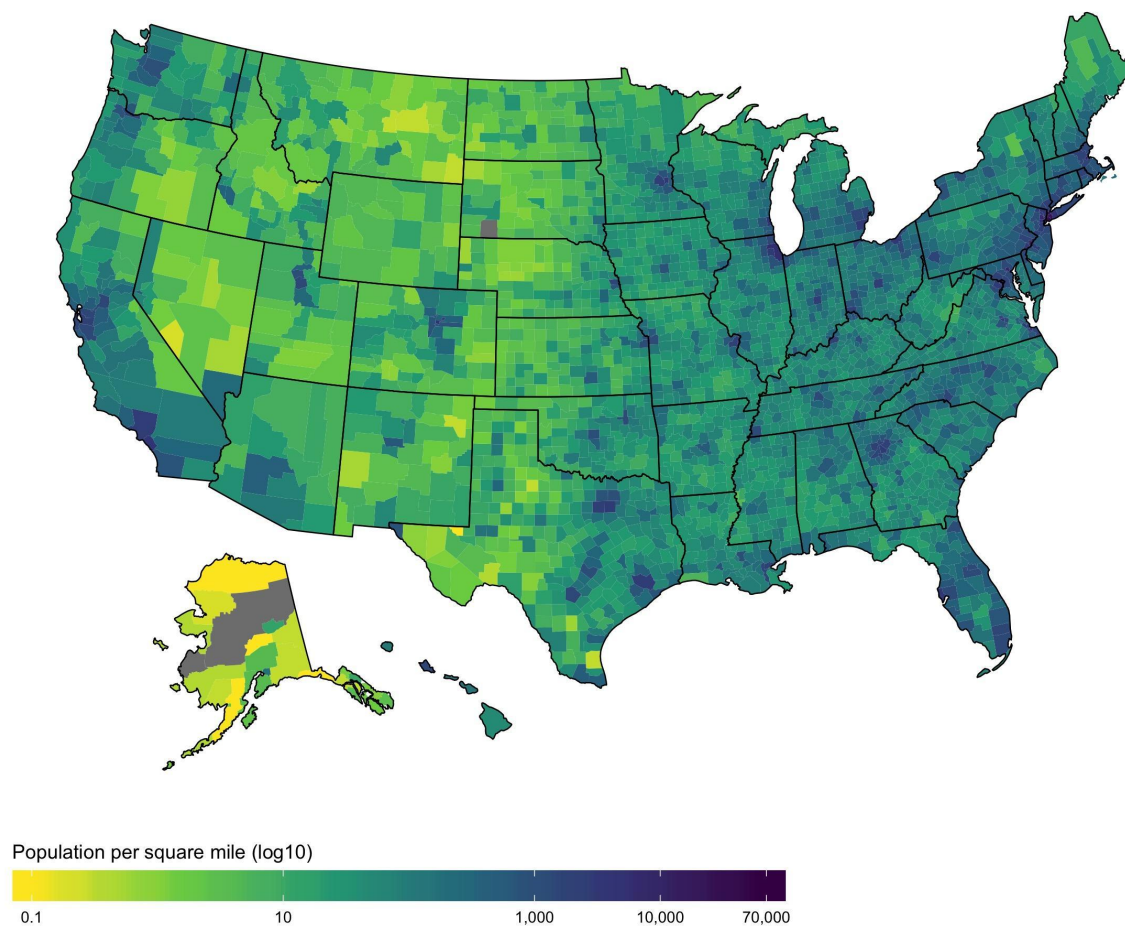


Figure S18. Population per square mile of land mass (log10), 2010. Source: US Census Bureau (summary table GCT-PH1).

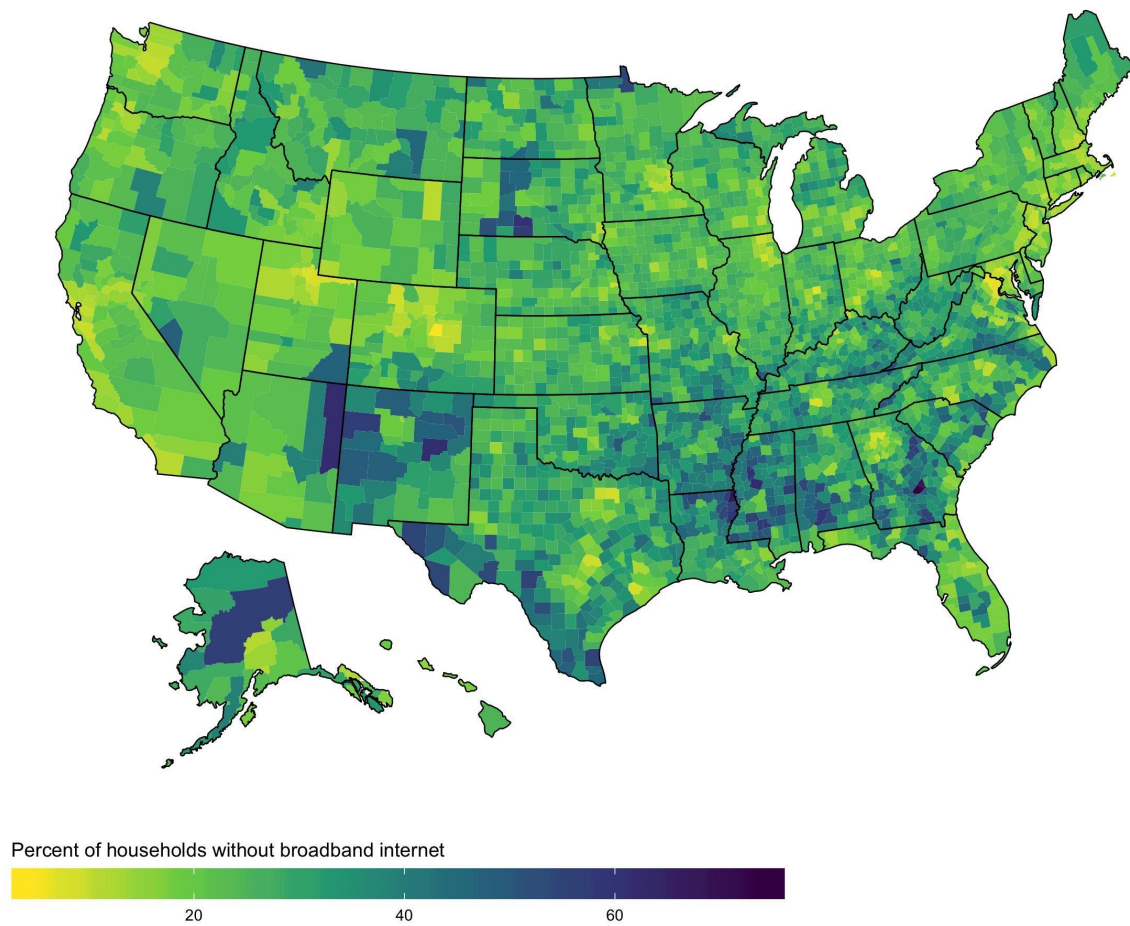


Figure S19. Percentage of households without broadband internet, 2018. Source: US Census Bureau's American Community Survey 5-year, 2018 (100% - variable DP02_0152PE).

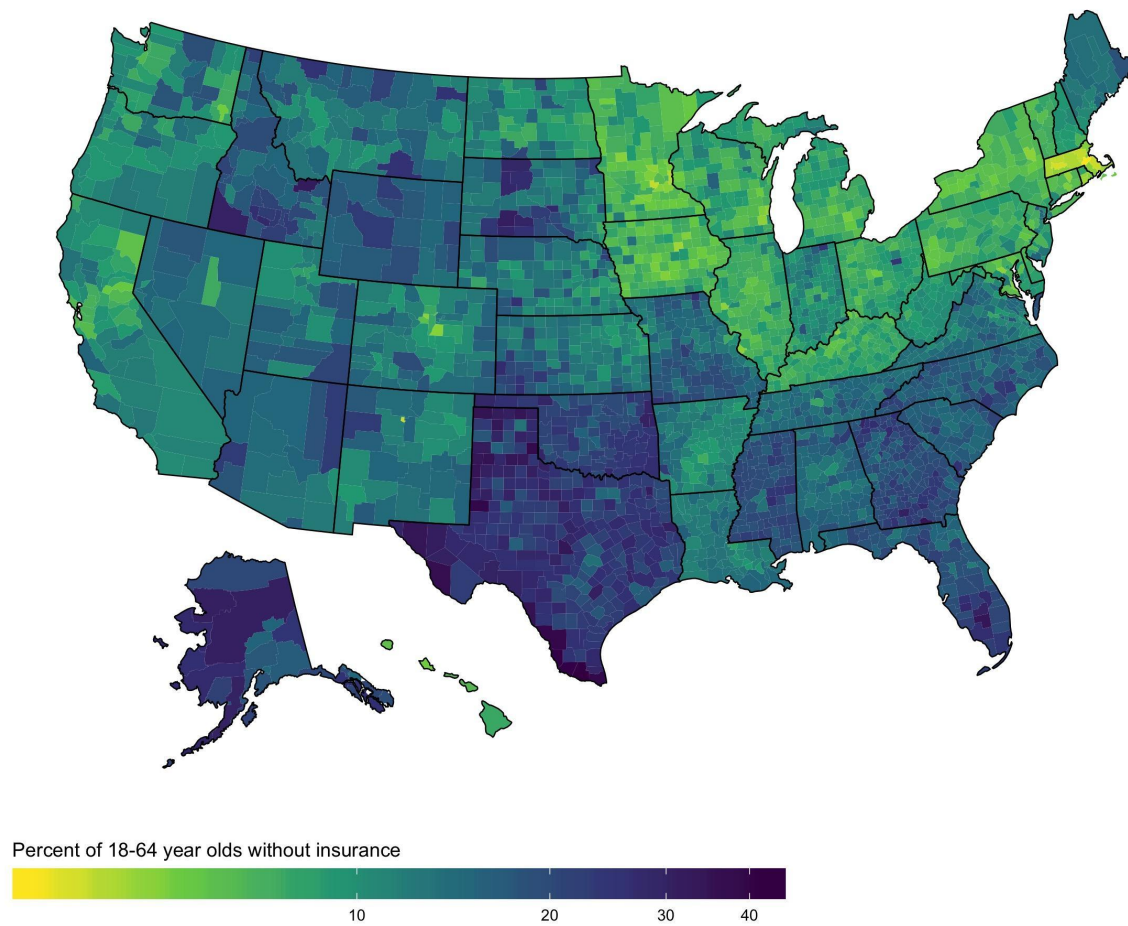


Figure S20. Percentage of 18-64 year olds with no health insurance, 2017. Source: Area Health Resources Files via the Census Small Area Health Insurance Estimates (variable F15498-17).

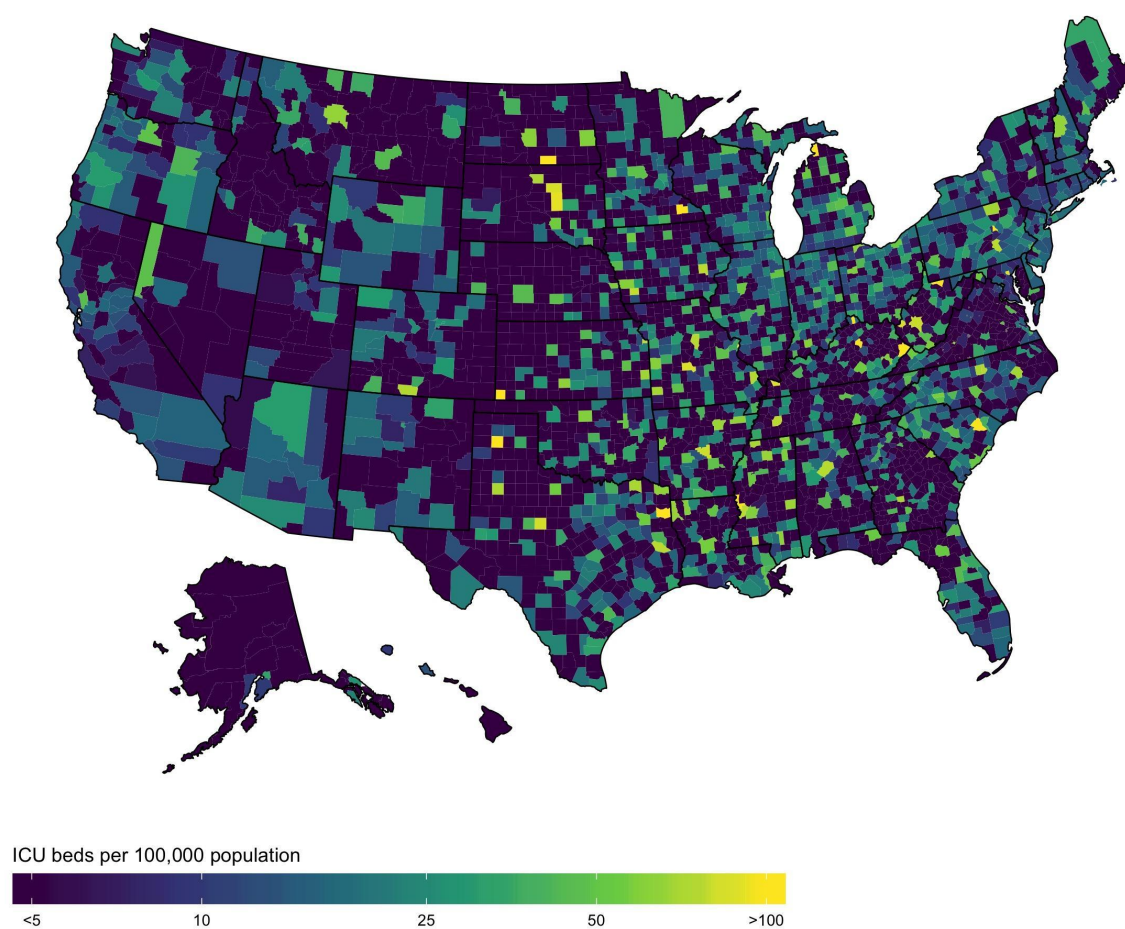


Figure S21. Intensive care unit (ICU) beds per 100,000 population, 2017. Intensive care unit beds are defined as medical/surgical, cardiac, and other intensive care beds. We exclude pediatric, neonatal, and burn intensive care beds. Source: Area Health Resources Files (variables F09139-17, F09133-17, F13309-17).

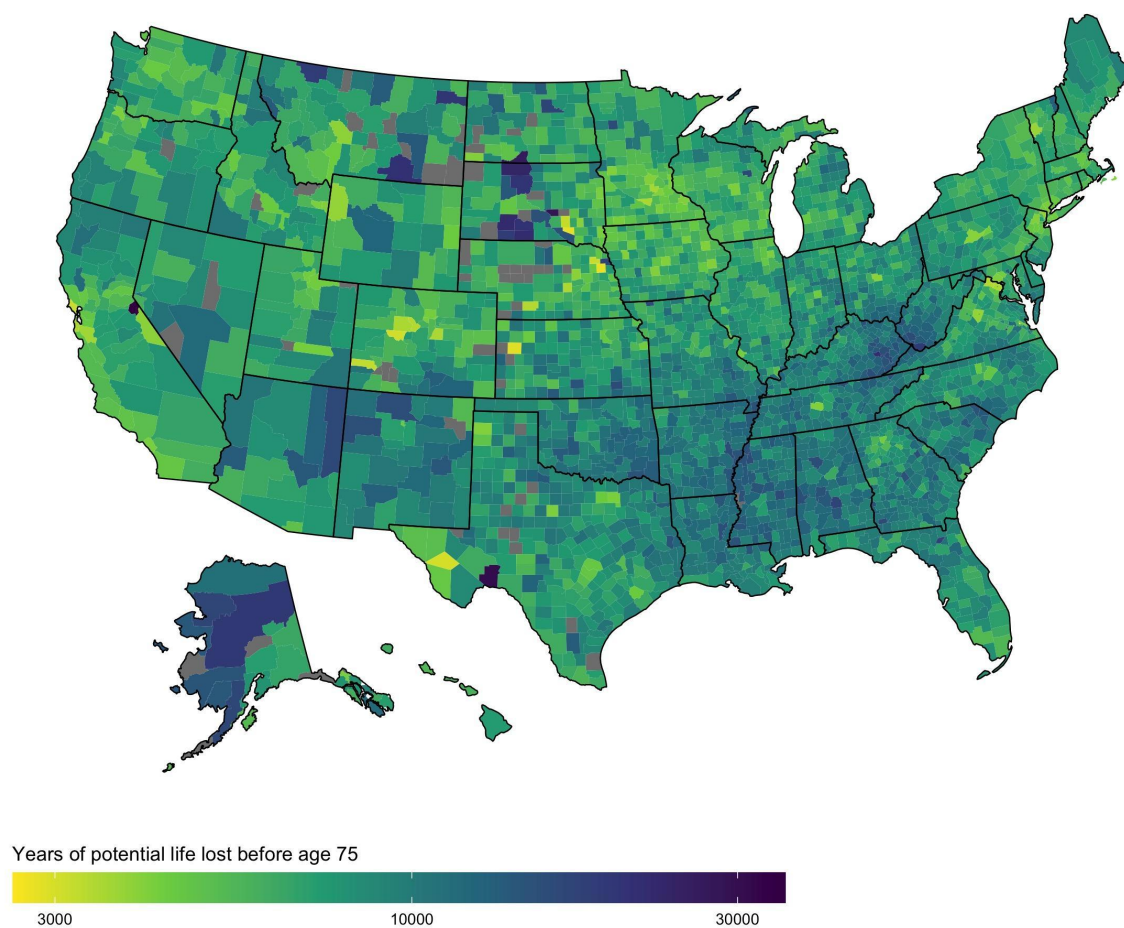


Figure S22. Age-adjusted years of potential life lost before age 75 per 100,000 population, 2017.
Robert Wood Johnson Foundation County Health Rankings, 2019.