

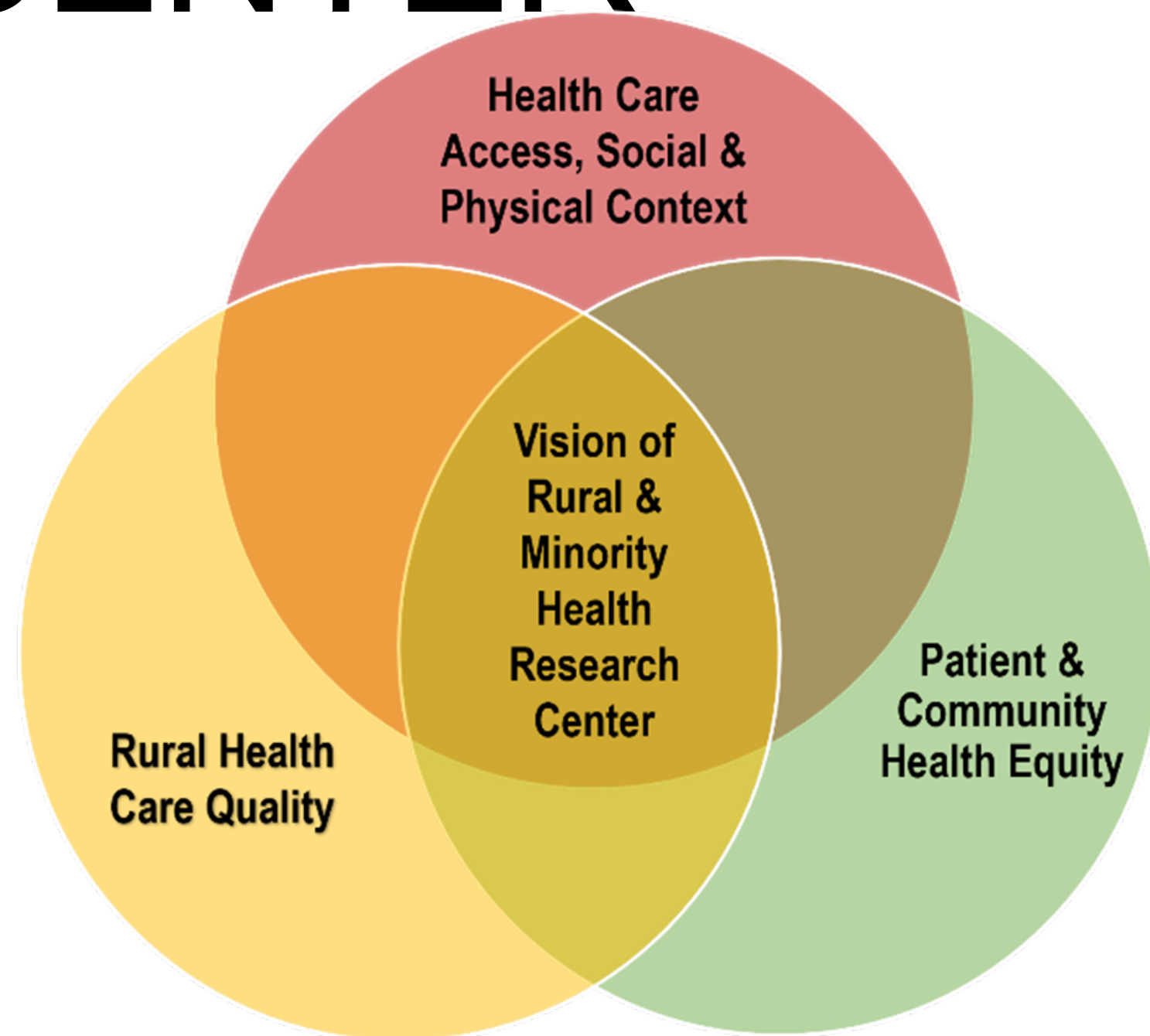
IDENTIFYING BARRIERS TO ACCESSING EQUITABLE HIGH-QUALITY DIAGNOSES

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**RURAL &
MINORITY**
Health Research Center

OUR CENTER

Our mission is to illuminate and address the problems experienced by rural and minority populations in order to guide research, policy, and related advocacy.



DISTANCE TO CARE

- On average, rural residents have to travel farther to access care- almost 20% of rural Americans live >60 miles away from an oncologist.¹

Cervical cancer treatment initiation and survival: The role of residential proximity to cancer care



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HIGHLIGHTS

- Women living farther from a cancer facility tend to live in higher-poverty areas, and to be treated at rural facilities.
- Private insured patients were *more likely* to live closer to a cancer care facility than their counterparts.
- Women living farther from a cancer facility were *less likely* to be treated at accredited and teaching hospitals.
- Driving times to treating providers, but not to the nearest providers, were associated with prolonged treatment initiation.
- Driving times to the nearest cancer provider were neither associated with survival nor with time to treatment.

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ABSTRACT

Objective. To examine the role of driving time to cancer care facilities on days to cancer treatment initiation and cause-specific survival for cervical cancer patients.

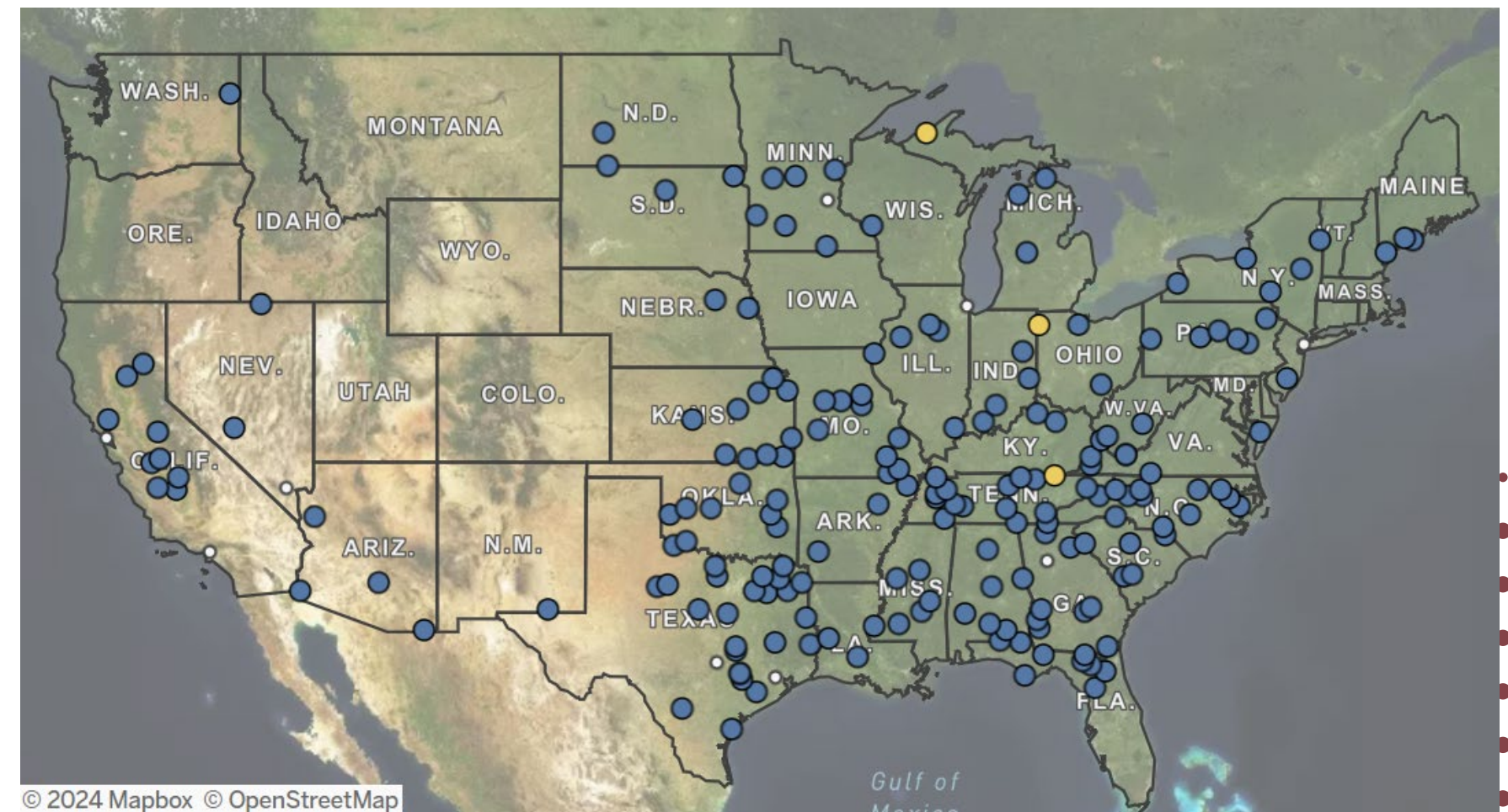
Methods. A retrospective cohort analysis of patients diagnosed with invasive cervical cancer during 2001–2016, using South Carolina Central Cancer Registry data linked to vital records. Kaplan-Meier survival curves and Cox proportional hazards models were used to examine the association of driving times to both a patient's nearest and actual cancer treatment initiation facility with cause-specific survival and time to treatment initiation.

Results. Of 2518 eligible patients, median cause-specific survival was 49 months (interquartile, 17–116) and time to cancer treatment initiation was 21 days (interquartile, 0–40). Compared to patients living within 15 min of the nearest cancer provider, those living more than 30 min away were less likely to receive initial treatment at teaching hospitals, Joint Commission accredited facilities, and/or Commission on Cancer accredited facilities. After controlling for patient, clinical, and provider characteristics, no significant associations existed between driving times to the nearest cancer provider and survival/time to treatment. When examining driving times to treatment initiation (rather than simply nearest) provider, patients who traveled farther than 30 min to their actual providers had delayed initiation of cancer treatment (hazard ratio, 0.81; 95% confidence interval, 0.73–0.90), including among (0.82; 0.68–0.97) and (0.83; 0.68–0.97) and (0.84; 0.73–0.94). Traveling farther than

WORKFORCE SHORTAGES

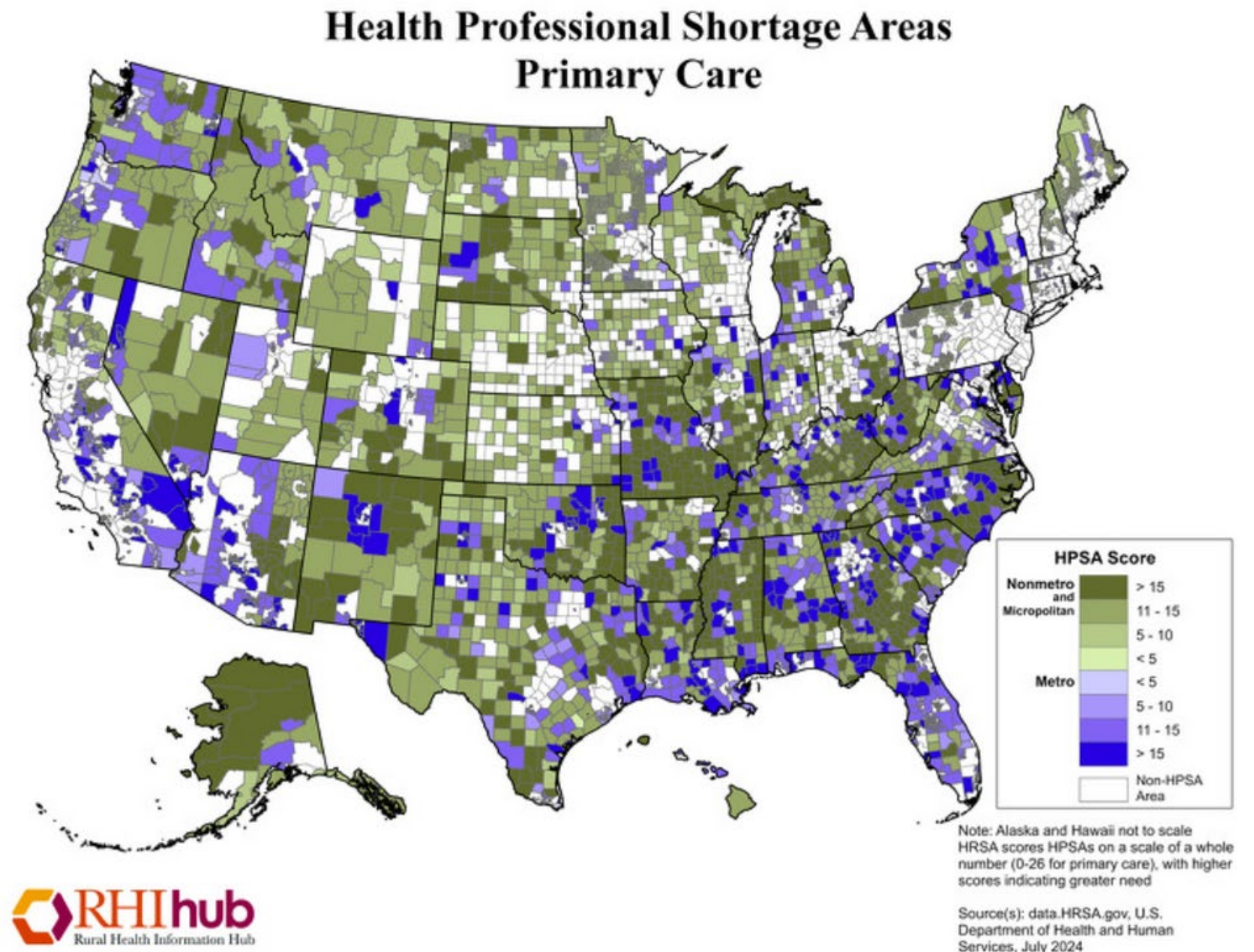
- Hospital closures are more common in rural areas, and even in rural communities which have maintained their healthcare facilities, workforce shortages have remained a problem.⁴
- Rural counties are more likely to have a primary care workforce shortage (including family medicine, internal medicine, and general pediatric doctors as well as nurse practitioners and physician assistants) than urban counties.⁵

Rural Hospital Closures, 2005-2024⁶



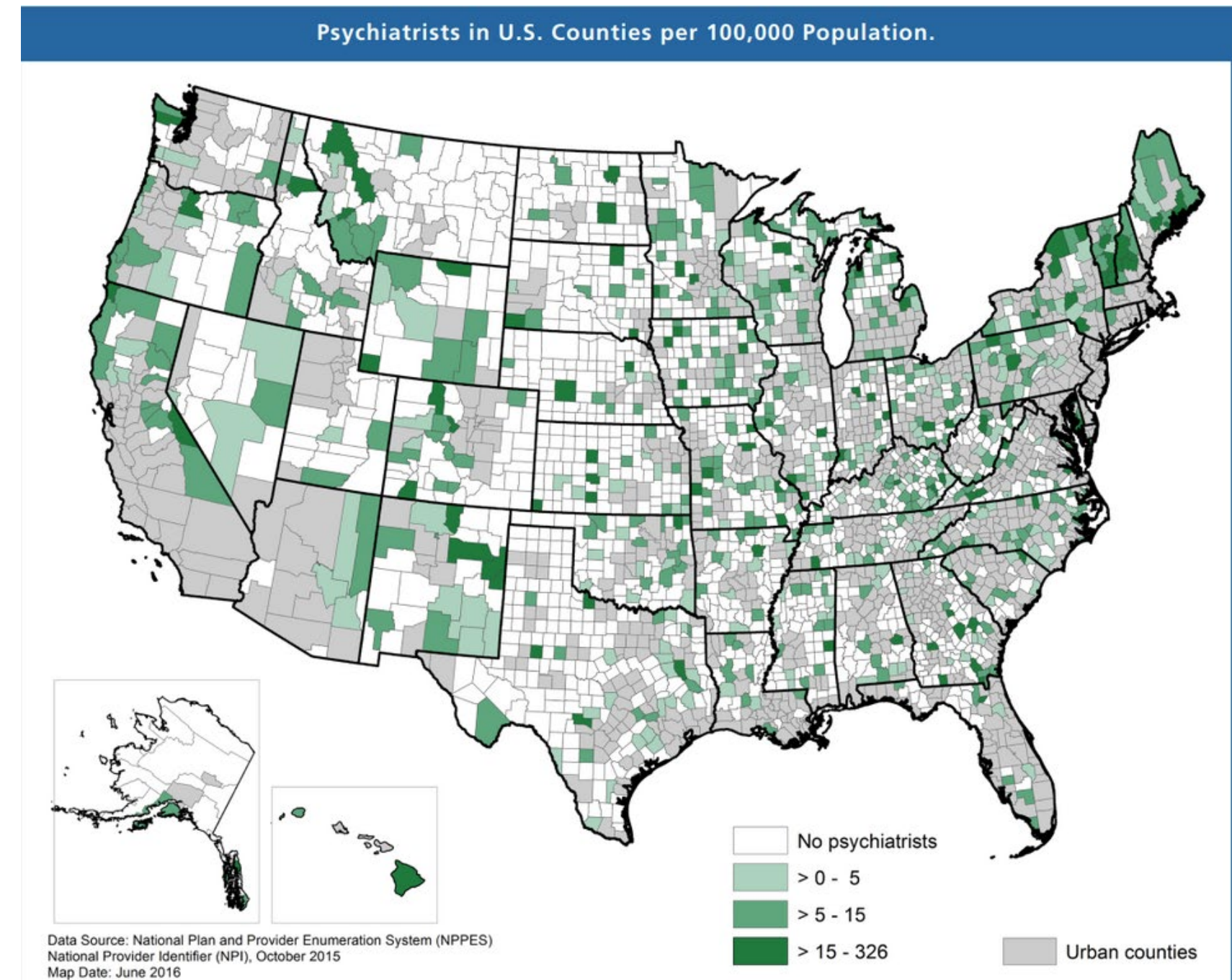
HEALTH PROFESSIONAL SHORTAGE AREAS (HPSAS)

- HPSAs are areas that have a shortage of medical professionals who provide primary, dental, or mental health care.⁷
- Rural counties are more likely to be designated as HPSAs- this year, more than 60% of HPSA designations across all categories are in rural counties.⁸
- It is estimated that more than 4,000 practitioners are needed to eliminate rural HPSAs.⁸



LACK OF SPECIALISTS

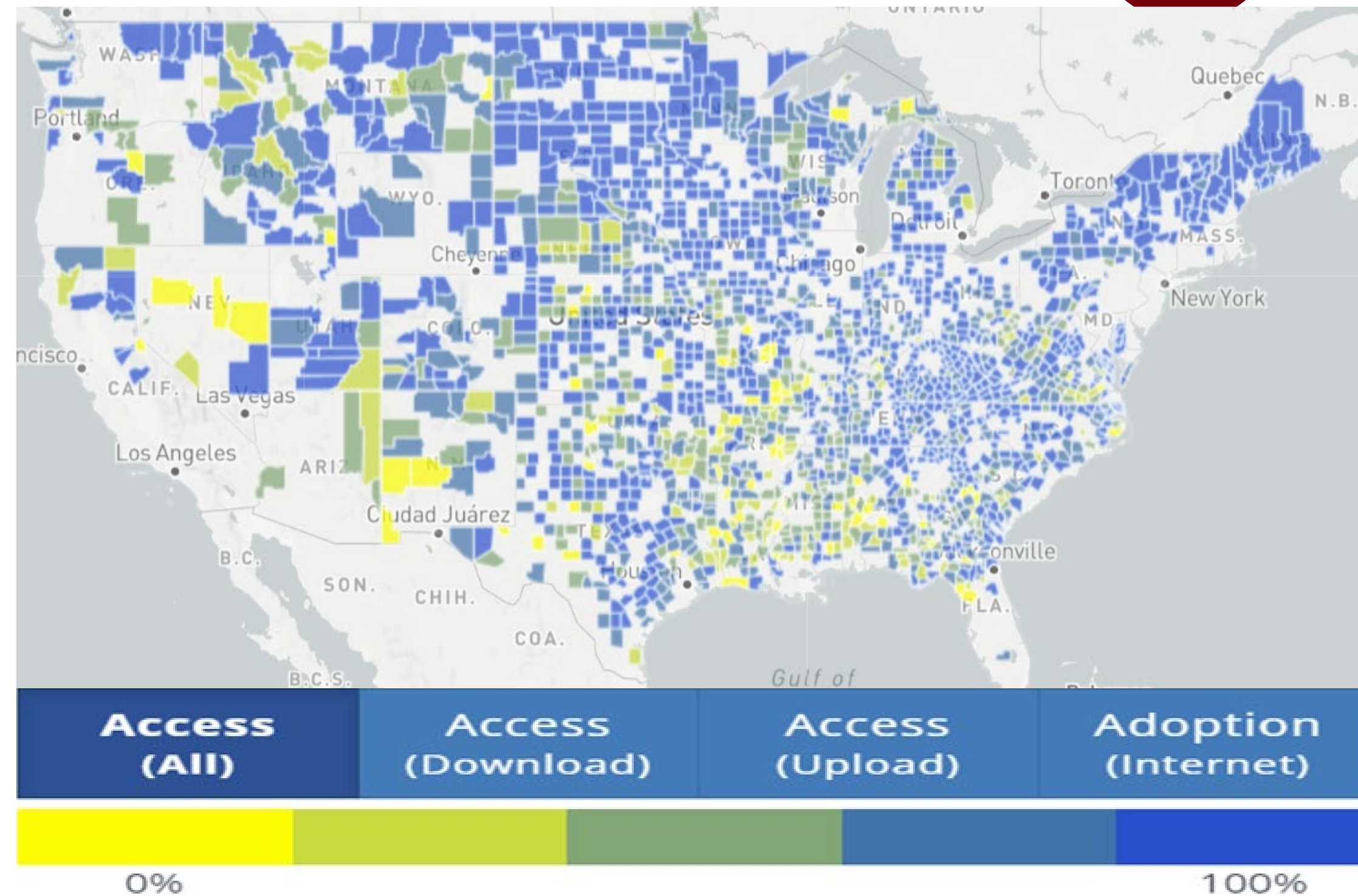
- Rural counties are more likely to have experienced a hospital OB unit closure⁹ and are less likely to have a practicing OBGYN¹⁰
- Compared to urban counties, rural counties are less likely to have orthopedic surgeons, behavioral health professionals, general surgeons, and oncologists working there.¹⁰⁻¹⁴
- Both rural and urban areas have experienced decreases in the behavioral health workforce, but rural communities have experienced more significant decreases.¹²



LACK OF INFRASTRUCTURE

6

- Previous research has found that rural residents, particularly in remote areas, are less likely to have access to broadband services than their urban counterparts.¹⁵
- Compared to large metro residents, non-metro residents are less likely to have used telehealth/virtual care for mental health in the past year.¹⁶

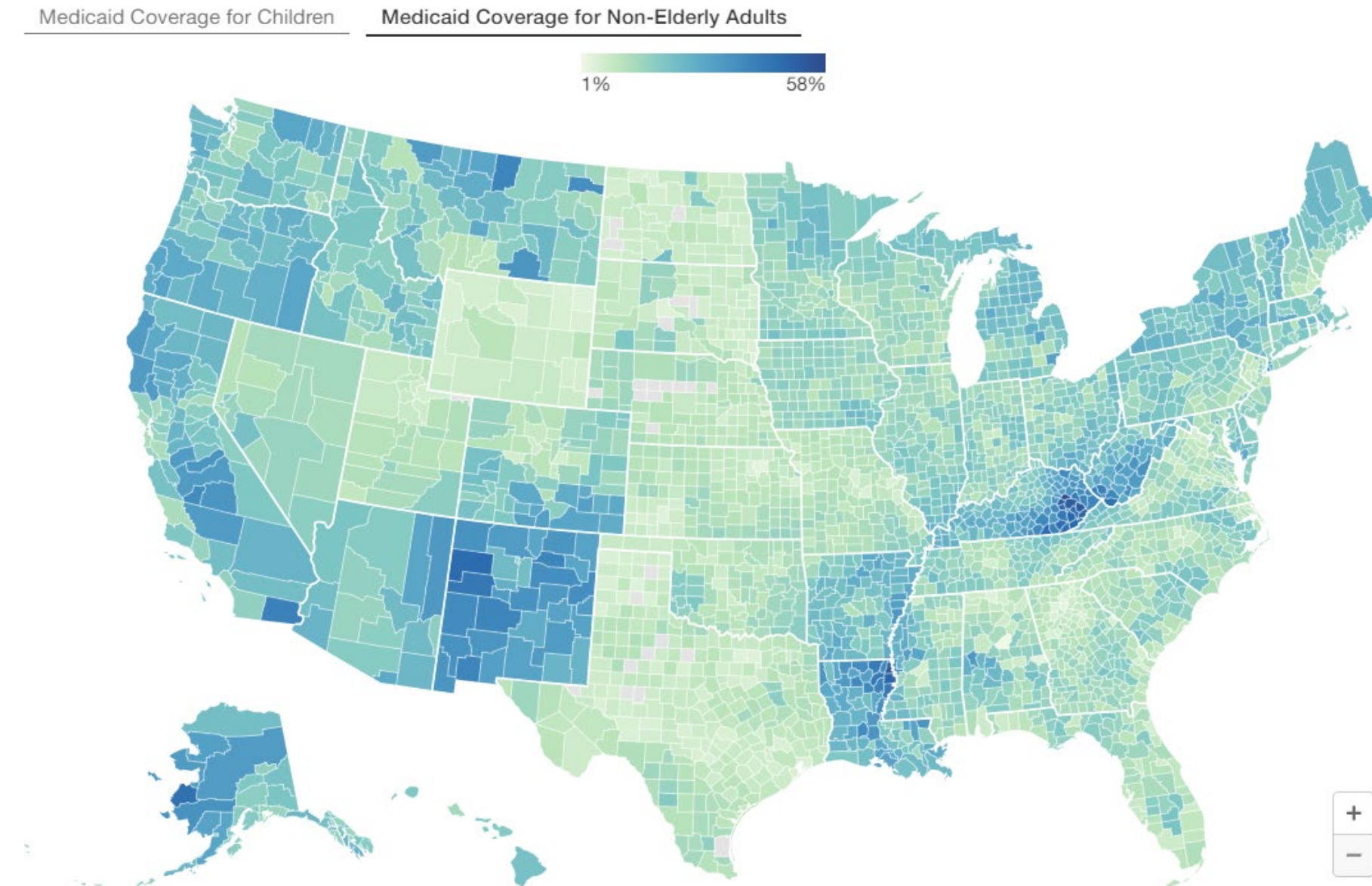


POVERTY AND INSURANCE

- Rural residents are more likely to live at or below the federal poverty line than their urban counterparts¹⁷
- Poverty rates are particularly concerning for rural children; the majority of counties with persistent child poverty rates are rural.¹⁸
- Rural residents are more likely to be uninsured or publicly insured (Medicare, Medicaid, CHIP, etc) than urban residents¹⁹

Medicaid Coverage in Metro and Small Town/Rural Counties, 2020-2021

Hover over counties for more information. Use tabs below to view map for children or non-elderly adults:



ISSUES WITH RURAL DATA

8

● Definitions of Rural

There are several federally used definitions of rural, which can result in confusion and an inability to compare results, depending on the definitions used.²¹

● Public Use Restrictions

Some national datasets do have information about rurality, but this information may not be publicly available- this can result in a higher cost to researchers or an inability to examine differences by rurality.²²

● Small Sample Sizes

Many national, regional, and state data sets collect information from a small number of rural respondents, which prevent the use of complex analyses.²³ This is of particular concern when attempting to look at the intersection of rurality and race/ethnicity.

CONCLUSION

- Rural patients, particularly rural people of color, face significant challenges to accessing high quality diagnoses.
- Additional research, buy-in from stakeholders, and targeted interventions are needed to reduce barriers to care for rural residents.

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