



Center for Health
Economics and Policy

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Rural Health Challenges and Opportunities

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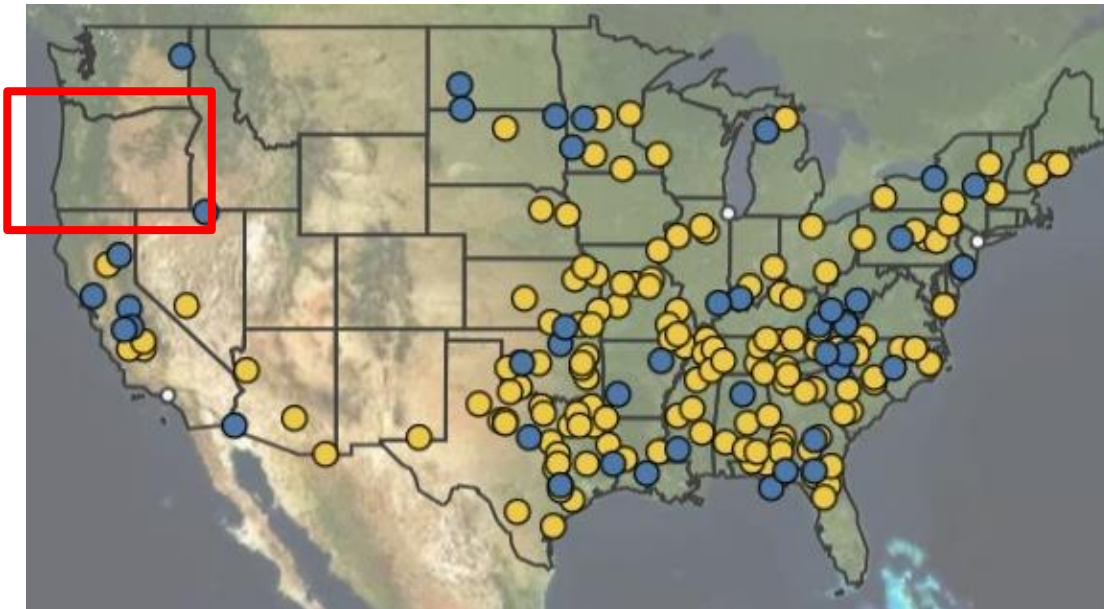
CO-INVESTIGATOR, RURAL POLICY RESEARCH INSTITUTE CENTER FOR RURAL HEALTH POLICY ANALYSIS

Rural America Challenges and Solutions

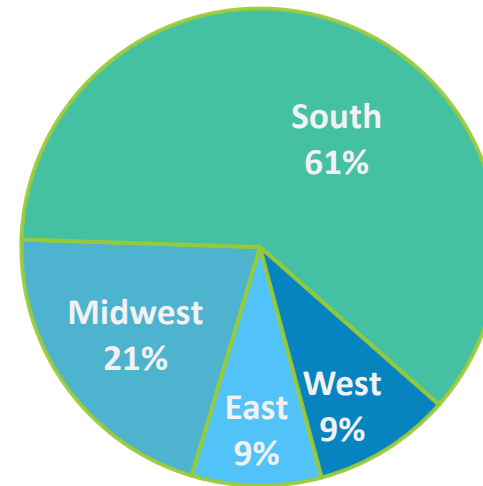
- Concerns about affordability and access to care
- Concerns about impacts on health, well being
 - *Today: Why is this happening?*
 - *National picture looks quite different than regional differences:*
 - *are these challenges the same in the West?*

Rural Health Challenges

Rural Hospital Closures



By Region



Few of the Rural Hospital Closures are in the West

Rural Hospital Closures:

193 since 2005

- 150 since 2010
- 78 since 2016

Conversions: 93

Complete closures: 100

By type of rurality:

- 71 Large Rural
- 78 Small Rural
- 44 Isolated Rural

By Payment Classification:

- 77 PPS
- 65 Critical Access
- 51 Other

Why are rural hospitals closing?

Financial distress is the proximate cause of a closure

- Causes of financial distress and closure are multi-faceted and complex

Long-term unprofitability is a major cause, and many factors behind this:

- Low volumes
- Rising inflation
- Market structure
- Population served (older, sicker, lower incomes)
- Workforce issues
- Technology challenges
- Policy challenges: Medicaid coverage and payment, low payment, Medicare payment changes

The South has the greatest number of rural hospitals at high risk of financial distress

Continued Concerns over rising National Health Spending

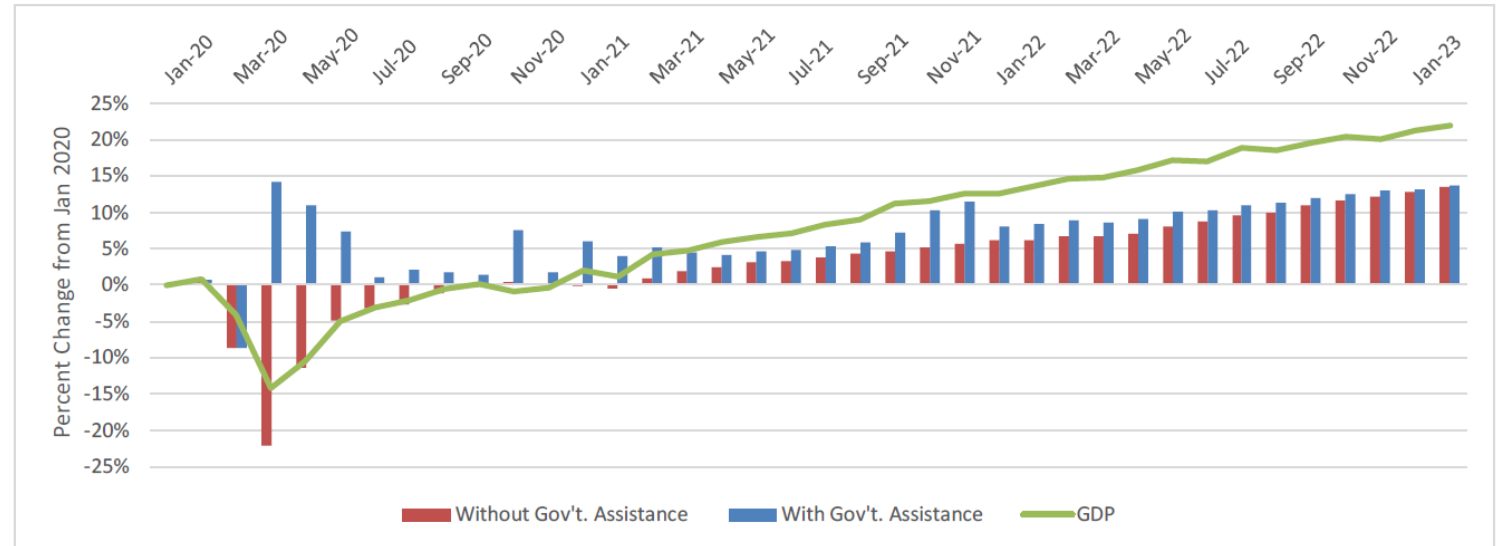
National Health Spending and GDP*

	Feb 2021	Feb 2022	Jan 2023	Feb 2023
GDP	22.03	24.73	26.41	26.55
National Health Spending (HS)	4.17	4.34	4.54	4.56
HS Share of GDP	18.9%	17.6%	17.2%	17.2%
HS Share of PGDP	18.2%	17.4%	17.0%	17.0%
Growth from Prior 12 Months				
HS	3.2%	4.2%	4.7%	4.9%
GDP	0.4%	12.3%	7.7%	7.3%
HS minus GDP	2.9%	-8.0%	-3.0%	-2.4%
HS minus PGDP	-0.9%	-4.6%	-3.1%	-2.4%

Source: Altarum monthly health spending estimates (see Methods box below). Monthly GDP is from IHS Markit. PGDP, defined as what GDP would be at full employment, is from the quarterly Congressional Budget Office estimates, converted to monthly by Altarum.

* Spending is in trillions of dollars at a seasonally adjusted annual rate (SAAR).

Exhibit 2. Percent Change in National Health Spending and GDP Since January 2020

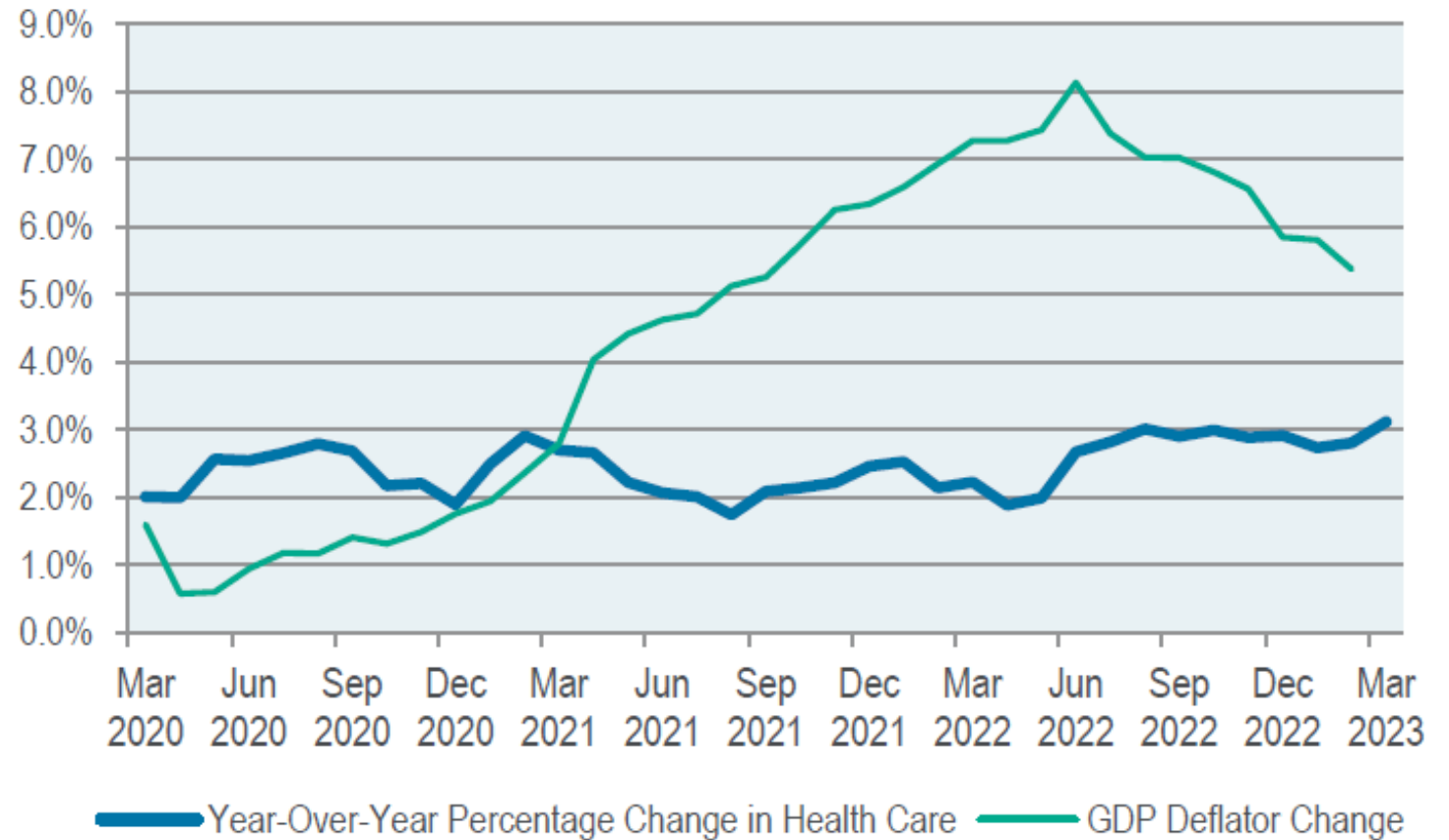


SOURCE: <https://altarum.org/publications/april-2023-health-sector-economic-indicators-briefs>

Inflation:

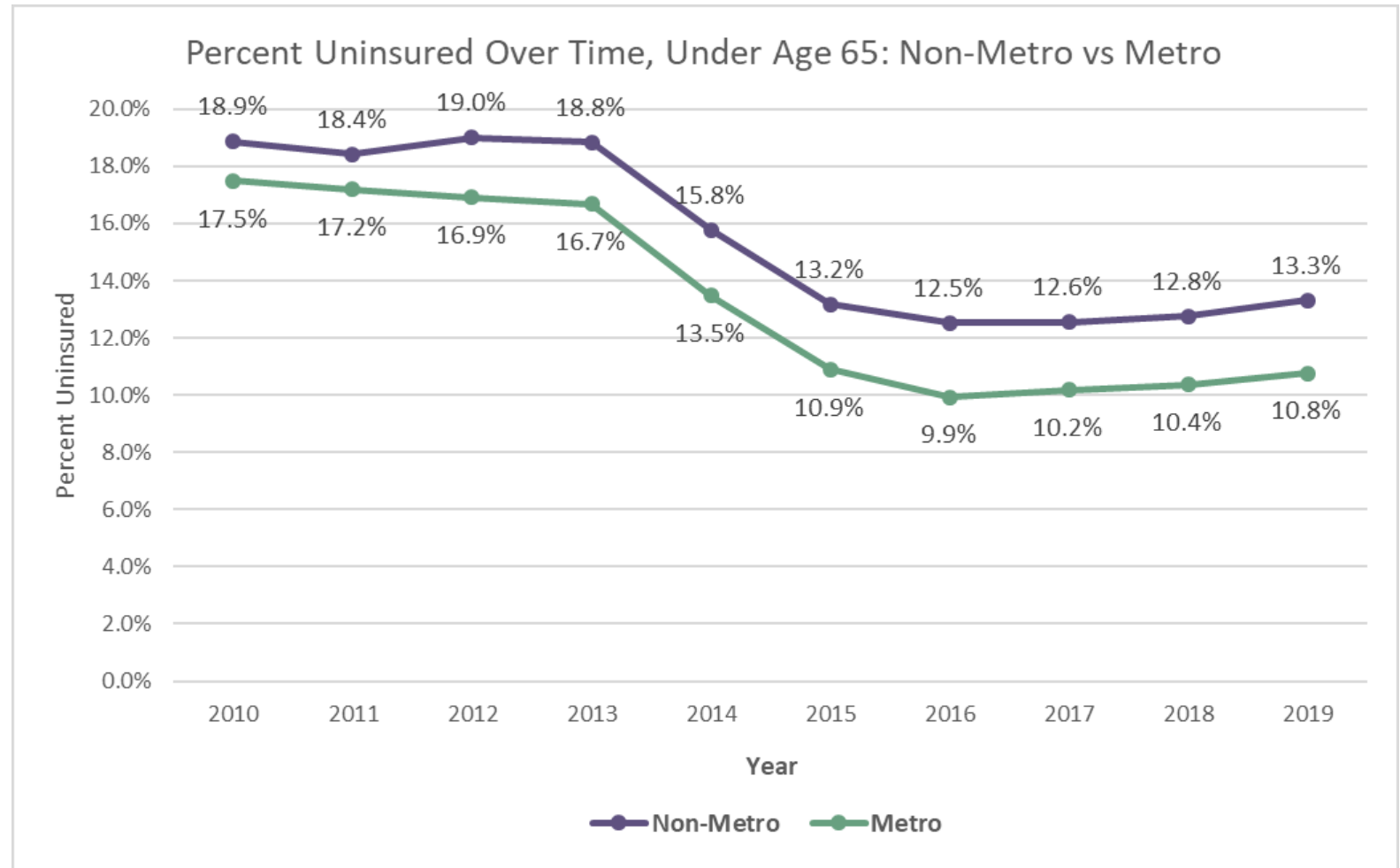
Rare good news that health inflation is lower than overall inflation

However... rising prices overall are stressing the health sector, especially hospitals

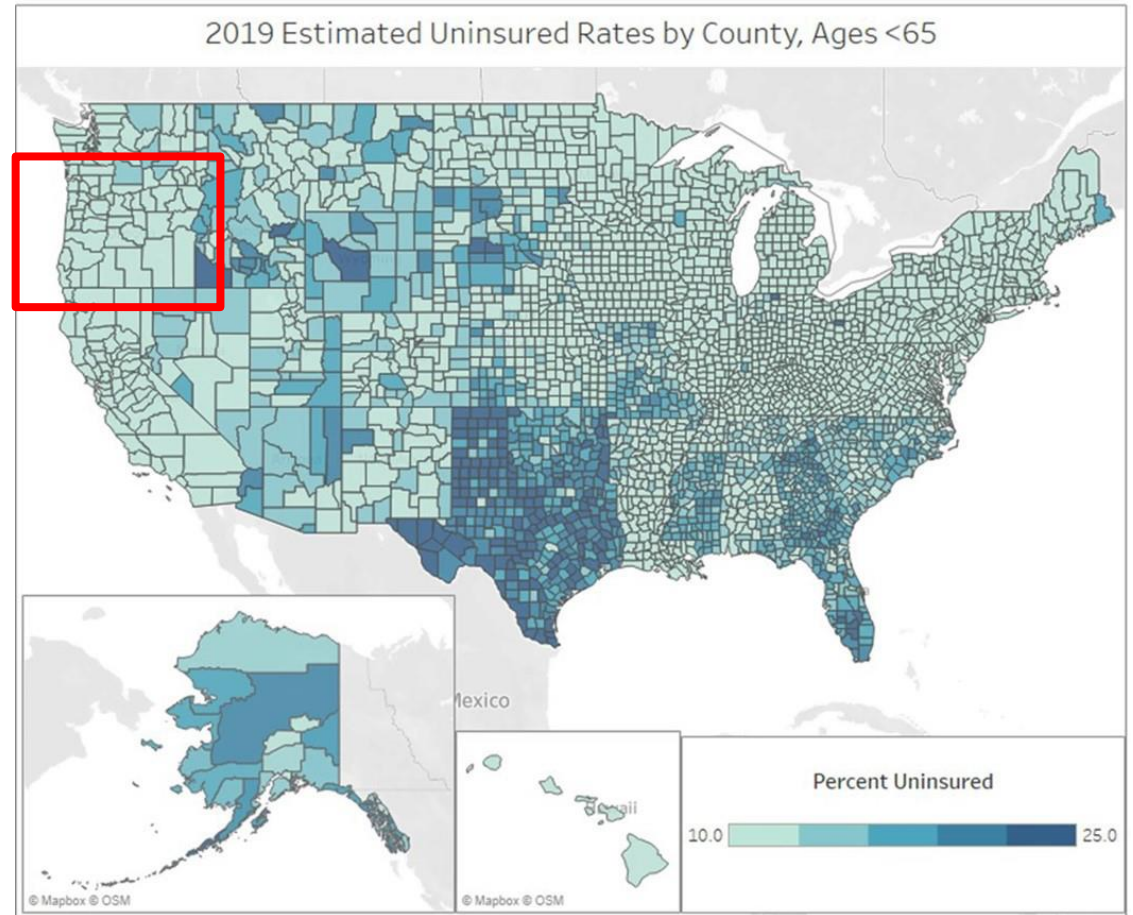
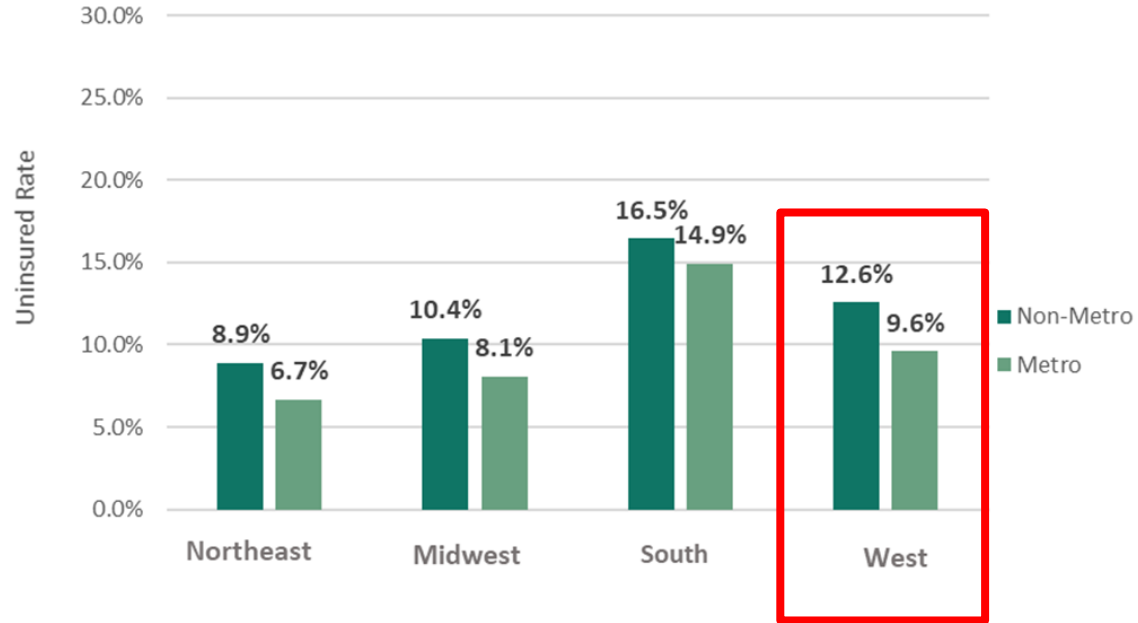


Source: Altarum analysis of monthly BLS price data and monthly GDPD data published by Macroeconomic Advisers.

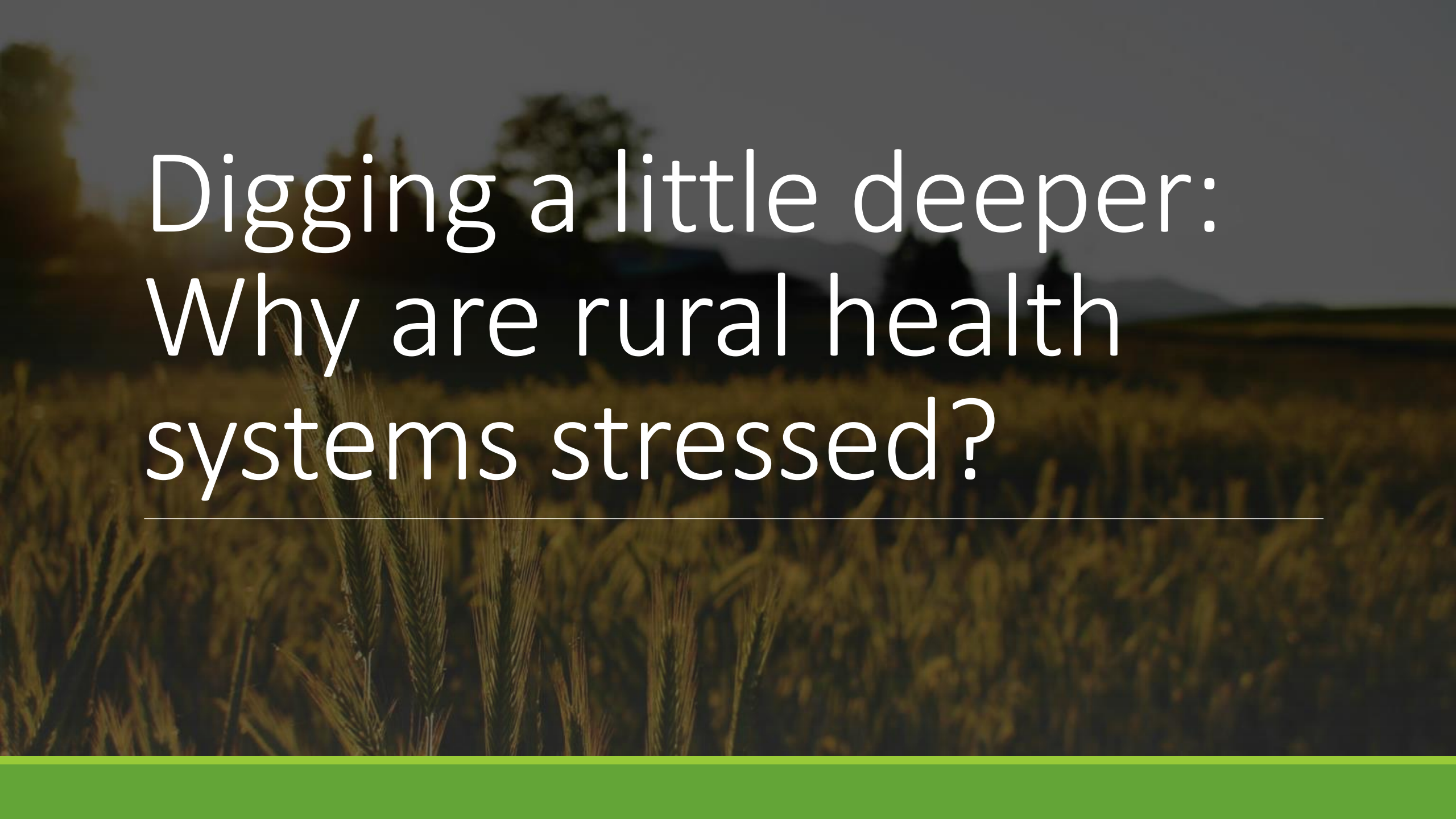
Uninsured rates, 2010-2019



Uninsured Rates by Region, Under Age 65:
Non-Metro vs. Metro, 2019



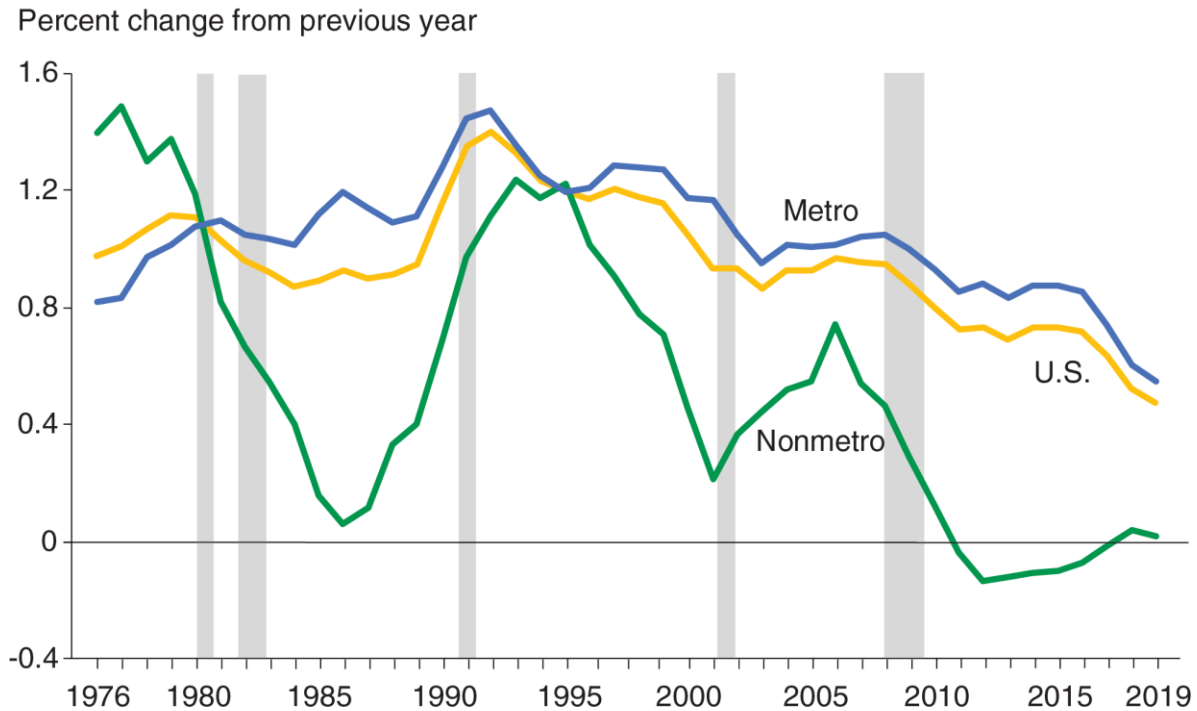
Uninsured rates by Region, 2019

The background of the slide is a photograph of a wheat field. The wheat stalks are in the foreground, and the field extends to the horizon. The image is dimmed with a dark grey overlay. At the bottom of the slide, there is a solid green horizontal bar.

Digging a little deeper:
Why are rural health
systems stressed?

Population change in U.S. metro and nonmetro counties, 1976-2019

USDA Economic Research Service



Notes: Shaded areas show periods of economic recession. Metro and nonmetro status are determined by metro area designations from the Office of Management and Budget that are updated following each decennial census. Some counties changed status in 1980, 1990, 2000, and 2010.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Losing Population in Rural America

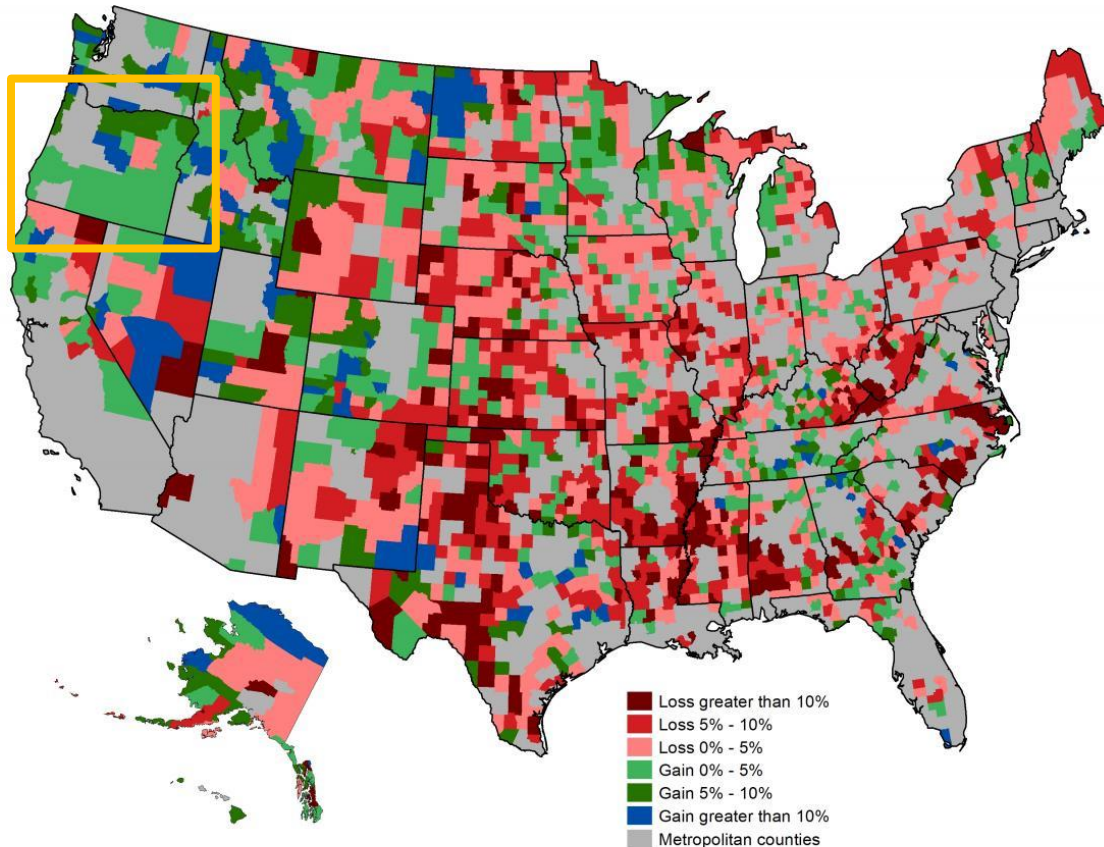
Nonmetro population growth has remained close to zero in recent years and was just 0.02 percent from July 2018 to July 2019.

During recessions, nonmetro areas experienced a steep decline in population growth rates, especially during the Great Recession and the 1980s.

Nonmetro population growth rates were actually negative during the 2010s

[Modest Improvement in Nonmetro Population Change During the Decade Masks Larger Geographic Shifts.](#)

Population Change In Nonmetropolitan Counties, 2010 To 2020



“Data from the 2020 Census reveal that the rural population declined between 2010 and 2020, the first decade-long rural population loss in history. In contrast, the rural population grew by 1.5 million between 2000 and 2010, and by nearly 3.4 million in the 1990s.”

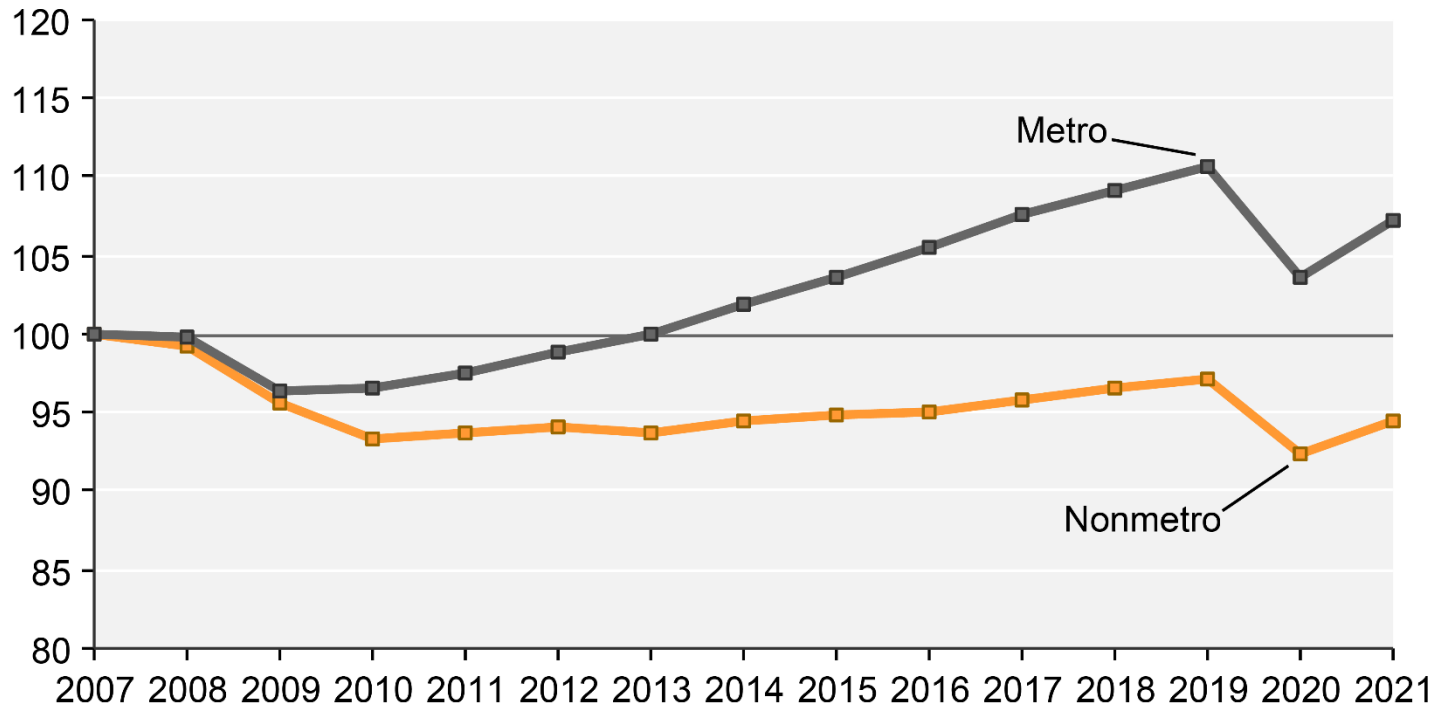
“Just 33.1 percent of rural counties gained population between 2010 and 2020, compared to 53.2 percent in the prior decade. Population growth was impacted in metropolitan areas too, but the urban population grew between 2010 and 2020.”

Rural Population Dropping in the Midwest and South; Increasing in the West

SOURCE: <https://carsey.unh.edu/publication-rural-america-lost-population-over-past-decade-for-first-time-in-history>

U.S. employment in metro and nonmetro areas, 2007–21

Percent of 2007 employment (2007=100)



Note: Employment is based on annual average total employment by county; metro and nonmetro designations are based on the 2013 definition of metropolitan counties, as determined by the U.S. Office of Management and Budget.

Source: USDA, Economic Research Service using data from the U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics program (April 15, 2022 release).

Losing Jobs in Rural America

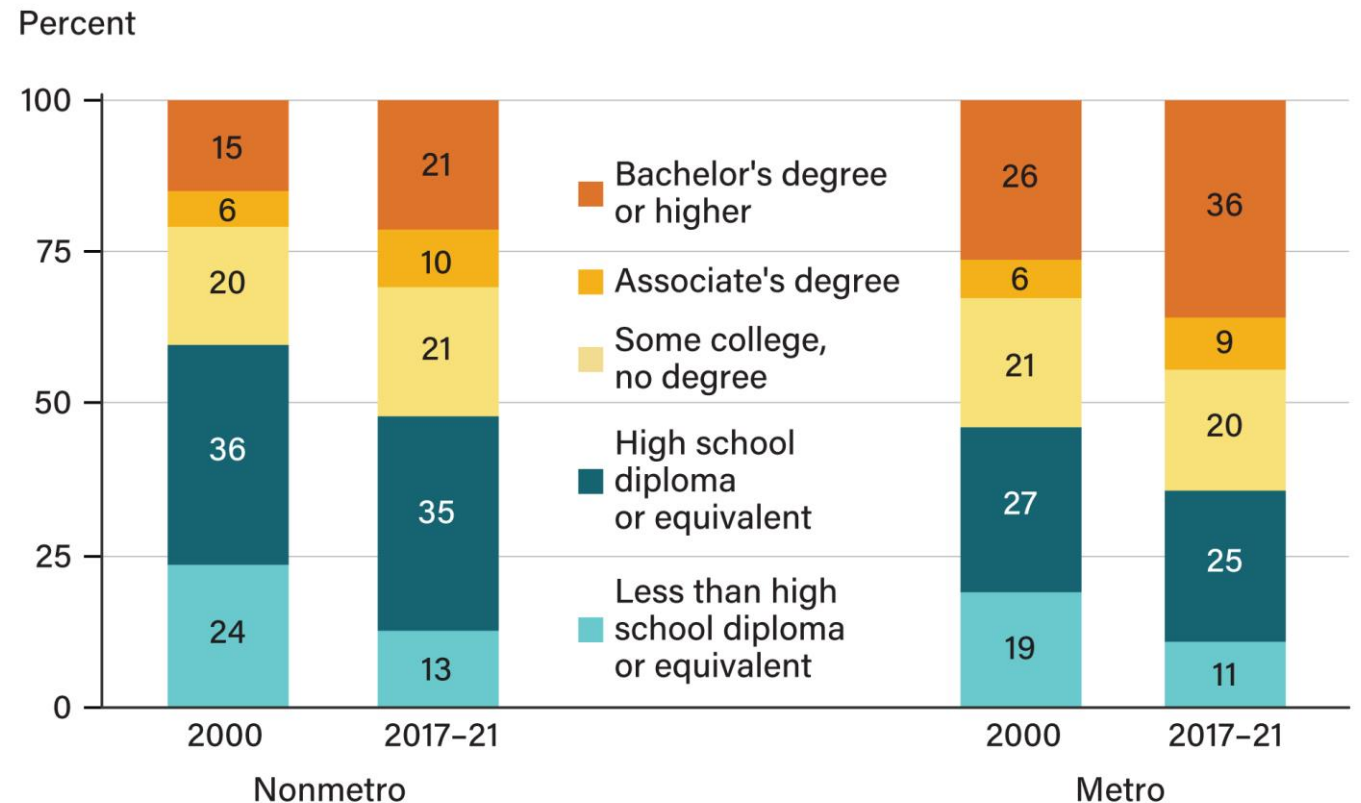
All areas hit hard by Great Recession (2008-10)
But Nonmetro areas recovered more slowly 2010-19 until COVID-19 hit
Net effect: rural has lost jobs since 2008

Education in Rural America

- Although educational attainment is rising, a lower proportion (31%<45%) have college education in rural America.
- 48% in rural (36% in urban) have high school or lower
- Implication for opportunities for skilled labor positions.

Educational attainment for adults 25 and older, 2000 and 2017–21

USDA Economic Research Service
U.S. DEPARTMENT OF AGRICULTURE



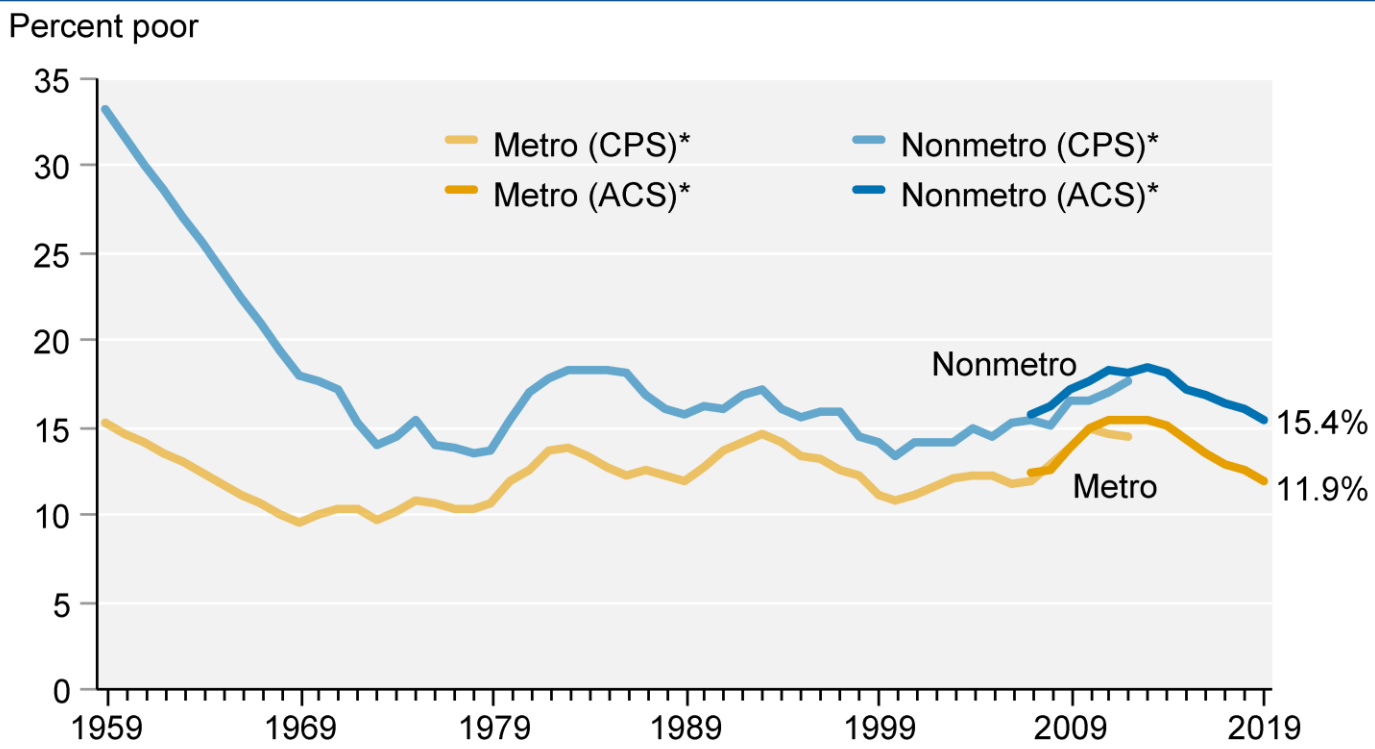
Note: Data are aggregated based on county metro-nonmetro status by Office of Management and Budget's 2013 metropolitan area definitions. Categories may not sum to 100 percent because of rounding.

Source: USDA, Economic Research Service using U.S. Department of Commerce, Bureau of the Census, 2000 Decennial Census and 2017-21 American Community Survey 5-year period estimates.

Poverty in Rural America

Though poverty rates fell significantly until the early 1970s, nonmetro poverty rates have always been higher than metro poverty rates.

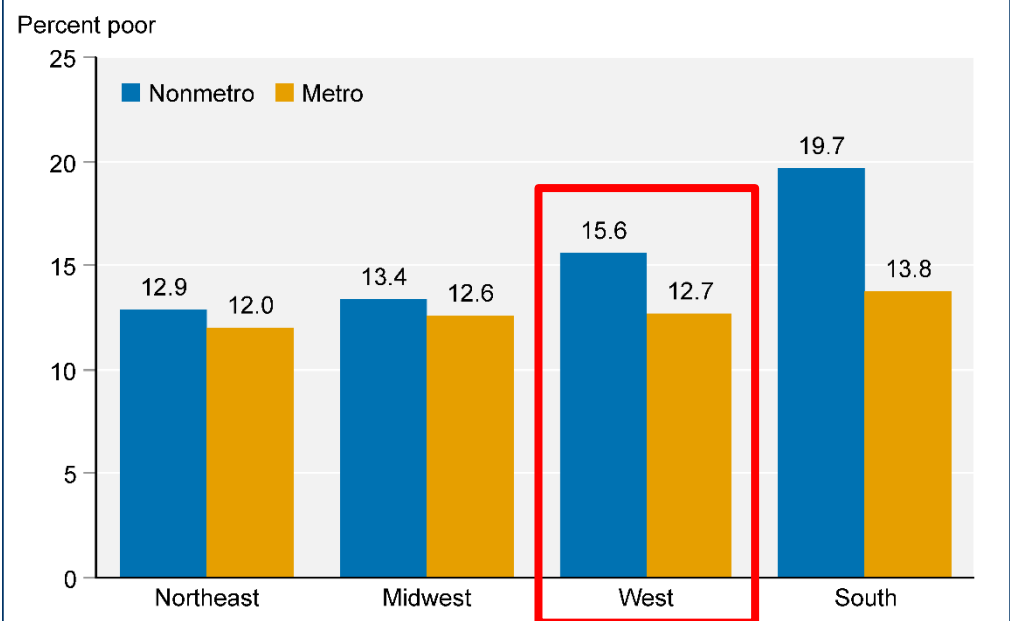
Poverty rates by metro/nonmetro residence, 1959-2019



Note: Metro status of some counties changed in 1984, 1994, 2004, 2014, and 2018.
 *CPS poverty status is based on family income in prior year and ACS poverty status is based on family income in the past 12 months.

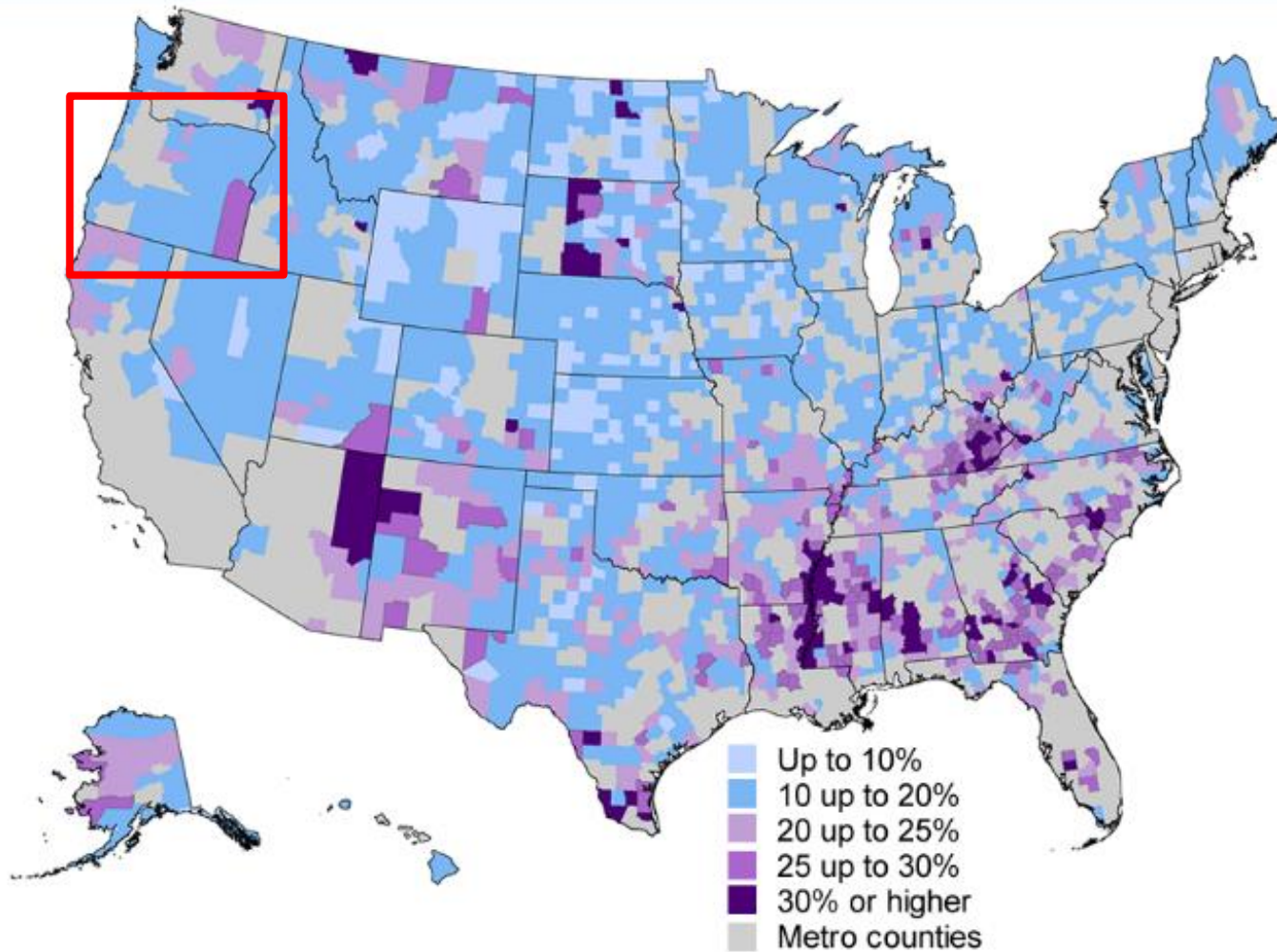
Sources: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS) 1960-2013 and annual American Community Survey (ACS) estimates for 2007-19.

Poverty rates by census region and metro/nonmetro status, 2015-19 average



Source: USDA, Economic Research Service using U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-year average county-level data for 2015-19 and 2018 Office of Management and Budget nonmetro/metro county designations.

Nonmetro county poverty rates, 2011-2015 average



Source: USDA, Economic Research Service using data from U.S. Census Bureau, 2011-2015 American Community Survey, and 2013 Office of Management and Budget nonmetro/metro county designations.

Some rural areas in the U.S. have significantly higher poverty rates

- mostly in the rural South and Southwest, Appalachia

- Higher poverty rates less common in the West.

Rural America is Older

Median age:

Rural 43, Urban 36

Percent of population age 65+:

Rural 17.2%, Urban 12.8%

Aged population will double from 2000 to 2030!

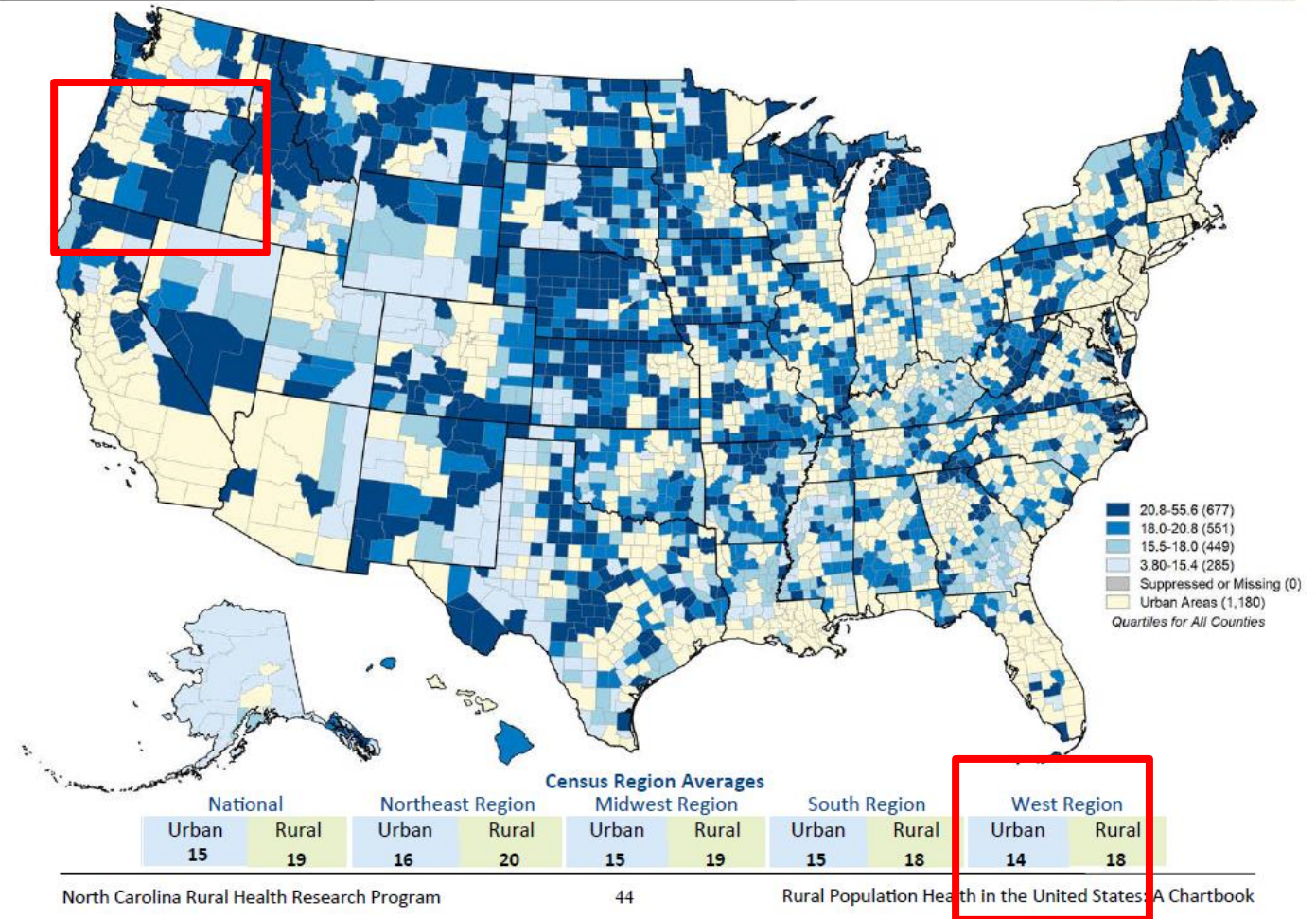
Implications for Medicare & Medicaid

Older Adult Population

Five-year average percentage of the population that is age 65 or older (2012-2016)



Socioeconomic Domain



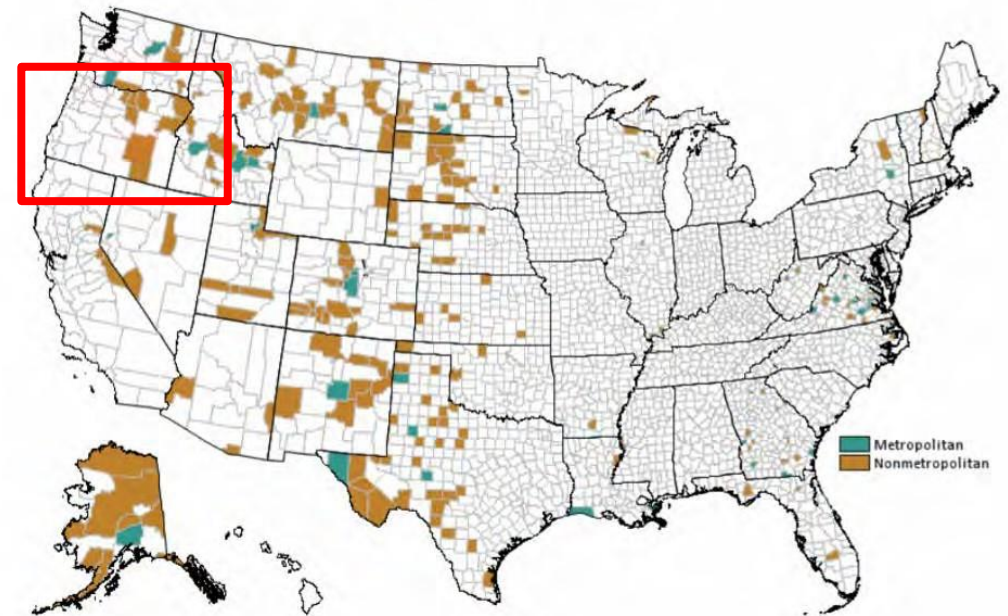
In the West: slightly smaller proportion age 65+

Older People in Rural America

- In general older people (rural&urban) seek to age in place
 - Compared to urban older adults, rural older adults more likely to live alone, but have larger social networks
- Challenges in rural areas:
 - Natural and built environments
 - Lower incomes and poverty
 - Greater housing burden and inadequate housing
 - Access to health care and other needed resources:
 - Home health care, assisted living
 - Transportation
 - Broadband and cellular connectivity

Figure 3.

Nursing Home Desert Counties, 2018

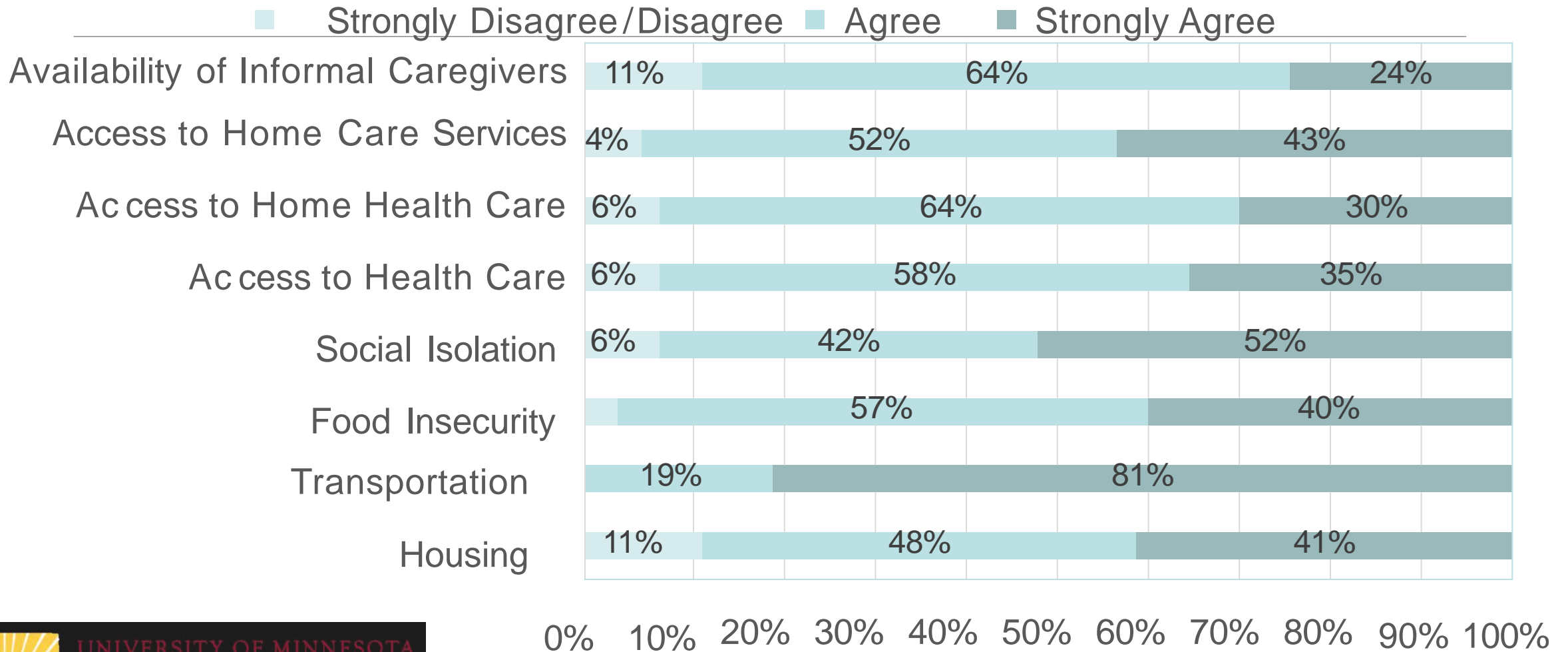


	Rural	Urban	P-value
Receive care in own home	62.5	60.4	0.336
<i>Receive help in own home from family friend</i>	33.0	29.9	0.195
<i>Receive help in own home from paid worker</i>	29.5	30.5	0.634
Live with an adult child	4.3	5.4	0.331
Live in assisted living or nursing home	31.6	32.1	0.797
Don't know	1.6	2.2	0.471

N=4,333; p-value indicates difference between rural and urban; frequencies estimated with survey weights

Desire for Living Arrangement

Barriers to Aging in Place in Rural Areas



Overview

Nine variables are used to calculate Unmet Need scores for each of Oregon's 128 primary care service areas. The lowest and worst score possible is 0. The highest and best score possible is 90. A lower score means greater unmet need. For 2022, scores in Oregon ranged from 18 (worst) to 79 (best). In 2021, it ranged from 24 to 79. Warm Springs had the lowest score in both years and lost points this year because the clinic lost their PCPCH status.

Rural and frontier service areas have greater unmet need (lower scores) than urban areas:

Mean (Average) Score by Geographic Area	2022	2021	2020
Oregon	49.4	49.4	49.3
Urban	62.1	62.6	62.1
Rural (without Frontier)	45.9	46.0	45.9
Rural (including Frontier)	46.4	46.4	46.4
Frontier	48.9	48.0	48.4

The mean (average) score for Oregon overall is 49.4, which is the same as last year's average of 49.4. Sixty-two of the 128 service areas fall below that score. The number of service areas by geographic type with scores below the Oregon average include:

Urban:	1 out of 24 (4%)
Rural (without Frontier):	52 out of 86 (60%)
Rural (including Frontier):	61 out of 104 (59%)
Frontier:	9 out of 18 (50%)

Category One: Availability of Providers—Are needed providers available locally?

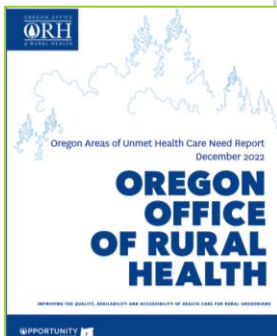
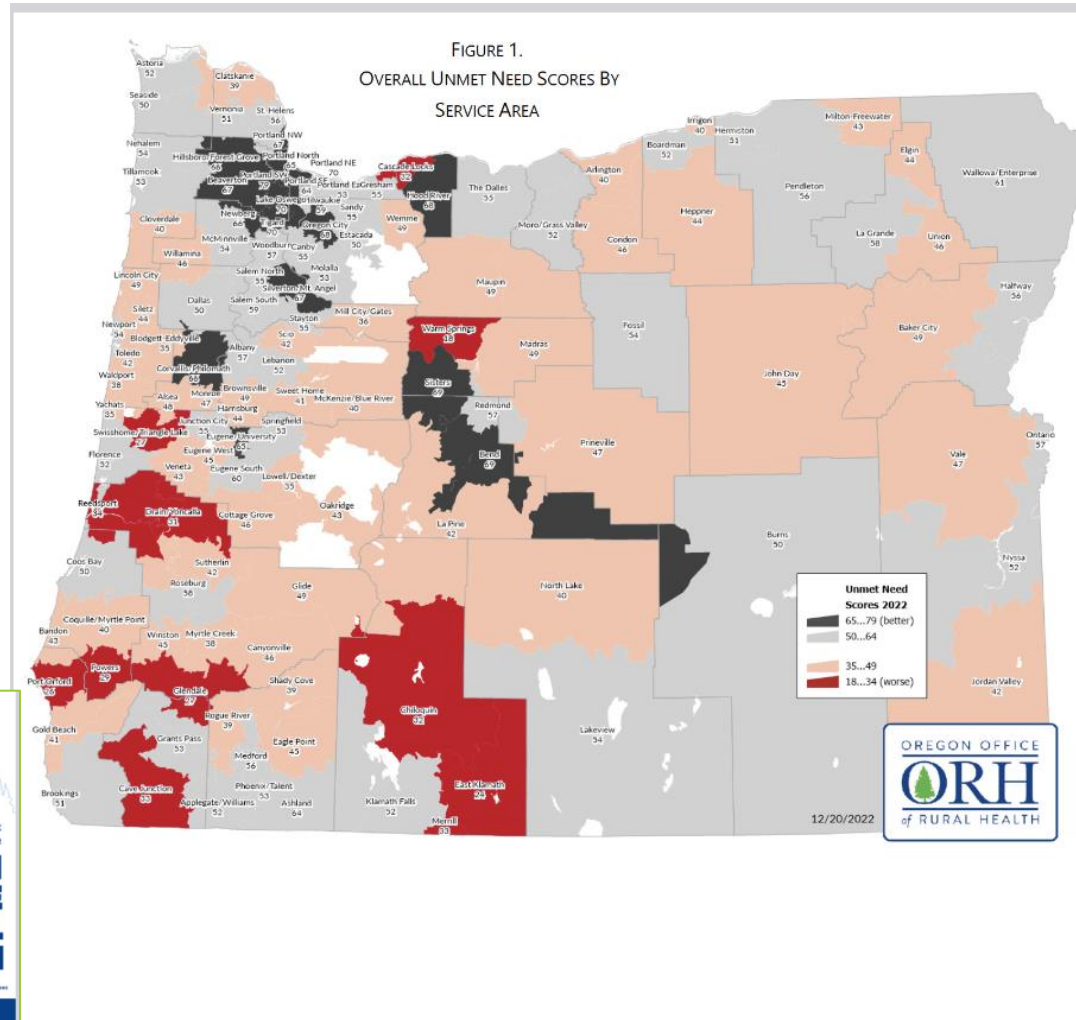
- 1) Travel Time to Nearest Patient Centered Primary Care Home (PCPCH)
- 2) Primary Care Capacity (Percent of Primary Care Visits Needed Able to Be Met)
- 3) Dentists per 1,000 Population
- 4) Mental Health Providers per 1,000 Population

Category Two: Ability to Afford Care—Can the local population afford health care?

- 5) Percent of Population Between 138% and 200% of Federal Poverty Level (FPL)

Category Three: Utilization—Are primary physical, mental and oral health care being used?

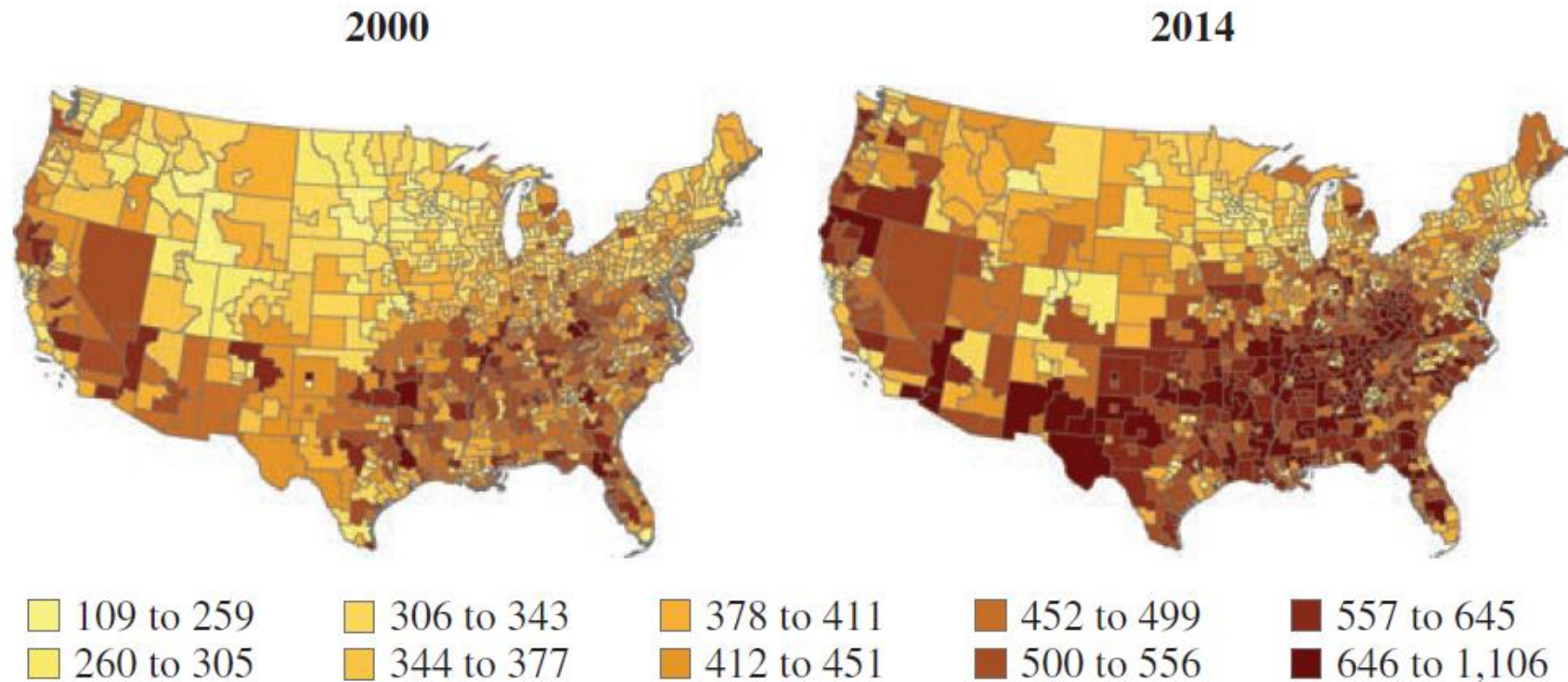
- 6) Inadequate Prenatal Care Rate per 1,000 Births
- 7) Ambulatory Care Sensitive Conditions (ACSC)/ Preventable Hospitalizations per 1,000 Population
- 8) Emergency Department Non-Traumatic Dental Visits per 1,000 Population
- 9) Emergency Department Mental Health/Substance Use Visits per 1,000 Population



Oregon: Unmet Needs for Primary Care

“Deaths of Despair”

Figure 9. All-Cause Mortality for White Non-Hispanics Age 45–54, by *County*, 2000 and 2014^a



Deaths of despair from alcohol, substance abuse, guns, suicide.. Also obesity.

Leading to first declines we have seen in mortality in years, decades.

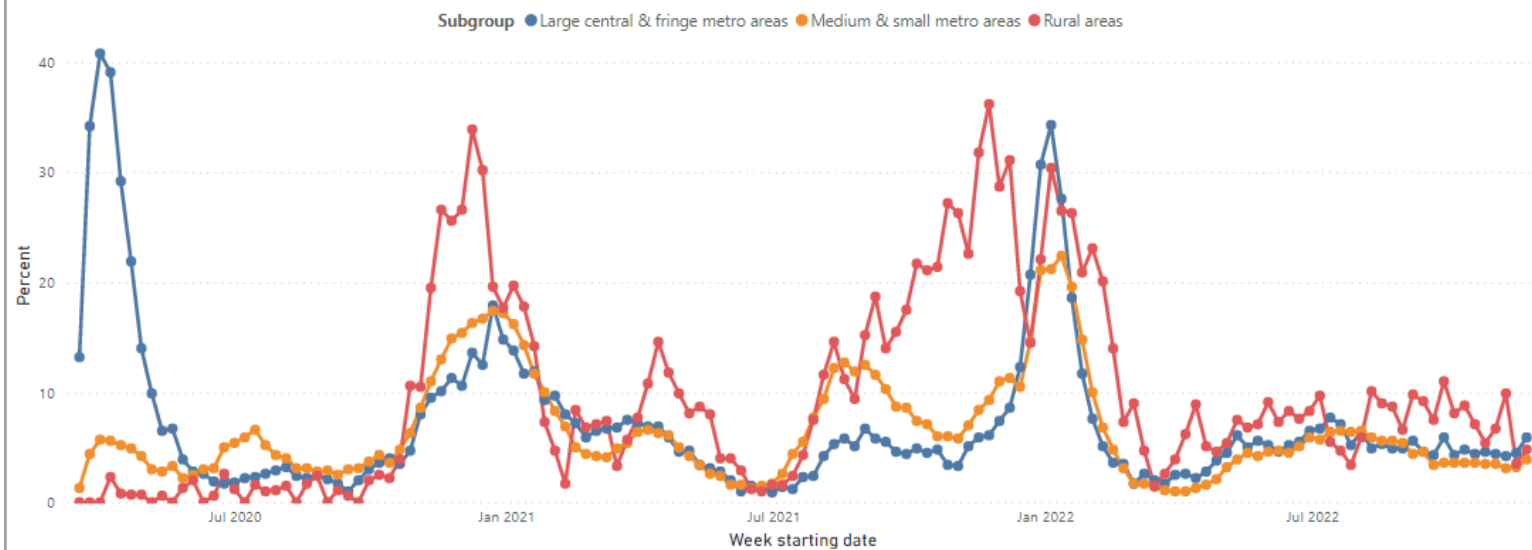
Much of it in the [south, East South Central region](#), and rural areas in specific.

Cumulative disadvantage: low education, poverty.

Percentage of encounters with a confirmed COVID-19 status from selected hospitals, by hospital urban-rural location and week

Select setting

Inpatient



NOTE: Data are not nationally representative.

SOURCE: National Center for Health Statistics, National Hospital Care Survey, 2020-2022

COVID-19

Covid Is Killing Rural Americans at Twice the Rate of Urbanites

“Rural Americans are dying of covid at more than twice the rate of their urban counterparts — a divide likely to widen as access to medical care shrinks for a population that tends to be older, sicker, heavier, poorer and less vaccinated.

“While initial surge of COVID-19 deaths skipped over much of rural America... nonmetropolitan mortality rates quickly started to outpace those of metropolitan areas as the virus spread nationwide before vaccinations became available, according to data from the Rural Policy Research Institute.”

<https://khn.org/news/article/covid-death-rate-rural-america/>

SOURCE: <https://rupri.public-health.uiowa.edu/presentations/index.html>

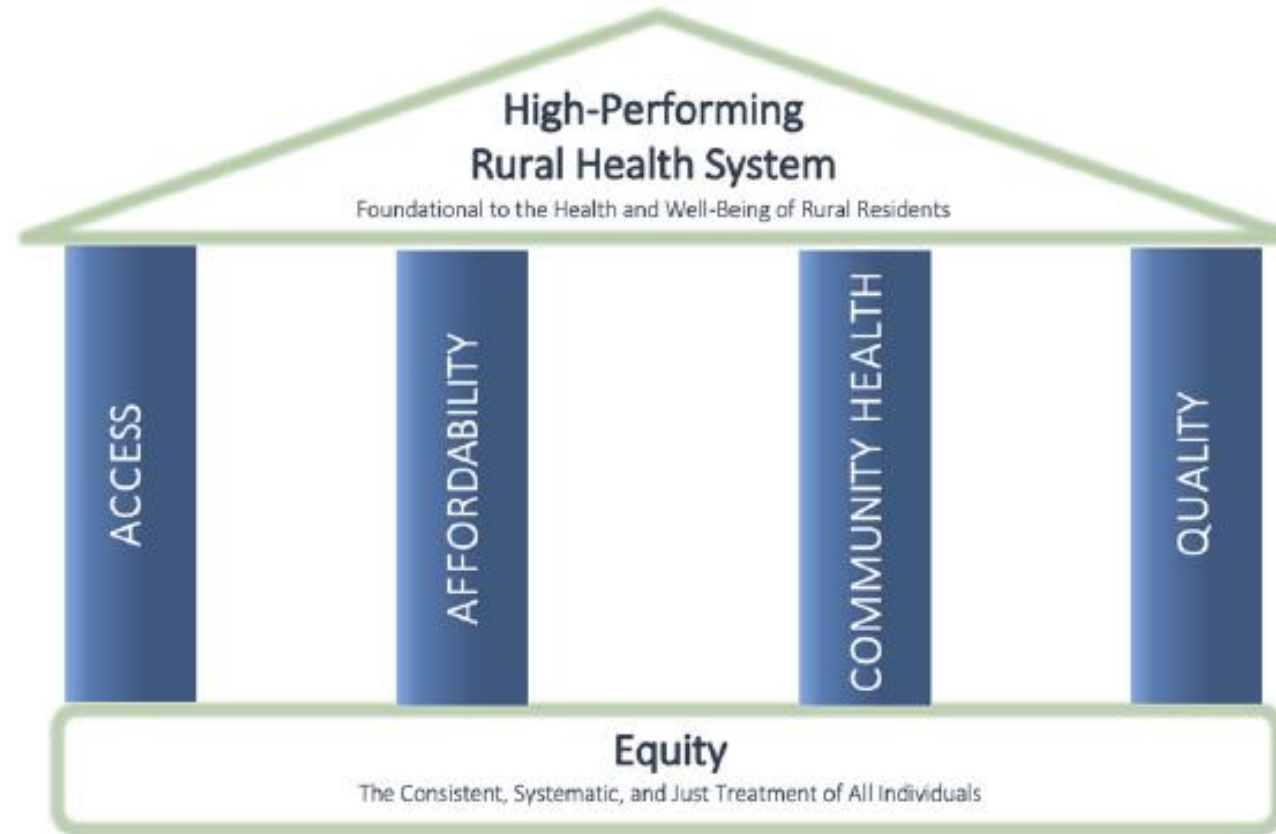
A High Performance Health System

The Framework for the Future: A High Performance Rural Health System

The RUPRI Health Panel envisions rural health care that is affordable and accessible for rural residents through a sustainable health system that delivers high quality, high value services. A high performance rural health care system informed by the needs of each unique rural community will lead to greater community health and well-being.

Source: Advancing the Transition to a High Performance Rural Health System. RUPRI Health Panel. November, 2014.
<http://www.rupri.org/wp-content/uploads/2014/11/Advancing-the-Transition-Health-Panel-Paper.pdf>. p. 6

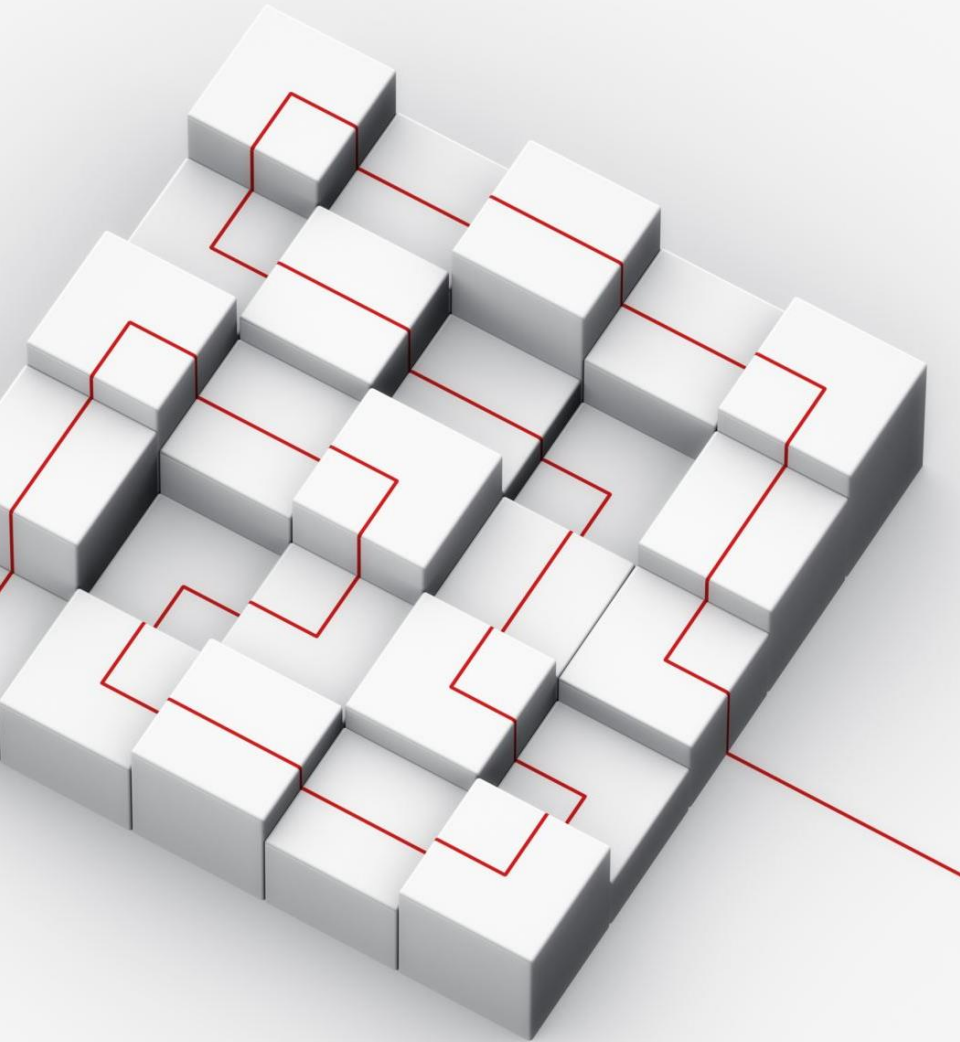
Pillars of the High Performance System



Source: The High Performance Rural Health Care System of the Future. RUPRI Health Panel. September 2,, 2011. <http://www.rupri.org/wp-content/uploads/2014/09/The-High-Performance-Rural-Health-Care-System-of-the-Future.pdf>.

Challenges

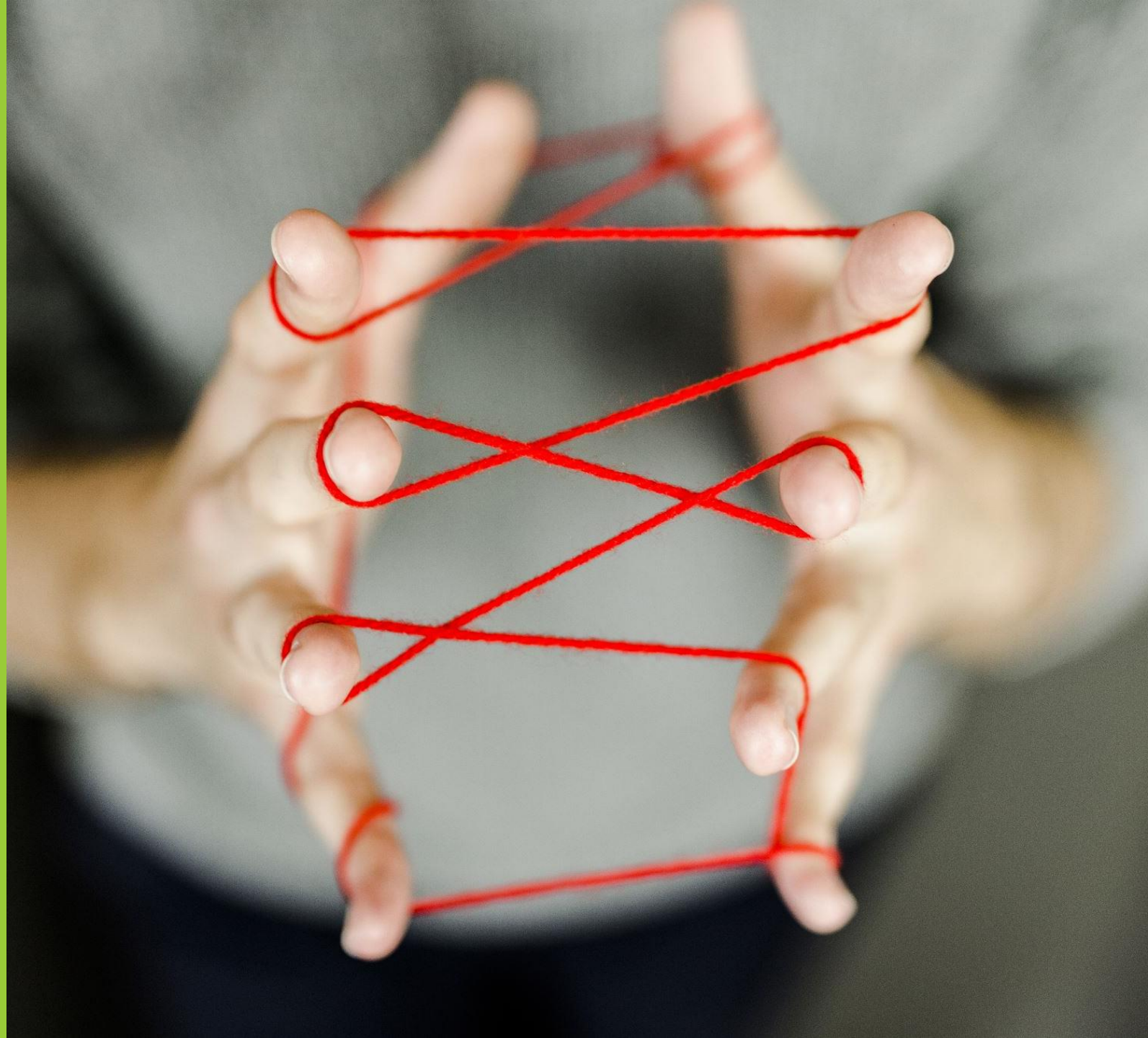
- Pandemic and ongoing behavioral health crisis demonstrate critical need for high-performing system
- These accentuate ongoing challenges in workforce, appropriate use of medical technology, maintaining facilities, integrating services
- Layer on new delivery modalities that may be helpful, or not: telehealth, outpatient procedures, in-home care
- Last but not least, changes in financing from volume-based for-service to value-based payment and global budgets



Building Blocks for the High Performing Health System

- Appropriate use of telehealth
- Primary care as the foundation
- Integrating clinic inside the walls with community-based services
- Address workforce needs across the continuum
- Use information systems to integrate patient care

Conclusions



Conclusions

- Rural America faces continuing challenges; but challenges more significant outside of the west
 - Challenges driven by underlying changes in demography, economy and social determinants of health
- Needed: changes in policy environment to improve affordability and create incentives for improved health

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