



# **Rural Health Research Resources**

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National Advisory Council on the National Health Service Corps

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# Acknowledgements

- Multiple contributors to the Population Health Atlas: Randy Randolph, MRP; Mark Holmes, PhD; Kristie Thompson, MA; Sharita Thomas, MPP; Julie Perry; Randall John, BSPH; Susie Gurzenda, MSPH; Katharine Ricks, PhD; Andrew Maxwell, BSPH
- Slides by Kristie Thompson
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# Agenda

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- The Rural Population Health Atlas
- Emerging issues in Rural Health Research
- Other resources of note

# The Rural Population Health Atlas

# Goals

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- 2023 Rural Population Health Chartbook:  
<https://www.shepscenter.unc.edu/download/25553/>
- 1. Explain the contents of the chartbook.
- 2. Show you how to read the charts and use them in your state.

# Finding the right data to share the rural story

Many chartbooks out there in addition to ours. These are some examples of national chartbooks. They provide definitions, methods, and sometimes goals and strategies. But many of them don't stratify for rural.

- *CDC Health, United States Annual Report (2020-21)* - <https://www.cdc.gov/nchs/data/hus/hus20-21.pdf>
- Additional Resources – not chartbooks
  - RWJ County Health Rankings & Roadmaps - <https://www.countyhealthrankings.org/explore-health-rankings>
  - Office of Minority Health – Minority Population Profiles - <https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=26>
  - Health People 2030 - <https://health.gov/healthypeople/objectives-and-data>
  - State Centers for Health Statistics

# Yay! Rural Data – Wait, which one is right for me?

## National Rural-Urban Comparisons

- **2021 AHRQ Chartbook on Rural Healthcare: National Healthcare Quality and Disparities Report**  
<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/chartbooks/2019-qdr-rural-chartbook.pdf>
- **2014 Update of the Rural-Urban Chartbook** - <https://ruralhealth.und.edu/projects/health-reform-policy-research-center/pdf/2014-rural-urban-chartbook-update.pdf>

## Regional rural health data tools

- **2021 Rural Border Health Chartbook** [https://www.ruralhealth.us/NRHA/media/Emerge\\_NRHA/PDFs/2021-Rural-Border-Health-Chartbook-compressed.pdf](https://www.ruralhealth.us/NRHA/media/Emerge_NRHA/PDFs/2021-Rural-Border-Health-Chartbook-compressed.pdf)
- **2021 Rural Delta Region Map Tool** <https://www.shepscenter.unc.edu/programs-projects/rural-health/projects/delta-region-map-tool/>

## Individual state rural health chartbooks

- **2020 Northern Border Regional Commission State and Region Chartbooks: A Health-Focused Landscape Analysis – (ME, NH, NY, VT)**  
<https://www.ruralhealthresearch.org/projects/990>
- **2022 Rural Health Care in Minnesota: Data Highlights MN Rural Health Care Chartbook** -  
<https://www.health.state.mn.us/facilities/ruralhealth/docs/summaries/ruralhealthcb2022.pdf>

## County and state-level rural data

- **RHInet's Rural Health Data Explorer** <https://www.ruralhealthinfo.org/data-explorer> (data 2006-2009) - provides downloadable county and state level data, stratified by rural and urban
- **2022 NORC at the University of Chicago Rural Health Mapping Tool** - <https://ruralhealthmap.norc.org/> (includes COVID-19)



# What makes our chartbook different?

1. Focus on **county-level data** to show **variation** within states.
2. Emphasize **distribution/range** of county rates for each indicator in each state (vs focusing on averages).
3. Compare each state's county rates to all U.S. county rates.
4. Show how population health indicators vary across the country, by region, and by state.
5. Compare rural and urban.
6. Designed to allow for single-page compilations (i.e., you can create a smaller chart pack for your state).



# Uses for chartbook

Chartbook is organized to help distill a large amount of data into useful bites to help:

- **Focus on pressing issues** - See which issues might be more urgent compared to others.
- **Identify disparities** - Identify areas where rural residents have poorer health outcomes compared to their urban counterparts.
- **Position your state among other states** – See how your states rates compare to other states for the same indicator.
- **Look for regional patterns** - Determine if you want to work with similar counties in other states.

# Data in the chartbook

We used public-use data sources. Each provides county-level data.

1. **County Health Rankings & Roadmaps**, 2012-2016. University of Wisconsin Population Health Institute. Available at: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).
2. **Provider of Services**, 2016. Centers for Medicare & Medicaid Services. Available at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/Provider-of-Services>.
3. **American Community Survey**, 2012-2016. U.S. Census Bureau. Available at: <https://www.census.gov/programs-surveys/acs/data.html>.
4. **Housing and Transportation (H+T®) Affordability Index**, 2017. The Center for Neighborhood Technology. Available at: <https://htaindex.cnt.org/>.
5. **Compressed Mortality File**, 2012-2016. CDC Wonder. Centers for Disease Control and Prevention. Available at: <https://wonder.cdc.gov/mortsql.html>.
6. **Rural Atlas**, 2011-2015. Economic Research Service, U.S. Department of Agriculture. Available at: <https://www.ers.usda.gov/data-products/atlas-of-rural-and-small-town-America>.

# Data in the chartbook continued

- Rural definition = **non-metro counties**

The Office of Management and Budget (OMB) designates counties as Metropolitan, Micropolitan, or Neither.

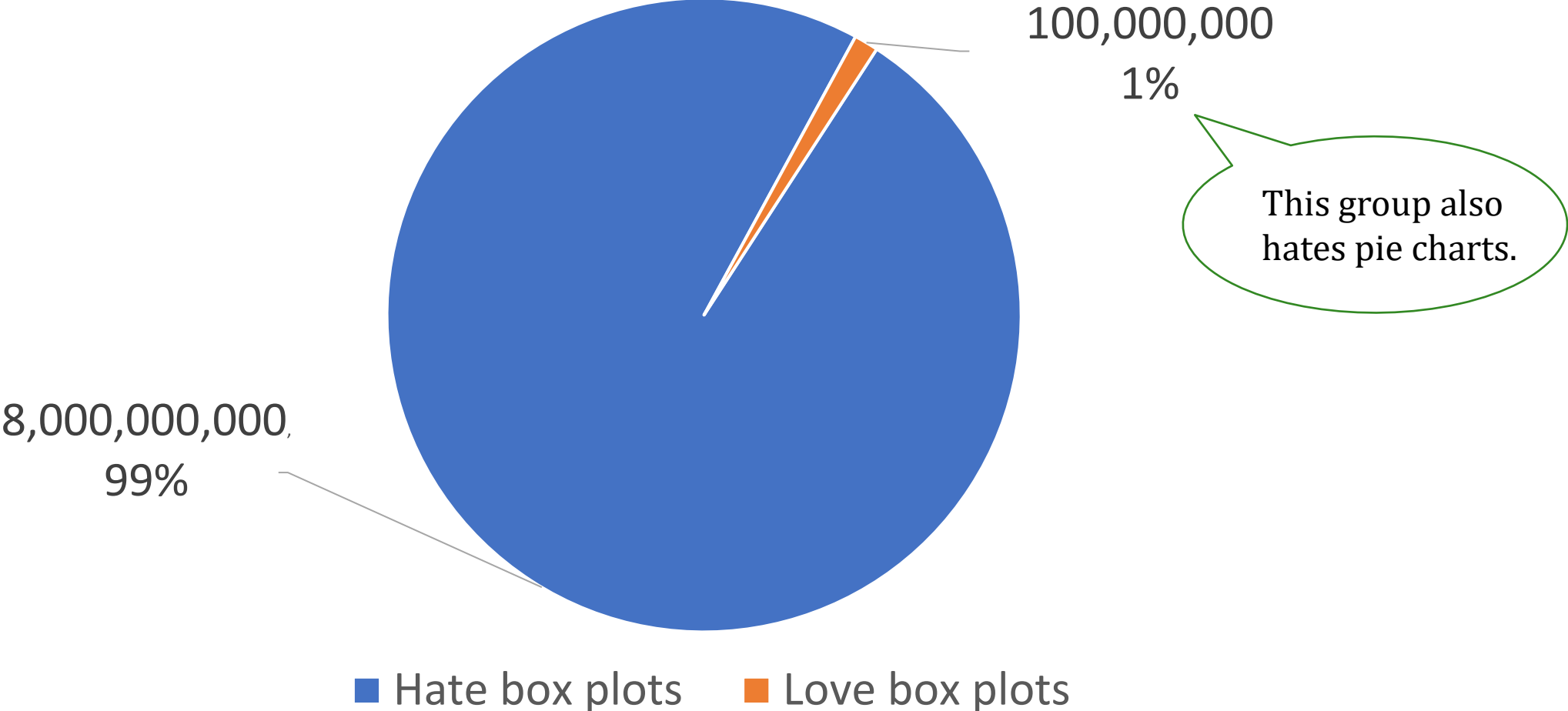
Area or County	Rural or Not Rural
Metro area (urban core of 50,000 or more people)	Not rural
<b>Micro area</b> (urban core of 10,000-49,999 people)	Rural
<b>Counties outside of Metro or Micro Areas</b>	Rural

<https://www.hrsa.gov/rural-health/about-us/what-is-rural>

- 33 indicators
- 5 health domains
  - Access,
  - Health Risk & Outcomes,
  - Mortality,
  - Social Determinants of Health,
  - Socioeconomic
- 3,142 U.S. counties
  - 1,962 rural
  - 1,180 urban
- > 103,686 data points  
(33 indicators x 3,142 counties)

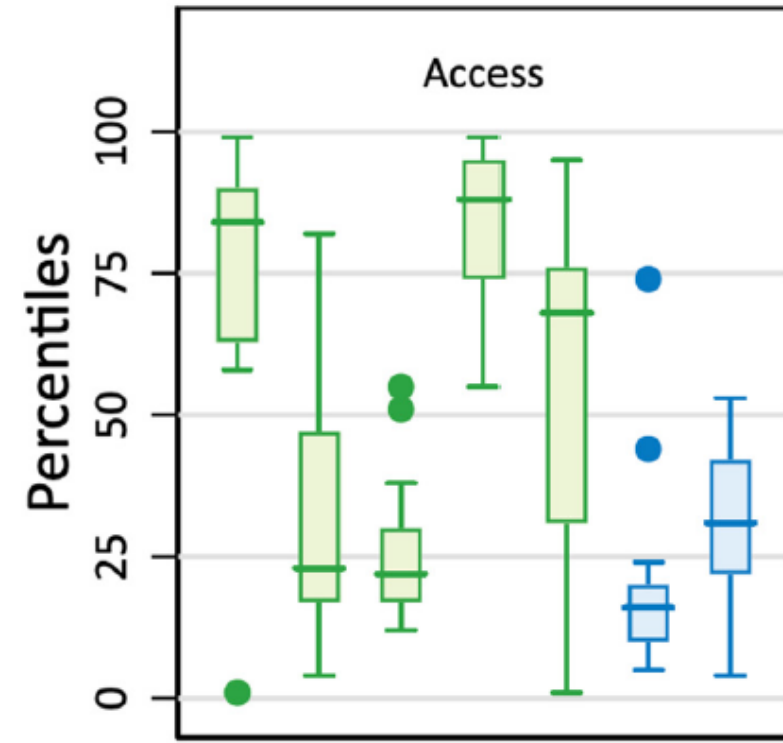
**What's a great way to condense and display a large amount of data without obscuring the details?**

# Two kinds of people in the world



# OMG – SO.MANY.BOX.PLOTS!

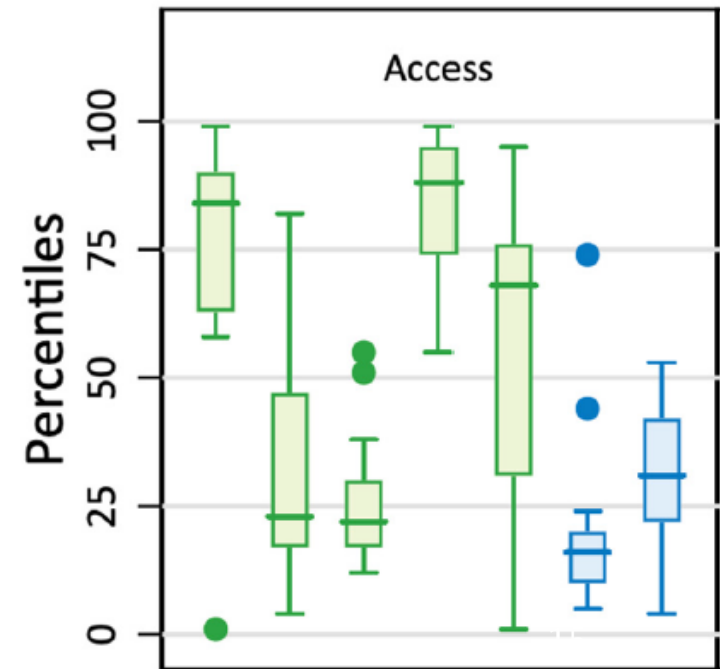
- We use a ridiculous amount of box plots.
  - 78 pages with 33-45 box plots per page
  - We think this is a **good** thing.



# You can ❤️ the box plot

Box plots allow us to

- See **distribution/range** of data-not just the avg.
  - Average alone might hide counties doing poorly or exceptionally well.
- See the **spread** of data (how far rates are from center of distribution).
  - How far from “normal” are some of the rates?
- Identify **skewness** of data – is it centered?
  - Are county rates in my state “normal” or more likely to “above or below normal”?
- Compare **distributions/ranges** of multiple sets of data
  - How does my state compare to others?
- Note **unusual observations** (outliers)
  - Are some of counties in my state a lot less healthy or exceptionally healthy? Some values are abnormally far from the middle of the data.



# 5 chart types

## State summary box plots

What are the most pressing issues in my state?

## Rural–urban disparity bar charts - (lollipop charts)

How do state rural vs urban averages compare for this indicator?

## Indicator box plots by region by state

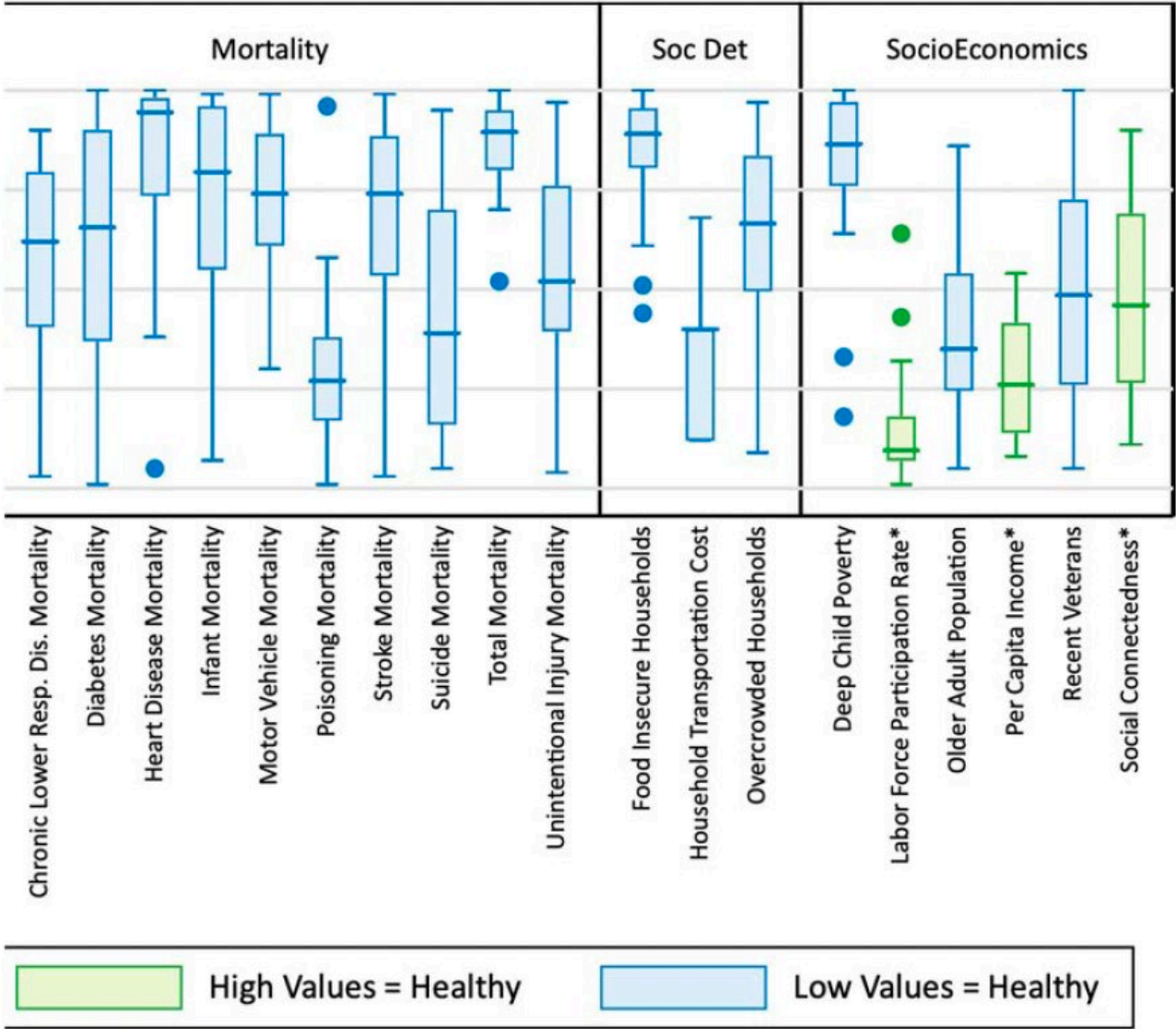
How does your state compare to other states?  
What does the range of data look like?

## Sex, race, and ethnicity bar charts

What are the sex, race, or ethnicity disparities in my Division?

## National maps

Are there regional patterns for this indicator?





# 5 chart types

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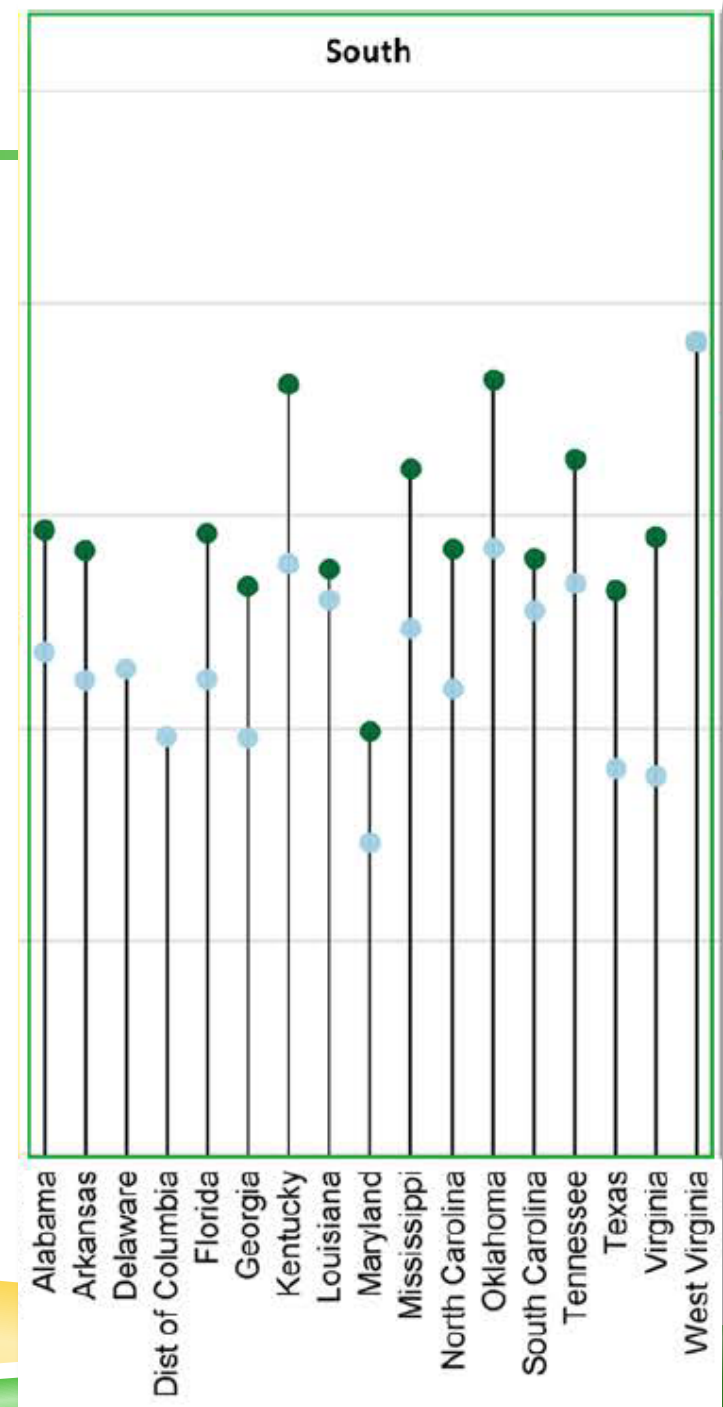
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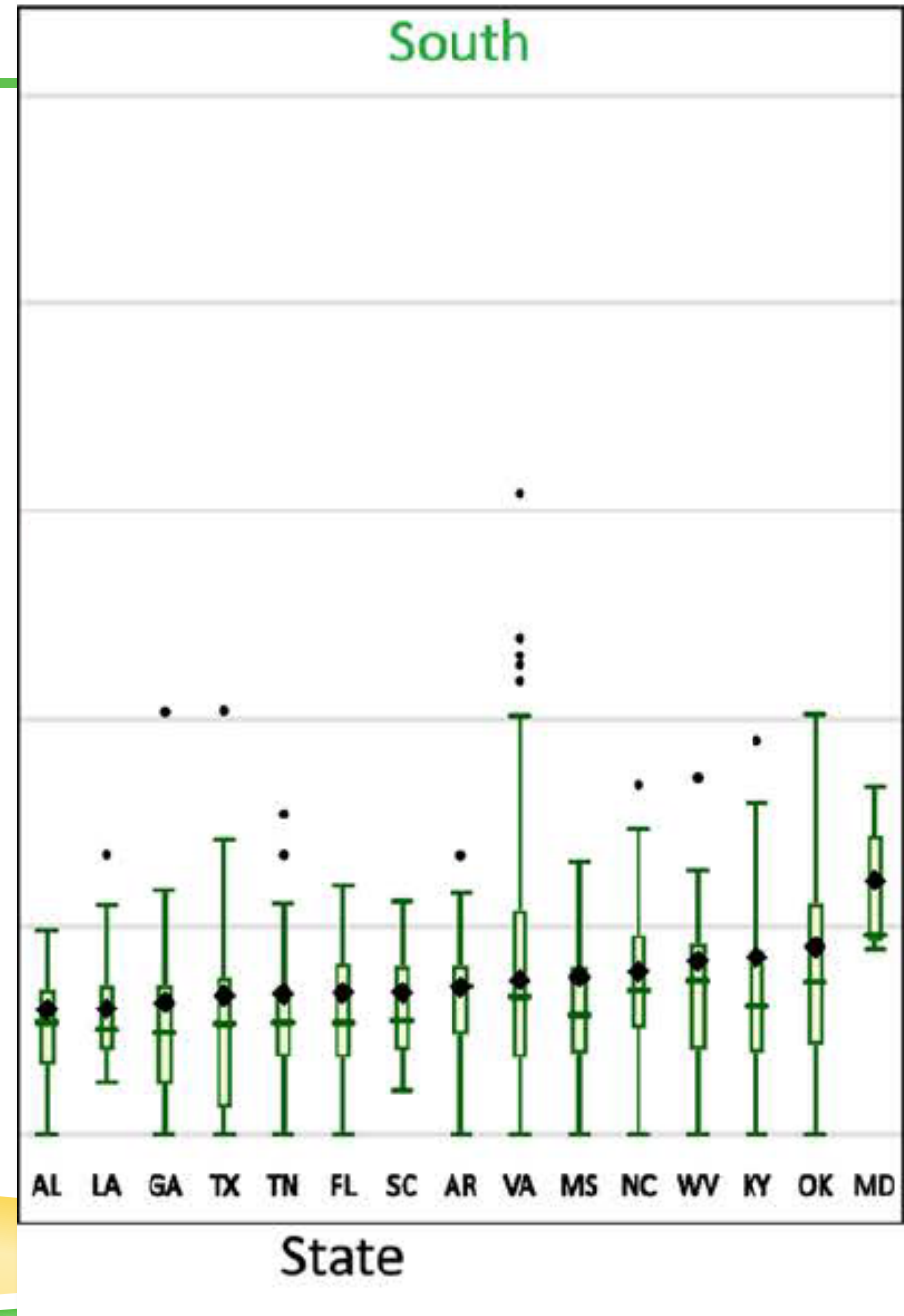
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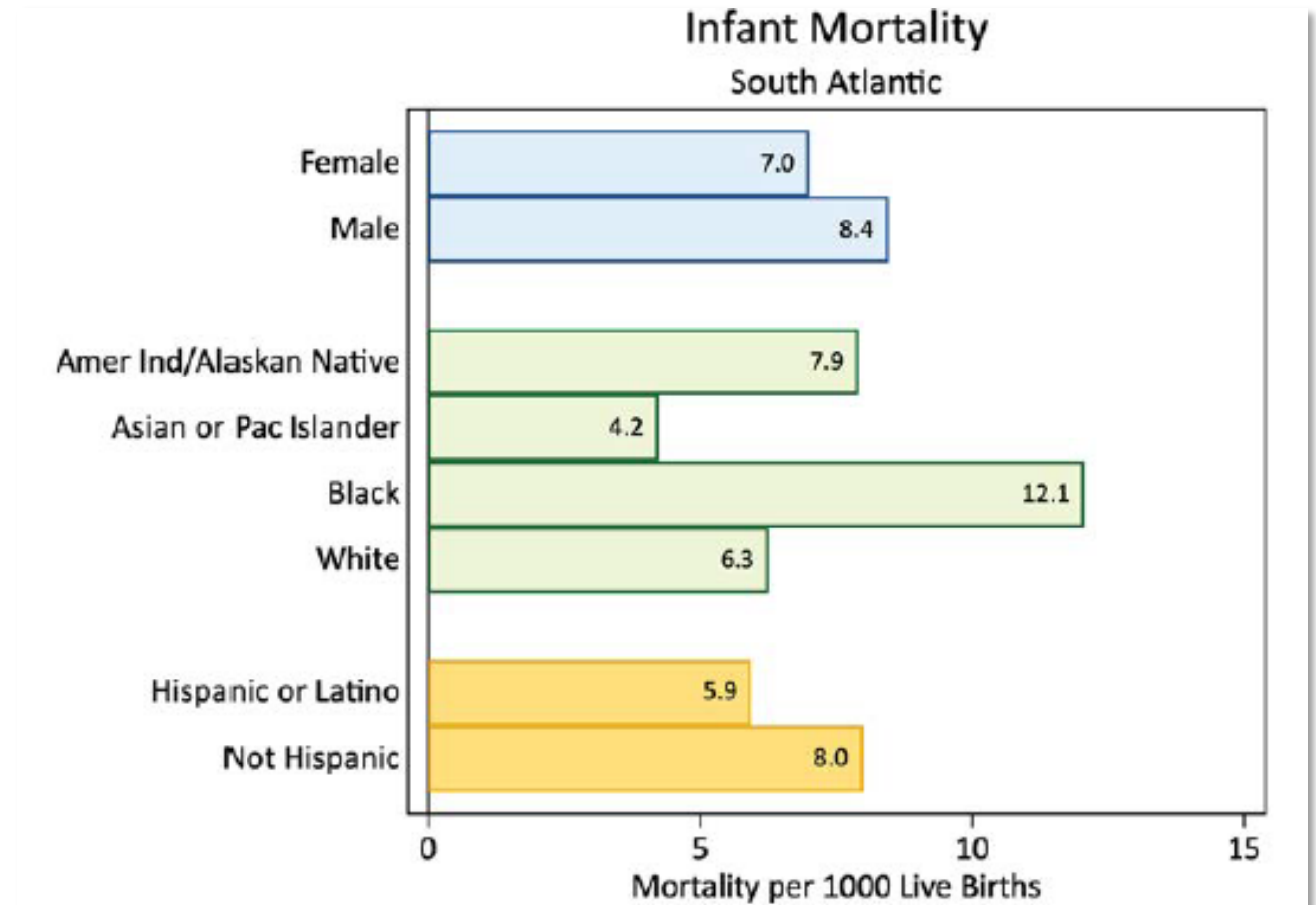
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# 5 chart types

Urban area – map doesn't show value

## State summary box plots

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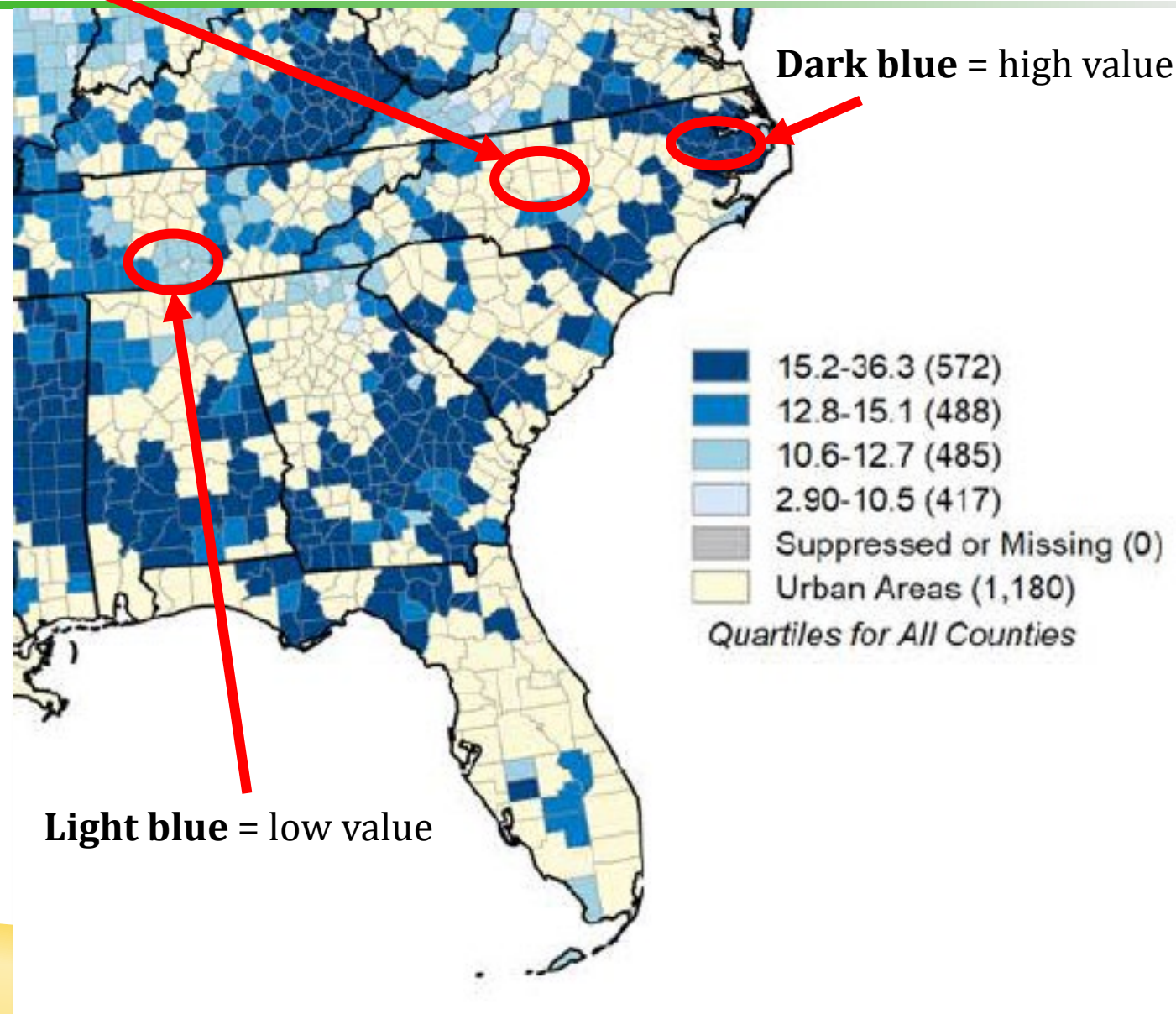
How does your state compare to other states?  
What does the range of data look like?

## Sex, race, and ethnicity

What are the sex, race, or ethnicity disparities in my Division?

## National maps

Are there regional patterns for this indicator?



# Using the charts

# Let's see how we might use the chartbook for rural North Carolina



What are the most pressing issues in my state?

Do we have rural-urban health disparities?

How does my state compare to the rest of the country?

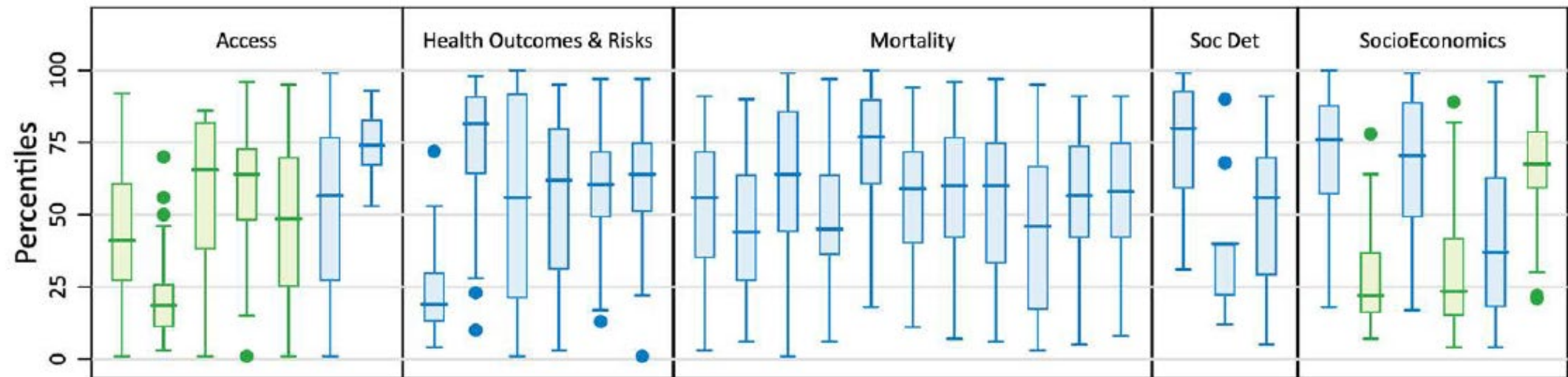
Are we part of a regional issue?

Are there differences based on sex, race, and ethnicity in my region?



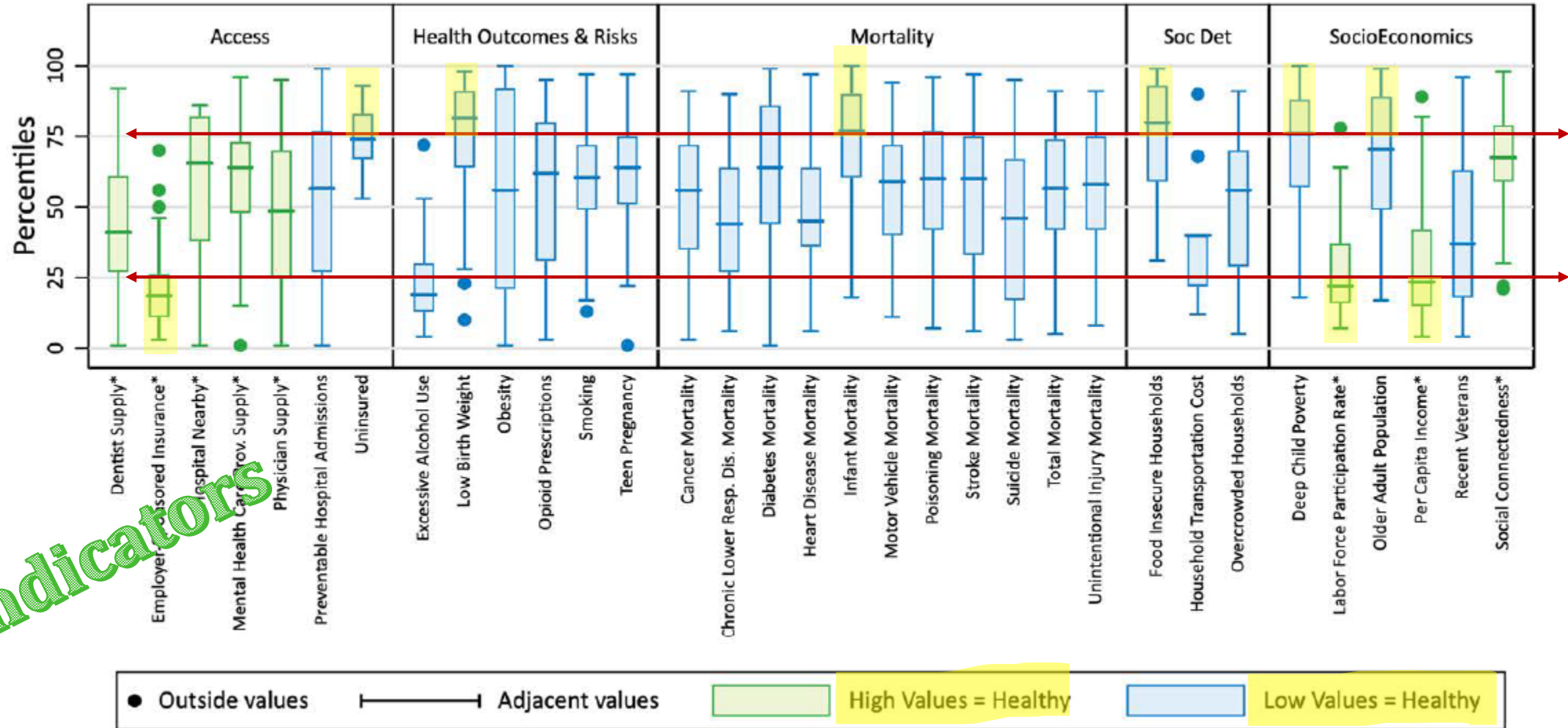
## State summary box plots

What are the most pressing issues in my state?



# State summary box plot – the Rural county data range for each indicator

## North Carolina



Note: Blue boxes are for indicators where higher values denote worse health.  
Green indicators, also denoted with a \* in the label, are indicators where higher values denote better health.



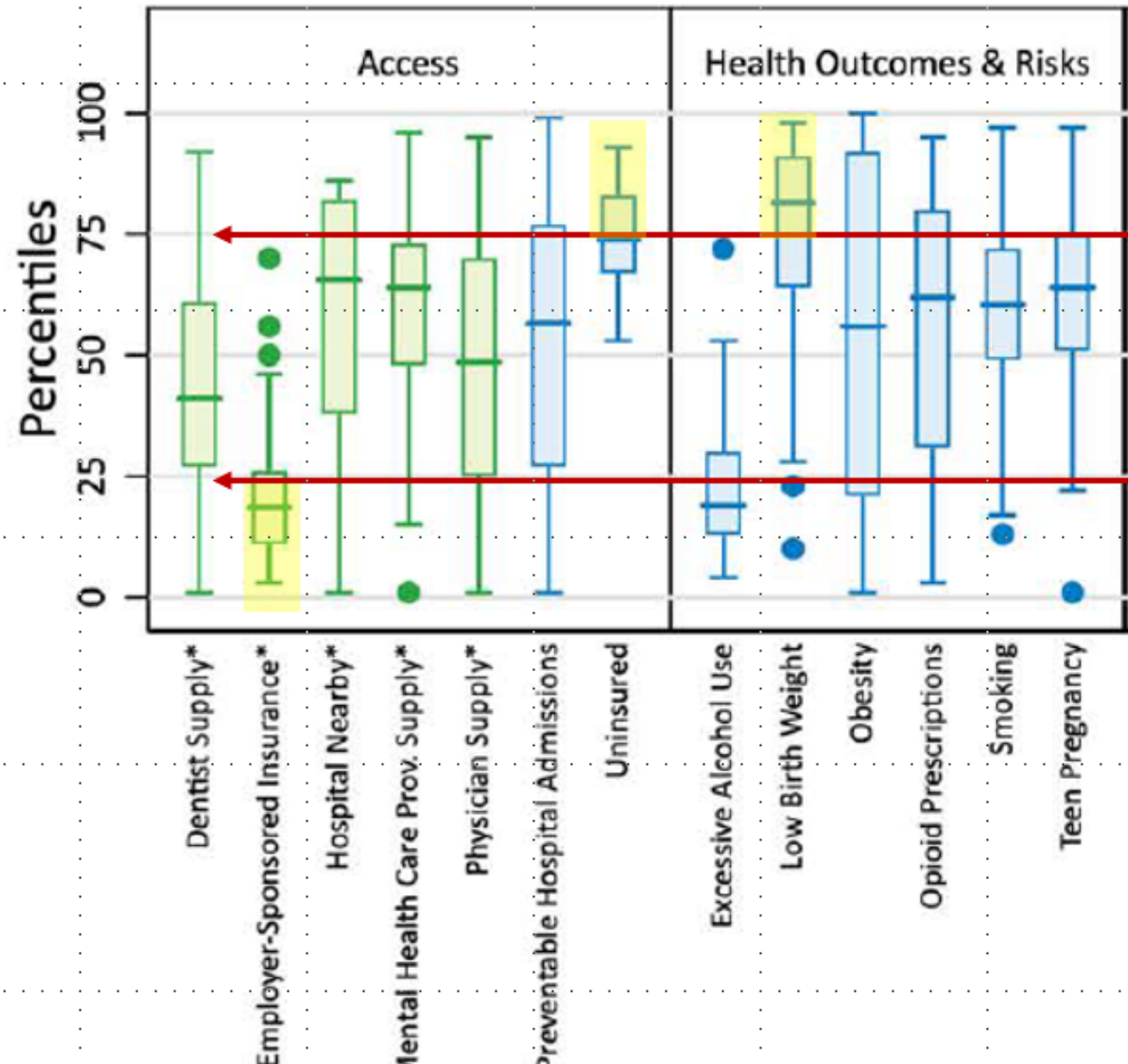
# Pressing Issues for Rural North Carolina

In rural North Carolina, highlighted indicators have less healthy rates = most pressing based on those above national 75<sup>th</sup> percentile.

1. **Employer sponsored insurance rates** – ~ 75% rural NC county rates among lowest in U.S.
2. **Uninsured rates** – ~ 50% of rural NC counties are among the highest 25% of uninsured rates. All rural NC counties have uninsured rates above national median (>50% of all U.S. counties).
3. **Low birth weight** – > half rural NC counties have high LBW rates. Not all rural counties face this problem--outliers are below 25<sup>th</sup> percentile.

RANGE For some there is wide variation. In access

- Dentist supply, hospital nearby, physician supply, preventable readmissions
- For these indicators, there are counties at both extremes.
- Insurance has a narrow spread – not much variation.



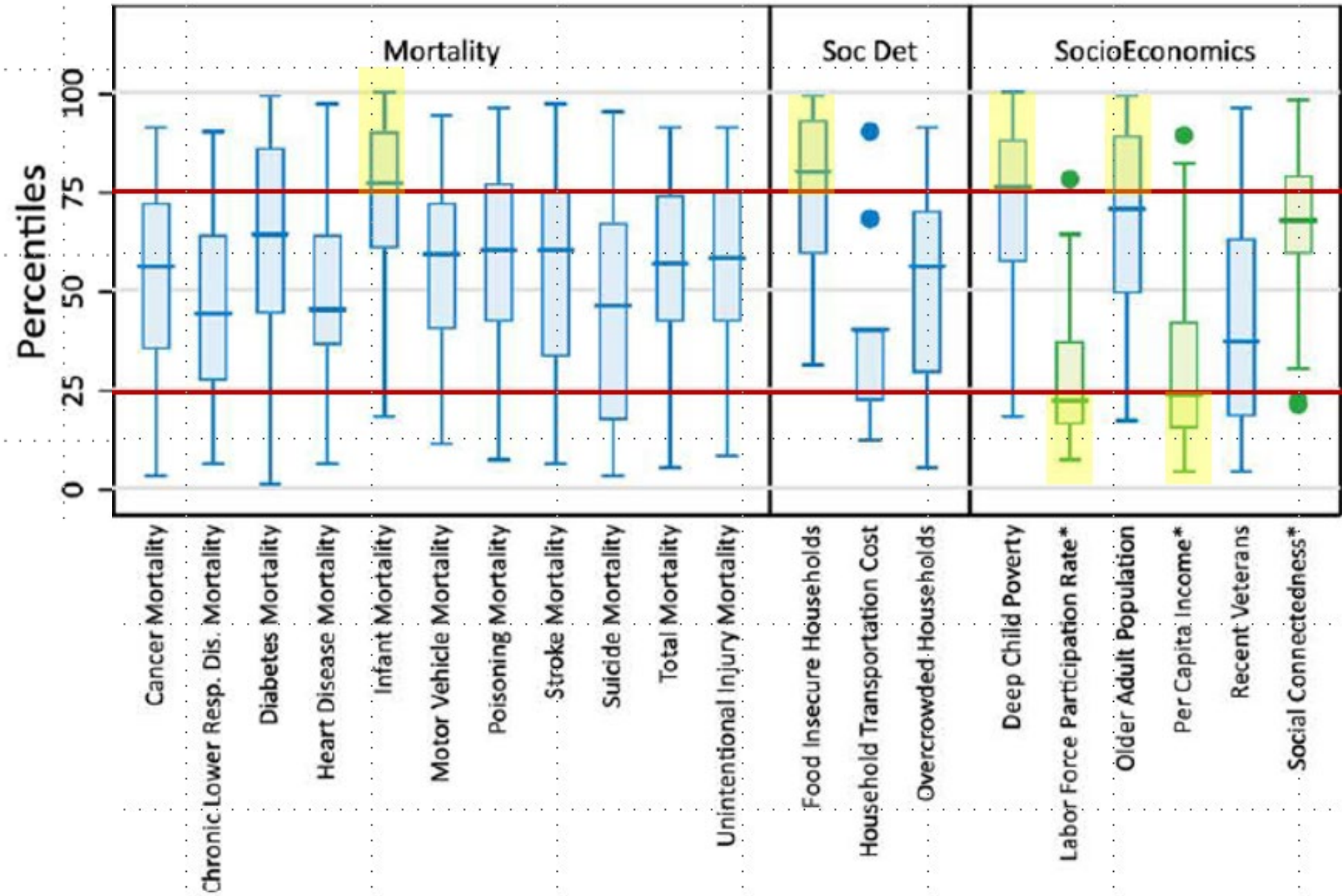
# Pressing Issues for Rural North Carolina

In rural NC, highlighted indicators have less healthy rates than most other counties.

- 1. Infant mortality
- 2. Food insecurity
- 3. Child poverty
- 4. Labor force
- 5. Per capita income
- 6. Employer sponsored insurance
- 7. Uninsured
- 8. Low birth weight

**RANGE** – most have broad range with some counties in Q 1 and Q4. Exceptions: Food insecurity (no Q1)

**NEXT STEP:** Look at other charts to see how some of these pressing issues look.



## **National Maps**

Rural and urban counties are shown

Look for regional patterns

Are there Issues that cross borders?



# Reading the maps

Urban area – map doesn't show value

## National maps

Are there regional patterns for this indicator?

**Blues** = rural counties with data

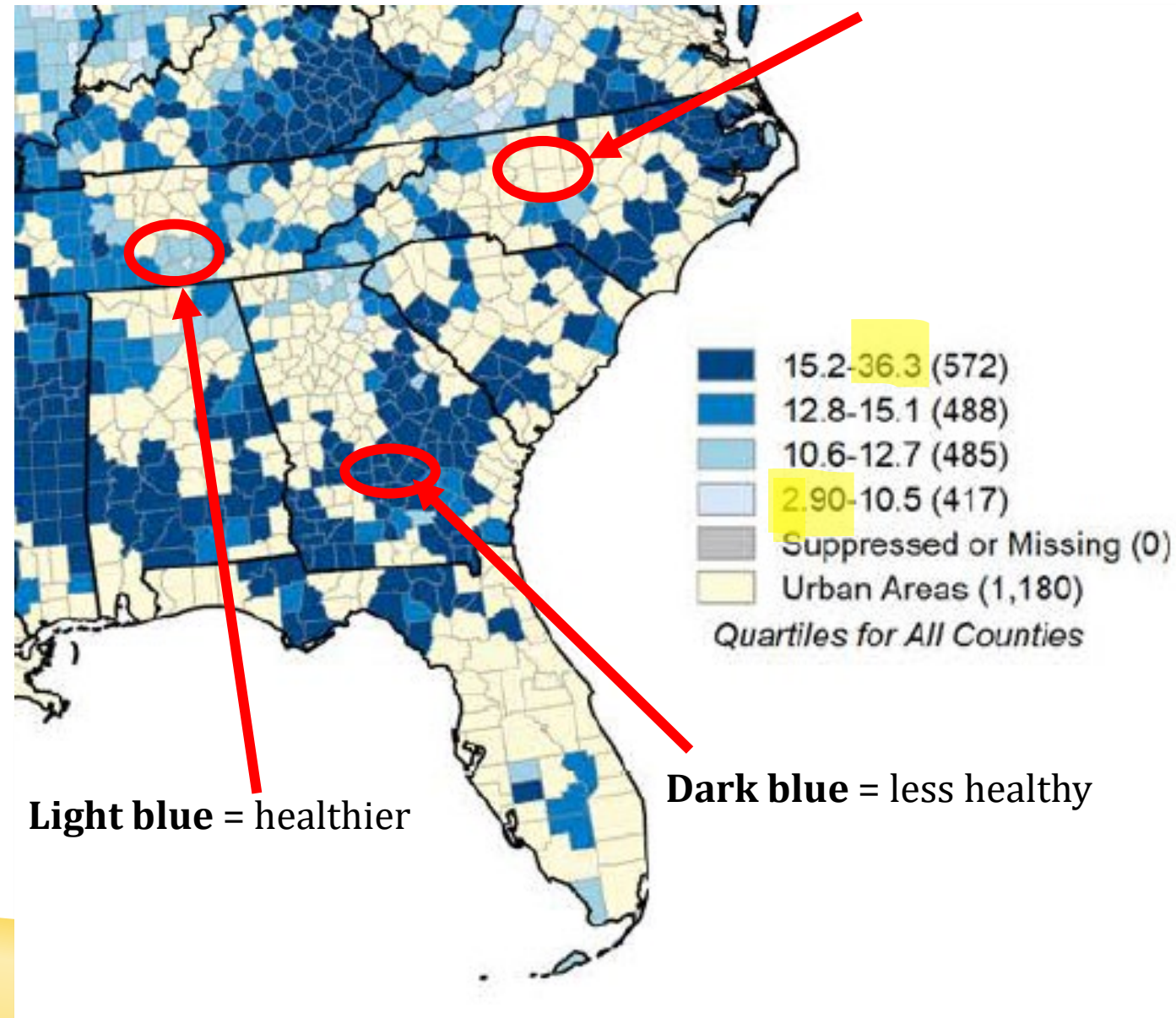
**Darker blue** represents in the least healthy quartile (less healthy than 75% of U.S. county values)

**Lighter blues** are more healthy

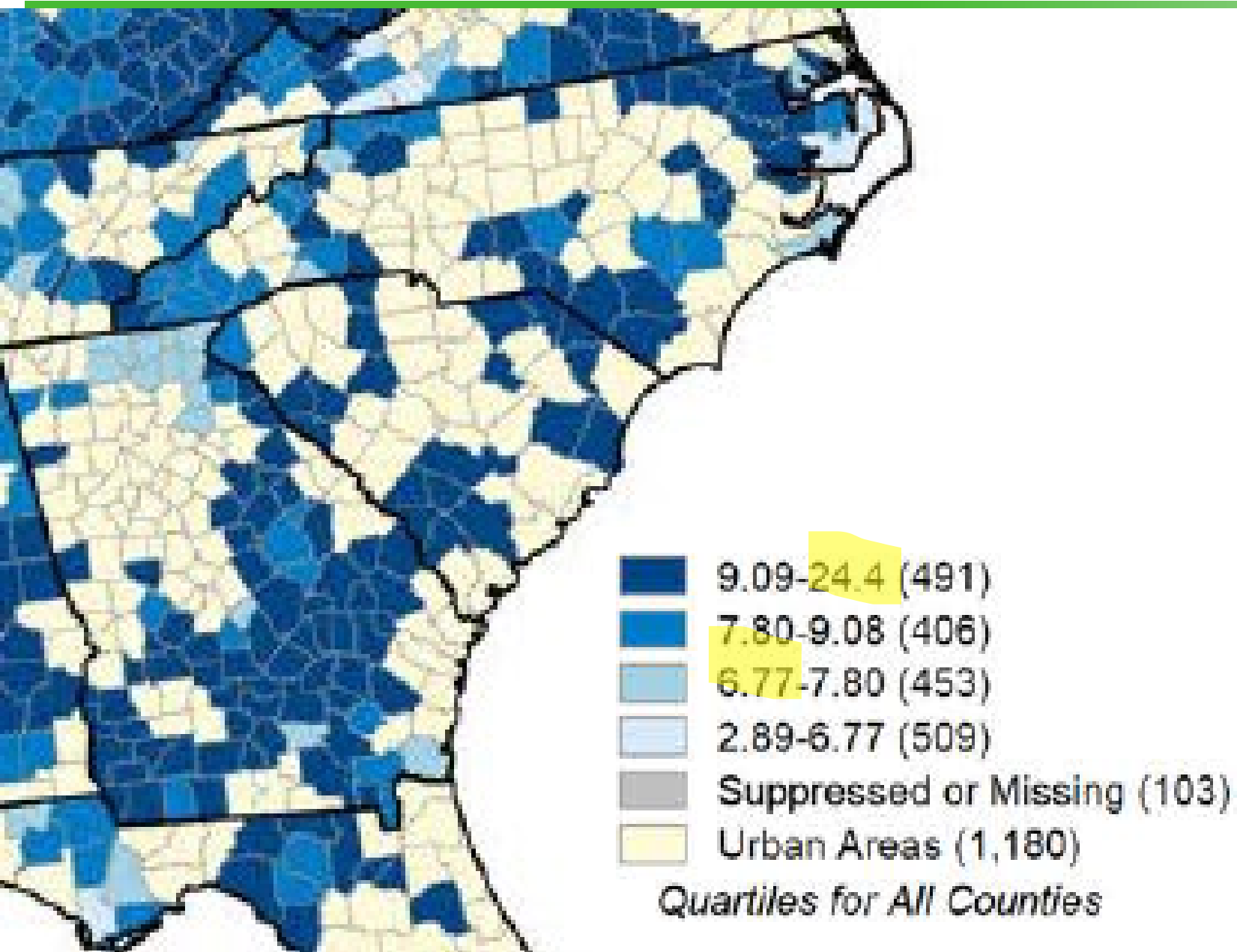
**Yellow counties** are urban (no values shown)

**Grey counties** have suppressed data

U.S. data range in legend - 2.90 - 36.3



# Low birth weight in NC



**28** rural NC counties in 4<sup>th</sup> quartile (9.09-13.4% LBW).

**16** rural NC counties in 3<sup>rd</sup> quartile.

**5** in Q2

**1** in Q1

No missing or suppressed data

# Summary

What are the most pressing issues in my state?

Do we have rural-urban health disparities?

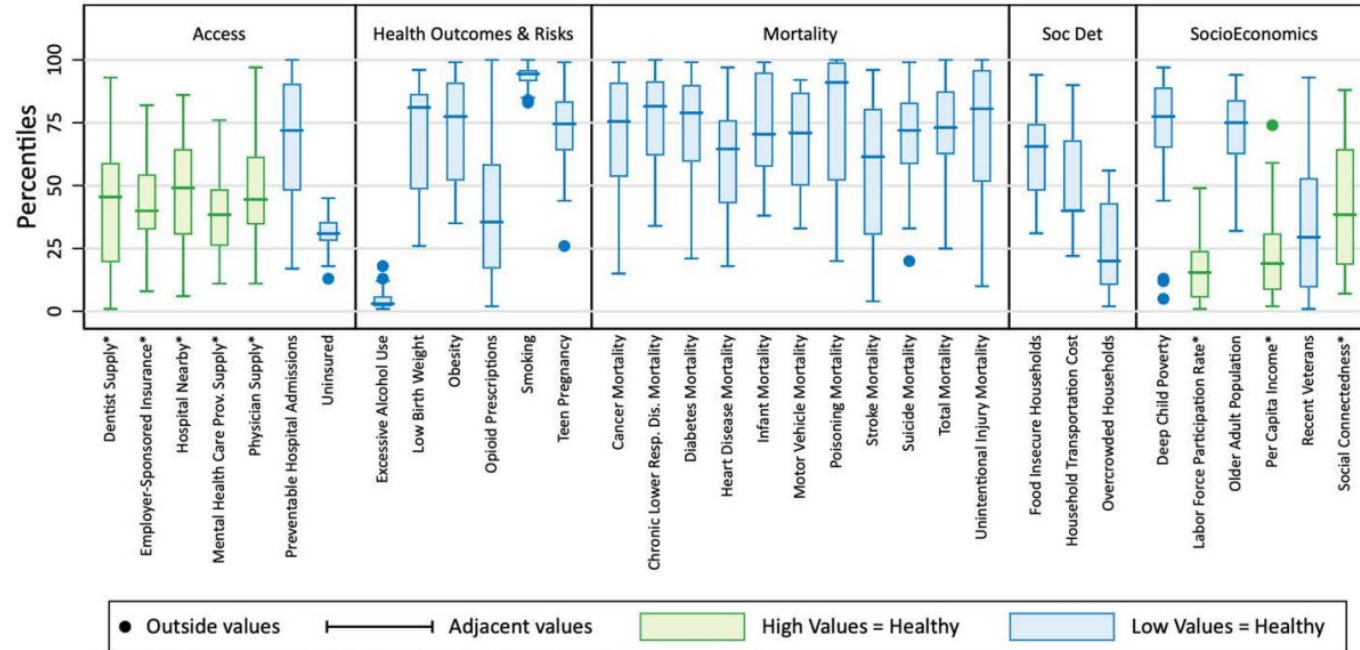
How does my state compare to the rest of the country?

Are we part of a regional issue?

Are there differences based on sex, race, and ethnicity in my region?

# Summary – What are our most pressing issues?

## West Virginia Summary



Note: Blue boxes are for indicators where higher values denote worse health. Green indicators, also denoted with a \* in the label, are indicators where higher values denote better health.

## State summary charts – all indicators

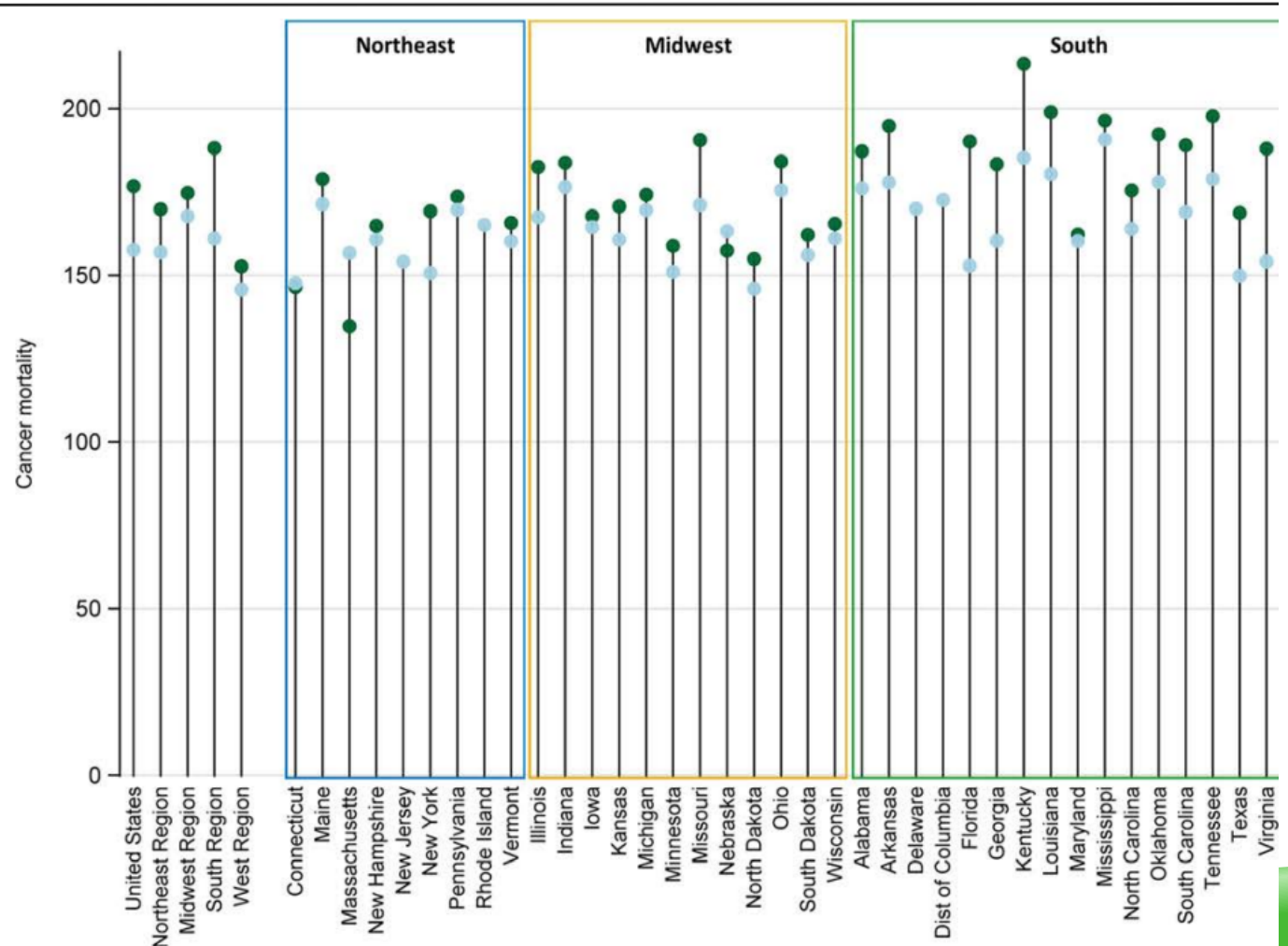
- ▶ Remember gray horizontal lines are national quartiles –shows you how you rank compared to other counties in U.S.
- ▶ Do you have indicators in 25<sup>th</sup> and 75<sup>th</sup> percentiles?
- ▶ Depending on indicator, having data in upper or lower quartiles means you have some county rates that are among the best or worst nationally.
- ▶ Helps identify pressing issues and consider range of state data.

# Summary – Do we have a rural-urban disparity?

- Which indicators have the largest disparities in your state?
- How does your state's disparity compare to other states for the indicators? Are you similar to other states in your region?
- How does your rural state average compare to other states?

## Cancer Mortality

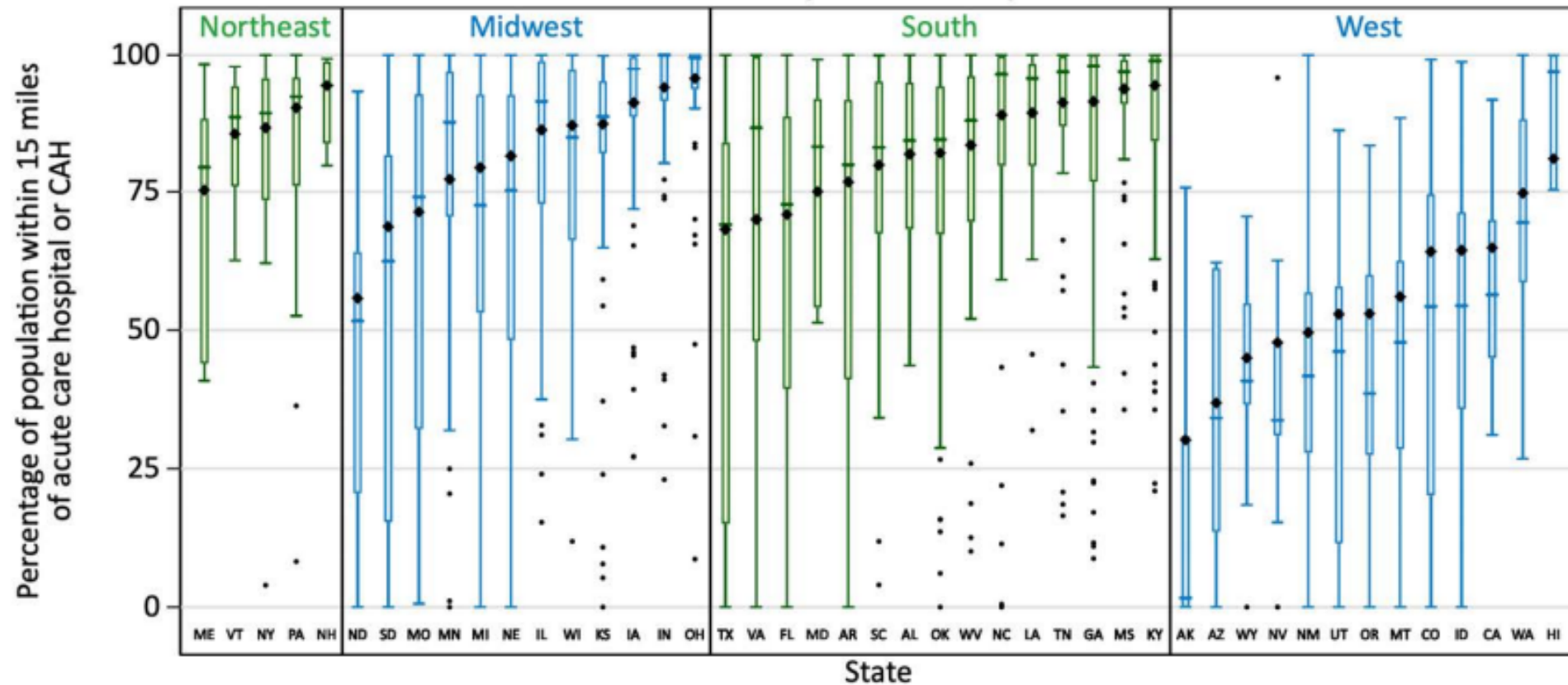
Five-year average all-cancer mortality per 100,000 (2012-2016)





# Summary – How does my state's rural data compare to other states?

- How does your rural data compare with other states?
- What does your rural data range look like?
  - Broad or narrow?
  - Centered or skewed?
- Do you have counties in the upper or lower quartiles?

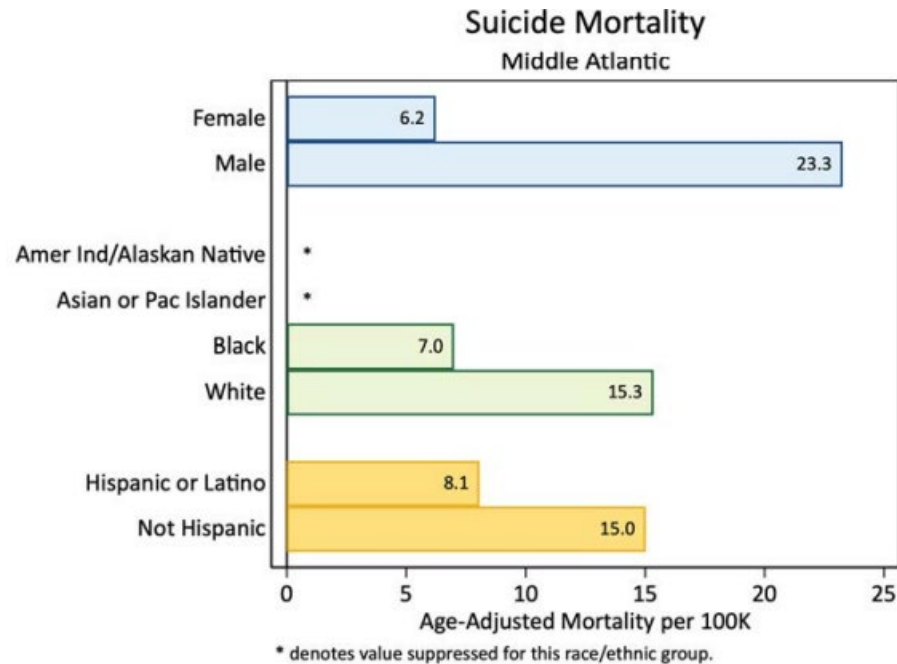


• State rural average • Outside values — Adjacent values 25th/75th percentiles

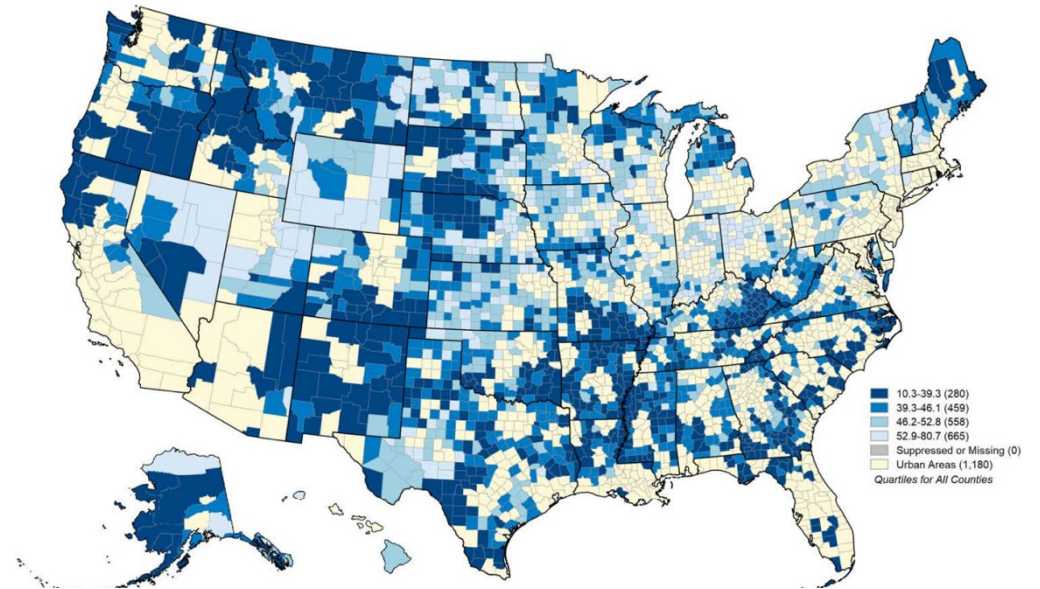
Note: States sorted by rural average within region.

# Summary

- Are there sex, race, or ethnicity disparities among the mortality indicators in your Census division?



- Are there geographic patterns among counties in your state?
- Do you share challenges with neighboring states?



# Chartbook uses

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- **Focus on pressing issues** - See which issues might be more urgent compared to others.
- **Identify disparities** - Identify areas where rural residents have poorer health outcomes compared to their urban counterparts.
- **Position your state among other states** – See how your states rates compare to other states for the same indicator.
- **Look for regional patterns** - Determine if you want to work with similar counties in other states.
- **Monitor progress** - Track changes in health outcomes and identify areas where improvements are needed.
- **Target resources** - By identifying the health issues that are most prevalent in rural areas, funding agencies can prioritize funding and resources to address these issues.
- **Educate stakeholders** - Educate stakeholders, including policymakers, health care providers, and community leaders, about the health issues facing rural populations.
- **Inform decision making** - Inform policy decisions and resource allocation.

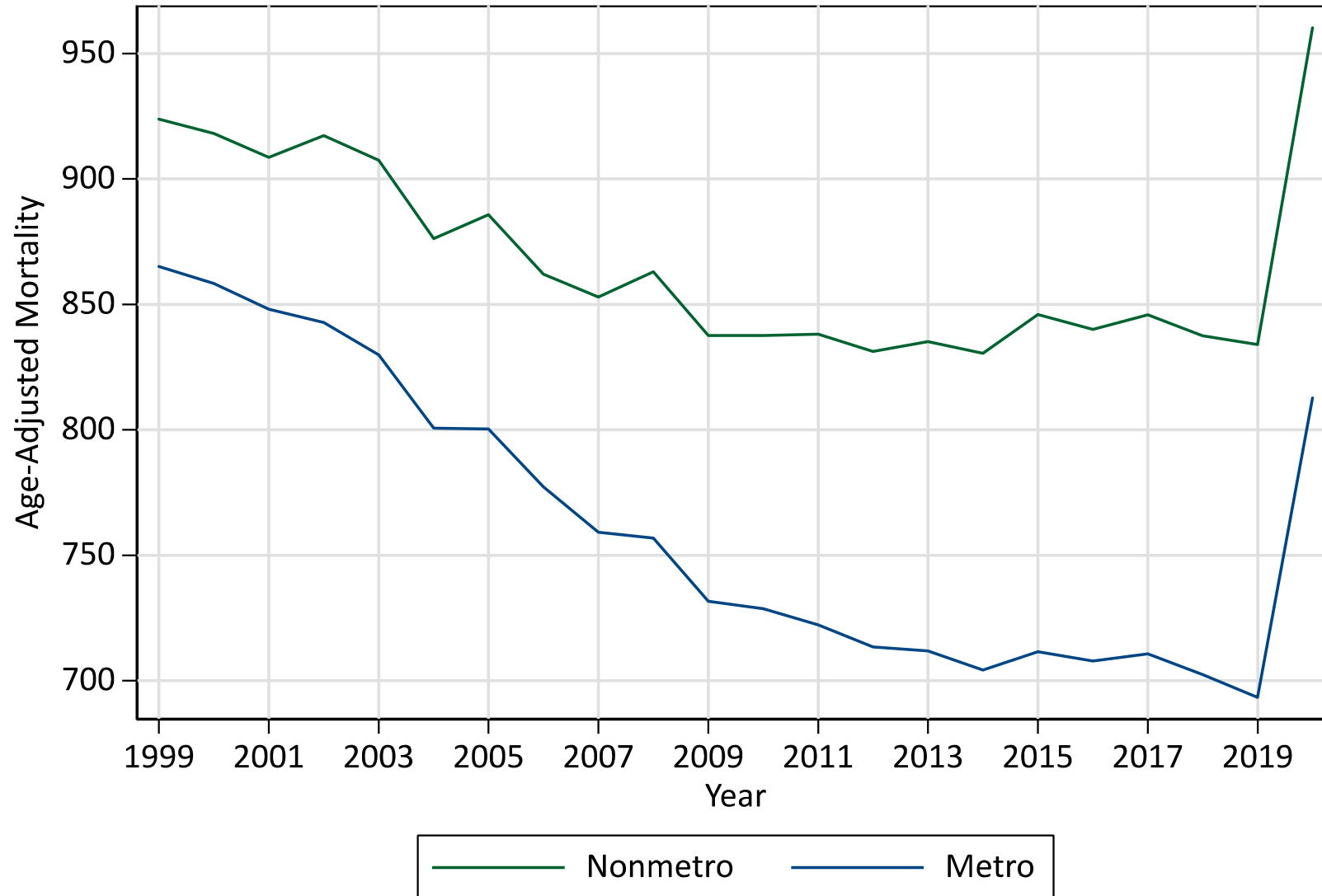
# Emerging (and Emerged!) Rural Health Issues

# Start from the lodestar

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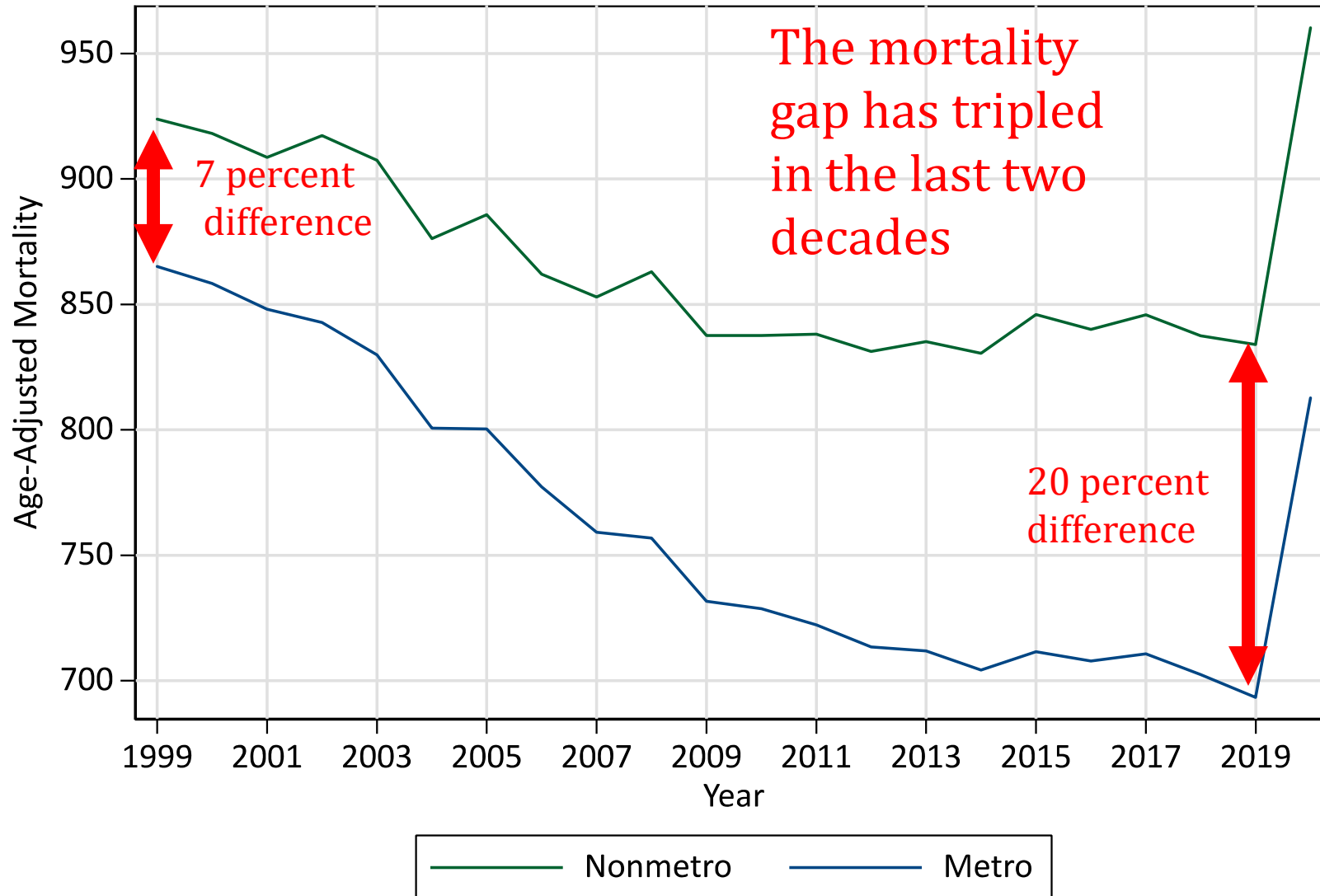
- My research largely focuses on the “supply side”
  - Workforce
  - Hospitals
  - Clinics
  - Insurance plans
- But ultimately what really matters is the health of the population
  - And the ultimate measure of population health is mortality
- So what has happened to mortality among rural populations?

# Rural communities have higher mortality and the disparity has grown



Source: CDC Multiple Cause of Death. 2013 Metro status.

# Rural communities have higher mortality and the disparity has grown



Source: CDC Multiple Cause of Death. 2013 Metro status.

# Emerging / emerged issues in rural health

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1. Rural hospital closures
2. Long-term profitability
3. Peri-pandemic period
4. The REH
5. Workforce

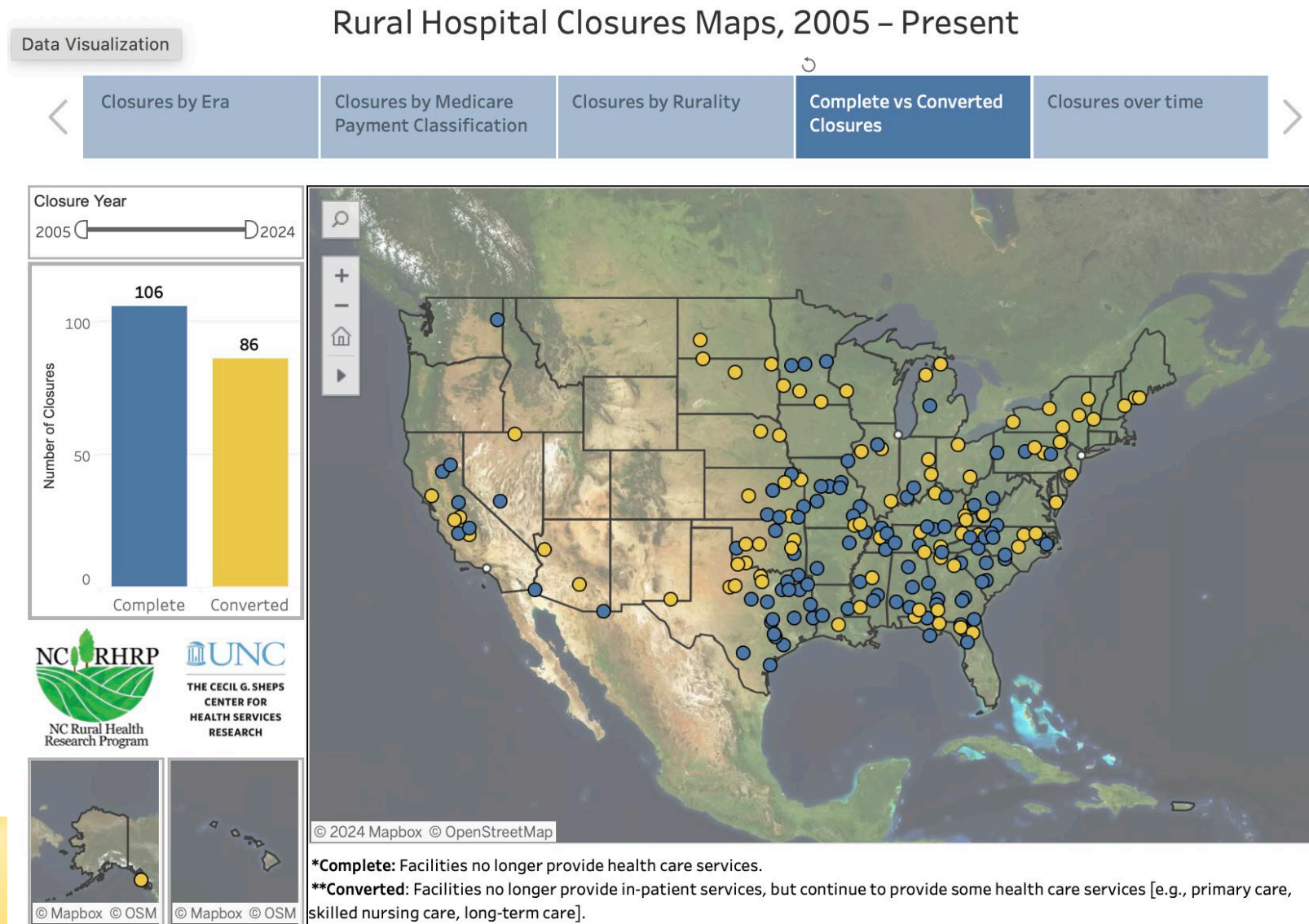


# 1. Rural hospital closures fell during COVID but they are beginning to resume



© SHUTTERSTOCK.COM

# 192 Rural Hospital Closures\* since January 2005



# Plug: rural hospital closure updates

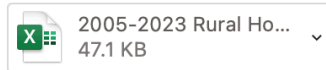
## Rural Hospital Closure Update



○ Perry, Julie <perryjr@email.unc.edu>

Tuesday, April 18, 2023 at 9:37 AM

To: ○ ruralstaff; Young, Sarah (HRSA); CAgwu@hrsa.gov; Heppner, Sarah (HRSA) (sheppner@hrsa.gov); +6 more ▾



[Download](#) • [Preview](#)

### Status change

**Anson General Hospital** – Officially converted to a Rural Emergency Hospital (REH), effective 3/27/23. The hospital closure date has been changed to 3/26/23 per QCOR data. This is the third Texas hospital to convert to an REH and the fourth overall in the nation.

### Reopening

**De Queen Medical Center**, previously a closed CAH in De Queen, AR has [reopened](#) in a new facility. The hospital [closed](#) in May of 2019 due to insurmountable financial difficulties. The community approved a tax increase to reopen the hospital but could not use the closed facility due to liens on the property from creditors of the previous owner, [Jorge Perez](#), tied to alleged health care billing [fraud](#). The old facility was also too close to nearby hospitals (CMS's 35-mile rule) to be a Critical Access Hospital (CAH) so they built the new facility 4 miles away but still in same rural community. The hospital, named Sevier County Medical Center, [opened](#) on January 23, 2023 and is working to achieve CAH status soon.

### [Currently Closed Rural Hospitals](#) – Totals by Year

Year	Hospitals
2005	8

## 2. Long-term unprofitability has not gone away



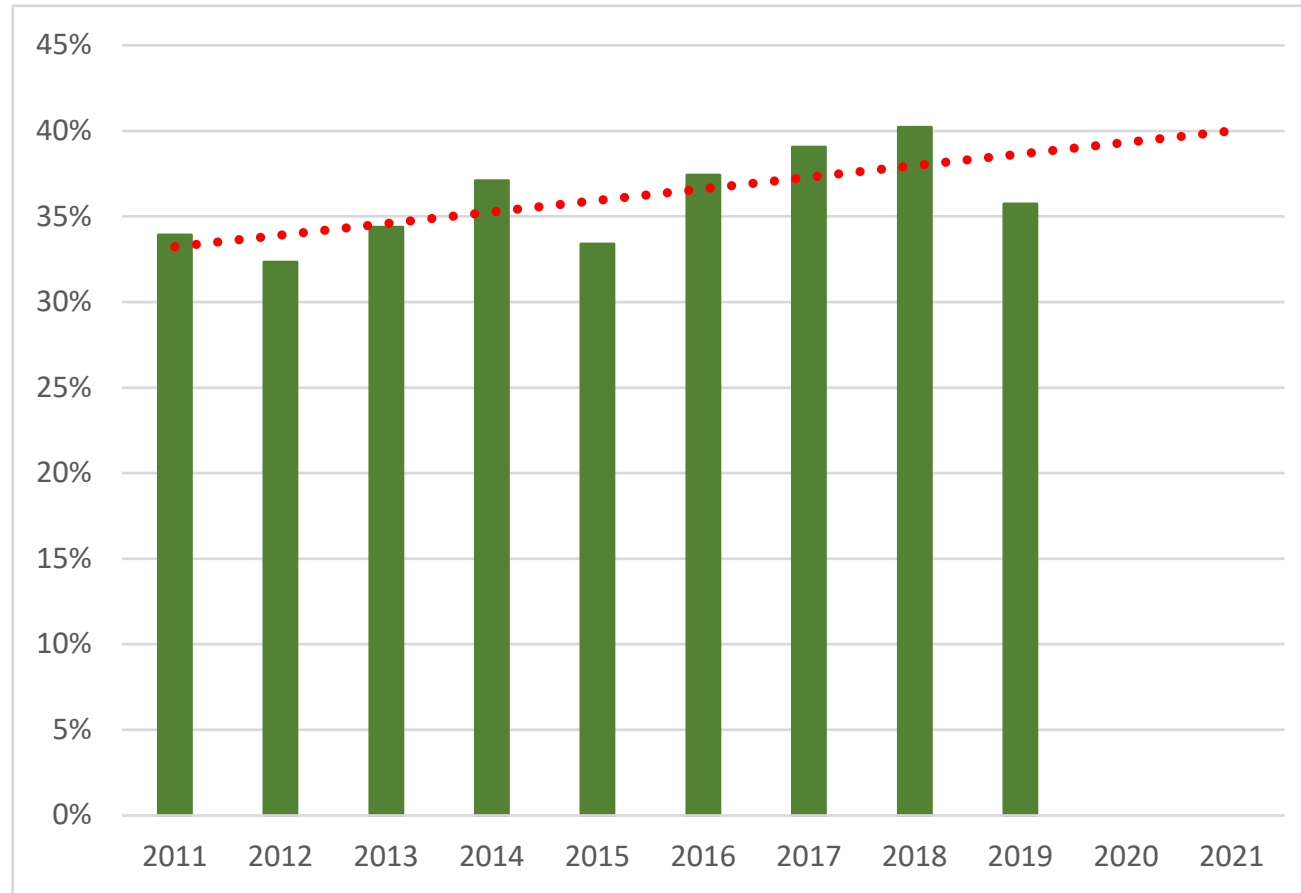
Findings Brief  
NC Rural Health Research Program

March 2022

### **Rural Hospital Profitability during the Global COVID-19 Pandemic Requires Careful Interpretation**

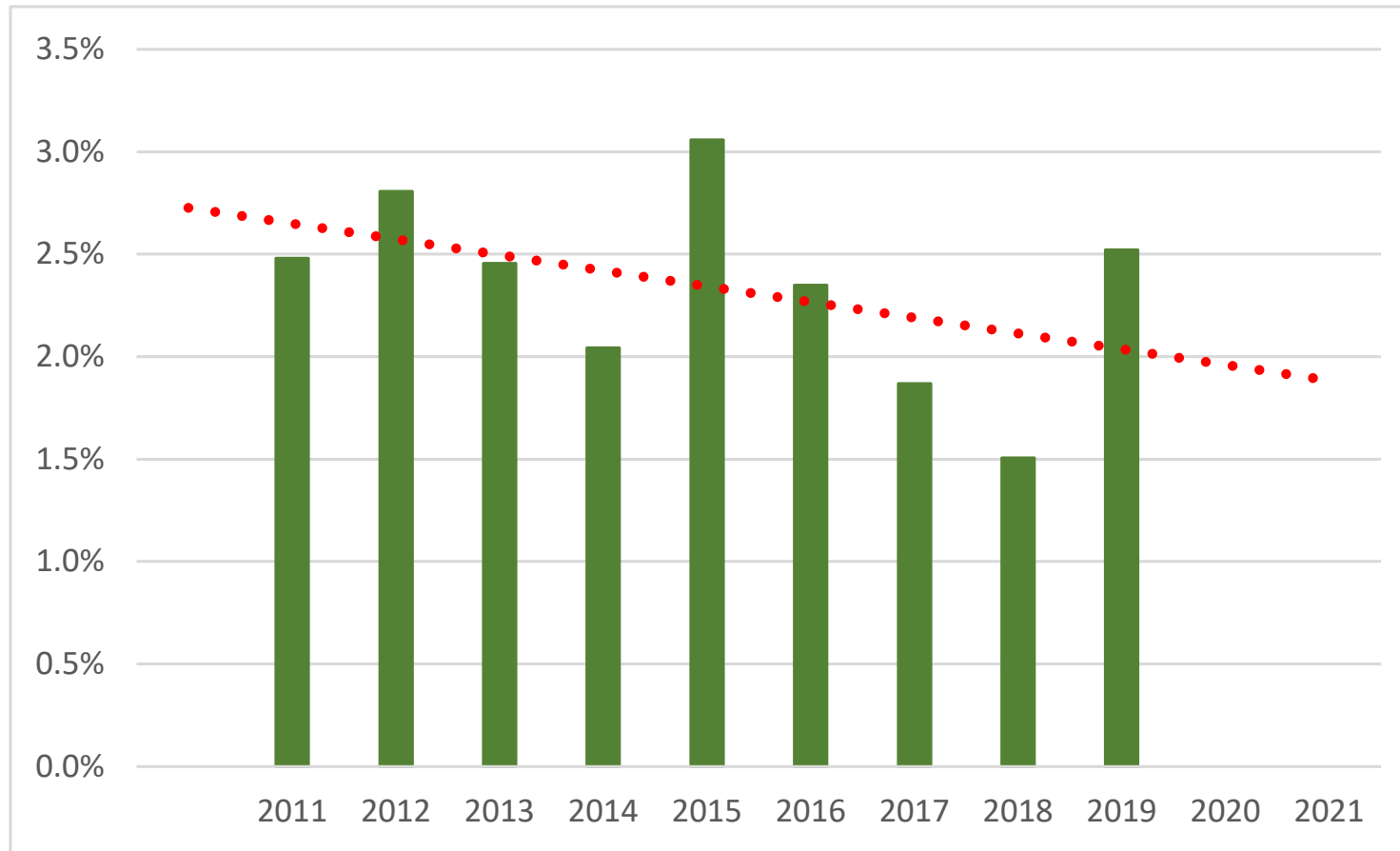
George Pink, PhD; Susie Gurzenda, MS; Mark Holmes, PhD

# The percentage of rural hospitals with a negative total margin was trending upward before COVID funding



**PRF and other COVID funding probably provided a lifeline for many rural hospitals**

# The median total margin of rural hospitals was trending downward before COVID funding



**Long-term unprofitability has not gone away**

# Rural hospital profitability increased during COVID but...

Table 1. Estimated Distribution of Provider Relief Funding to Hospitals as of February 2021 (millions)

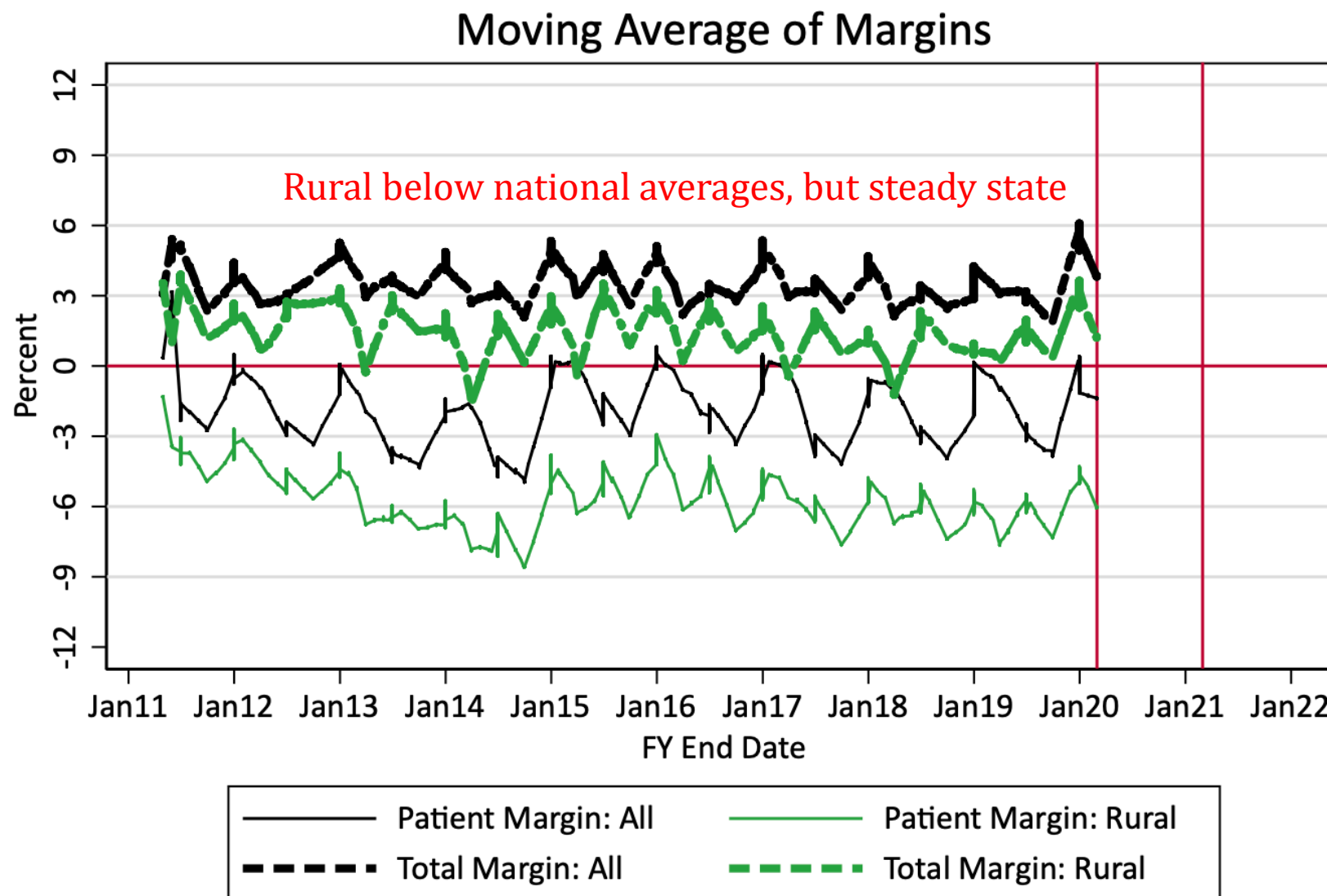
Hospital type	Number of hospitals	Number of beds (thousands)	General distribution		General, safety-net, rural, and tribal distribution		General, safety-net, rural, tribal, and high-impact distribution	
			Total funding	Funding as a share of FY 2018 operating expenses	Total funding	Funding as a share of FY 2018 operating expenses	Total funding	Funding as a share of FY 2018 operating expenses
Urban	3,567	567.8	\$18,643	2.0%	\$30,305	3.3%	\$49,273	5.3%
Rural	2,454	102.5	\$2,433	1.9%	\$14,261	11.0%	\$14,967	11.5%
Total	6,021	670.3	\$21,077	2.0%	\$44,566	4.2%	\$64,241	6.1%

Source: COVID Relief Funding for Medicaid Providers, MACPAC Issue Brief February 2021. (<https://www.macpac.gov/wp-content/uploads/2021/02/COVID-Relief-Funding-for-Medicaid-Providers.pdf>)

- The Provide Relief Funds, Paycheck Protection Program, and timing differences in reporting could temporarily distort reported profitability measures and conceal the long-term financial challenges facing rural hospitals.



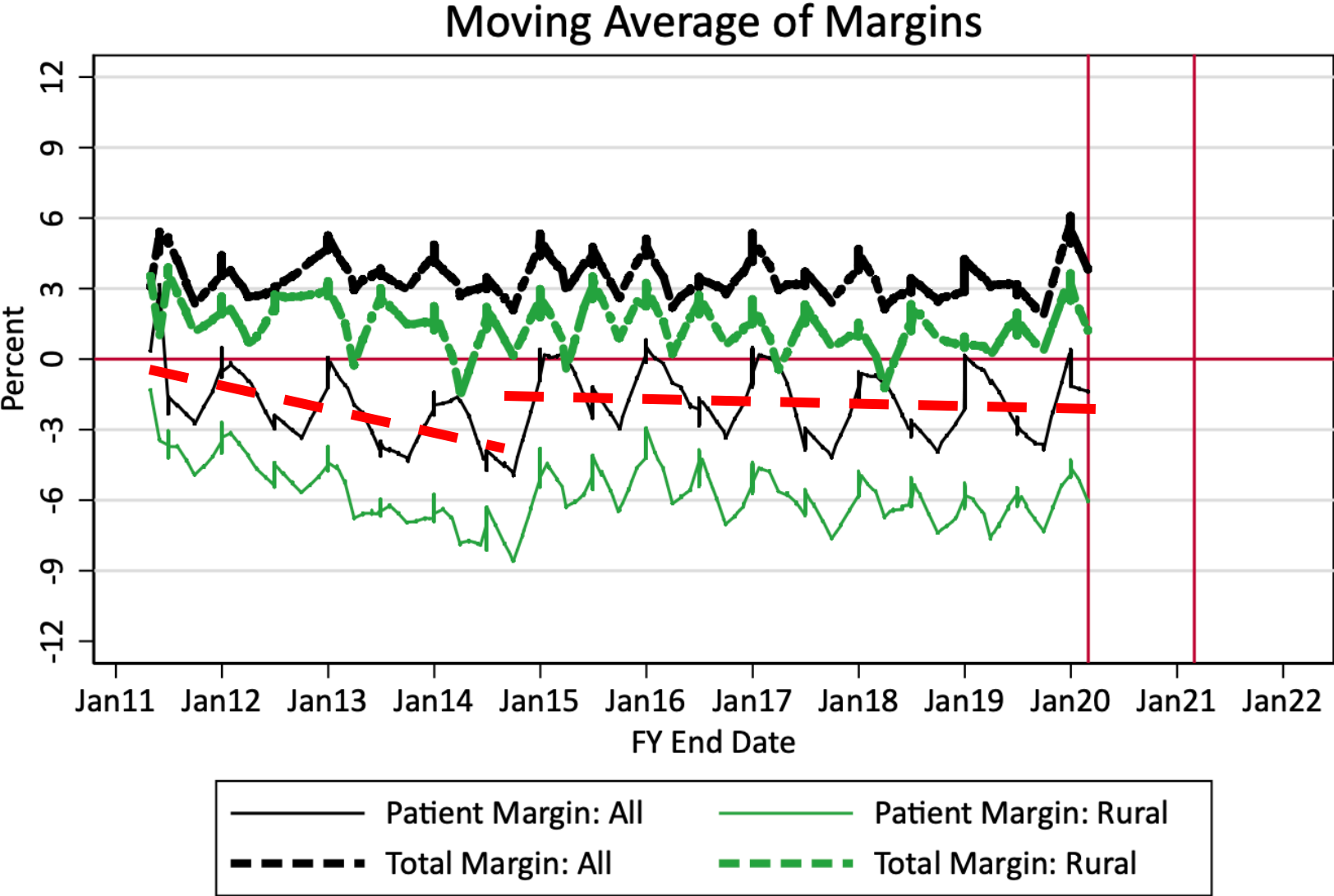
# 3. Trends pre- and peri- pandemic



Red vertical lines denote 3/1/2020 and 3/1/2021

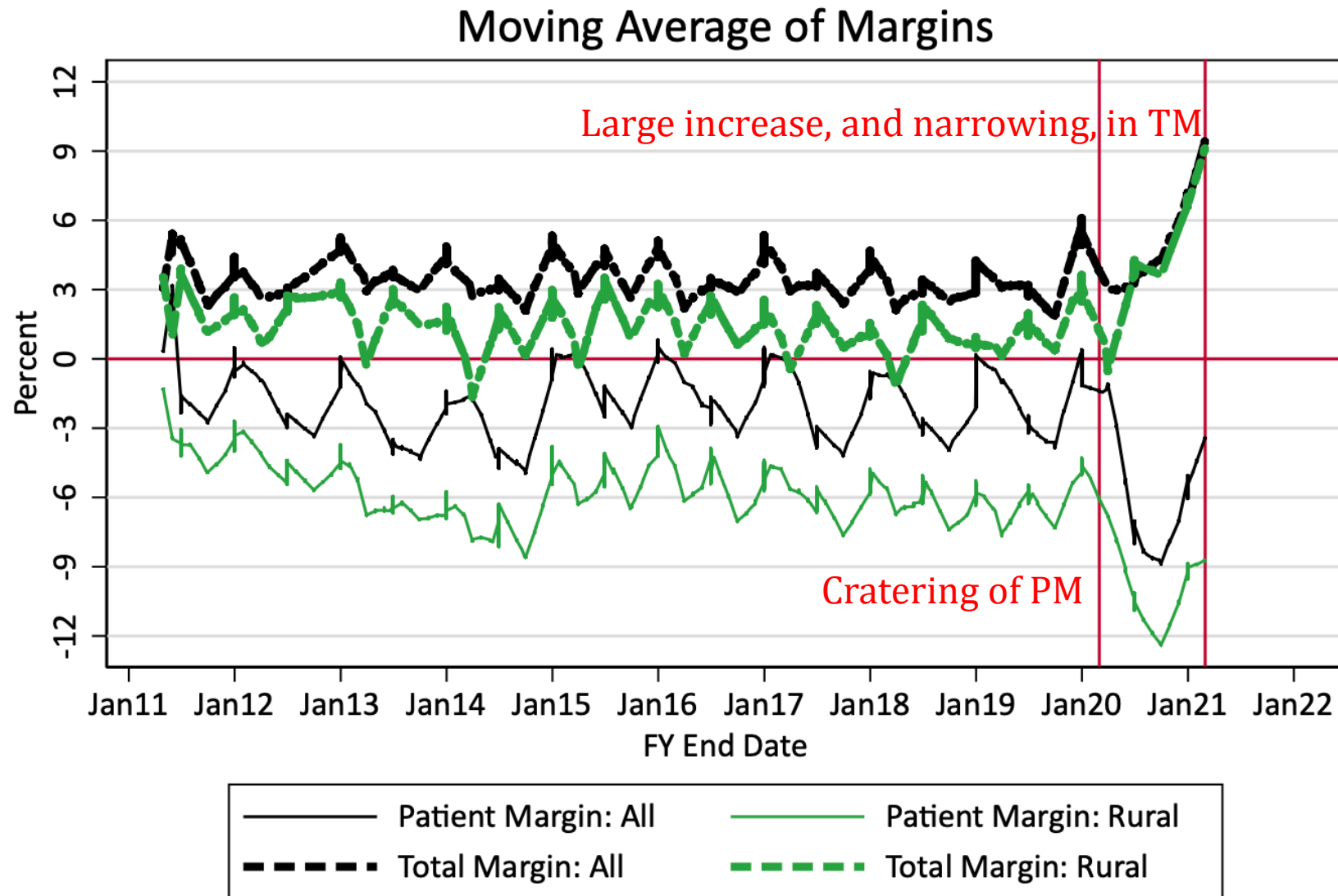


# Trends pre- and peri- pandemic



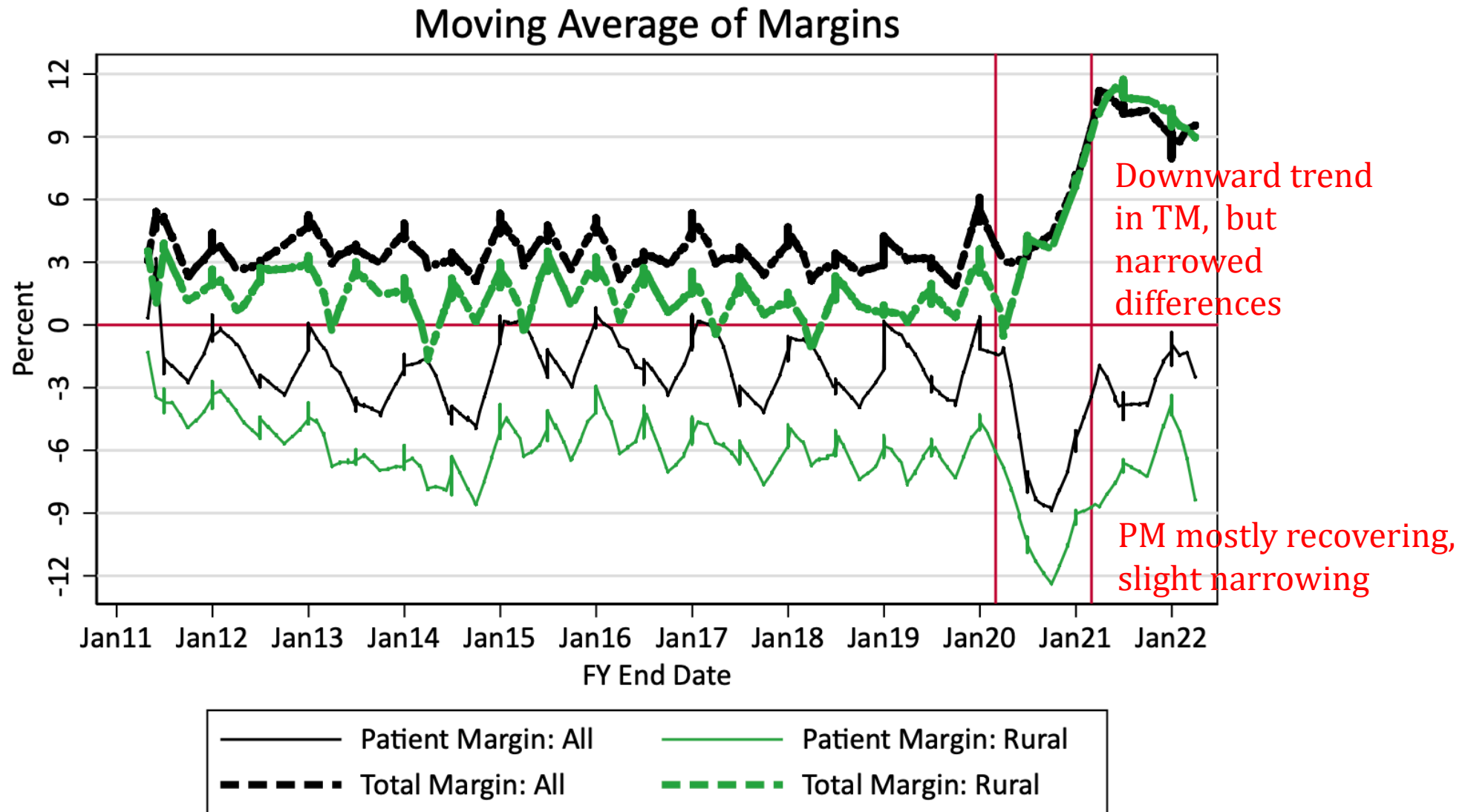
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# Trends pre- and peri- pandemic



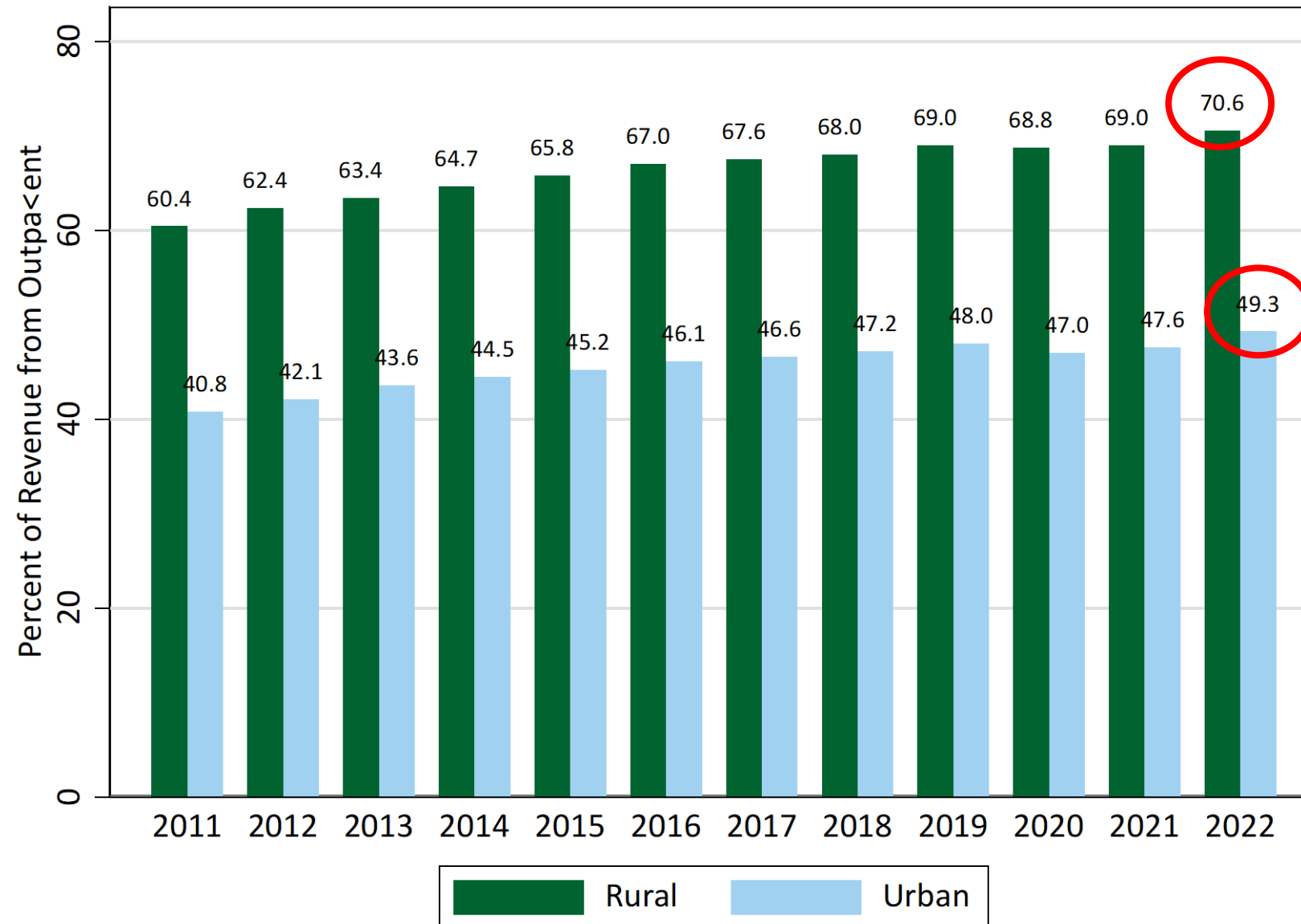
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# Trends pre- and peri- pandemic



Red vertical lines denote 3/1/2020 and 3/1/2021

# Rural hospitals are primarily outpatient-based facilities



Although both rural and urban hospitals are seeing increases, almost 71 percent of revenue for rural hospitals come from outpatient services (vs. 50 percent in urban)

# So where does that leave us?

- Hospital closures and unprofitability set to resume after COVID funding disappears
- Inpatient care will continue to decline, and outpatient care will continue to increase
- Patient bypass is uncertain but demographic trends towards older and sicker patients will continue

Need for a new model based on  
outpatient and emergency services –  
Rural Emergency Hospital (REH)

## 4. The Rural Emergency Hospital

- New provider type enabled by CAA (Dec 2020)
- Big Idea:
  - No inpatient care (including swing bed)
  - Additional Facility Payment of \$3.2m
  - OPPS at 105% fee schedule
- Sweet spot? A low-volume rural hospital with few options?



### RURAL EMERGENCY HOSPITAL POLICY BRIEF AND RECOMMENDATIONS TO THE SECRETARY

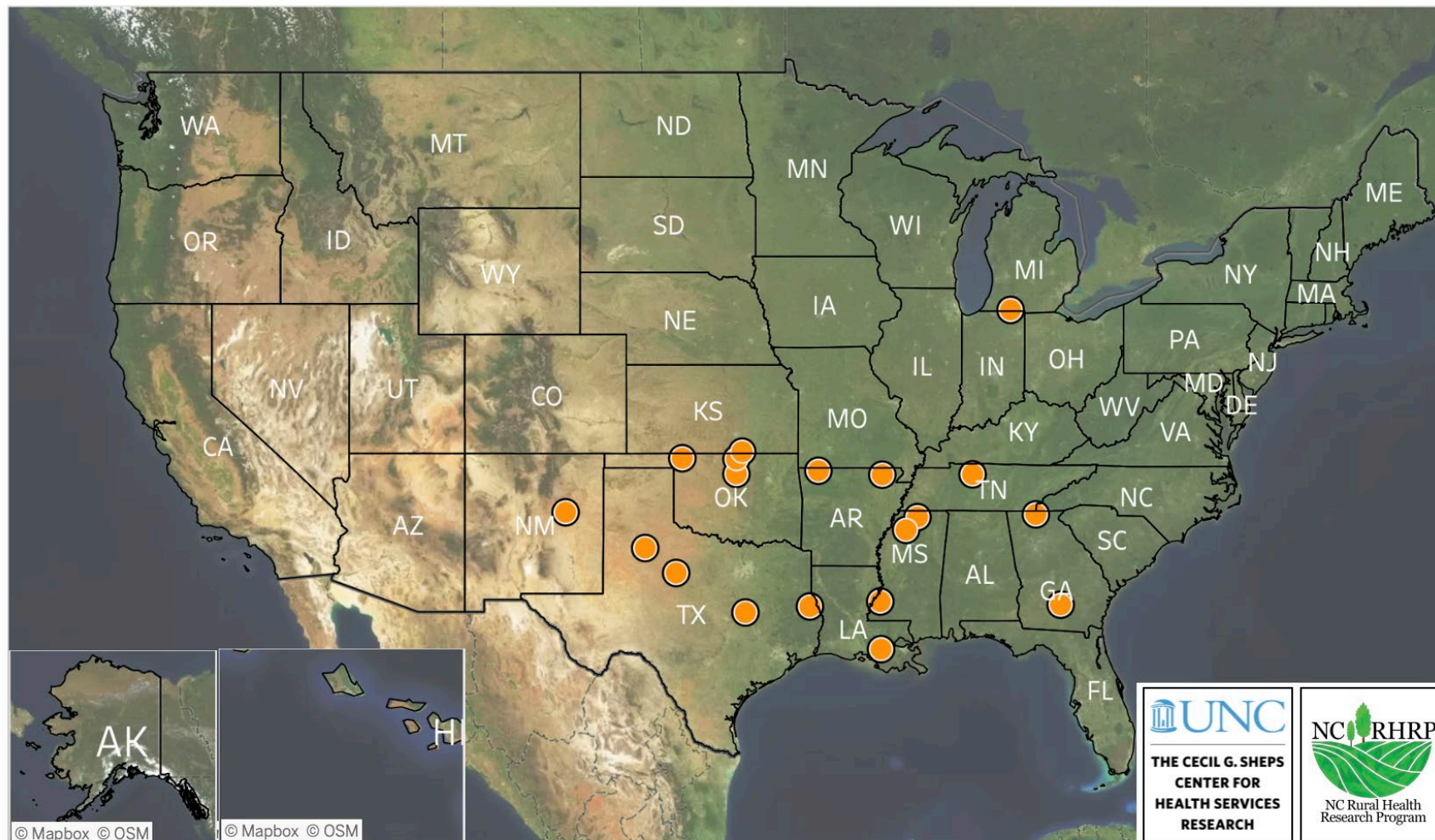
OCTOBER 2021

**NACRHHS**  
National Advisory Committee on Rural Health and Human Services



# Where are hospitals converting to REHs?

**19 Hospitals Have Converted to Rural Emergency Hospitals since January 2023**





# Importance of the REH model



- ▶ Not enough AFP
- ▶ Needs big capital upfit
- ▶ Would leave big service gaps
- ▶ Would the community view it as a “real” ED?
- ▶ Would this allow closures of otherwise healthy providers?



- ▶ Recognizes that some communities cannot support inpatient services
- ▶ Closer to a frontier model – stabilize and transfer
- ▶ Better than complete closure
- ▶ \$3.2m in AFP double some early estimates
- ▶ Is this just the opening gambit?

## 5. Workforce

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- “I’ve been studying health workforce for 22 years, and for 21 years no one cared” (E. Fraher)
- Pandemic showed the world the importance of workforce – and the fragility of rural staffing

## 5. Workforce, some topics

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- RRPD: massive investment by HRSA to foster new rural residencies ([ruralgme.org](http://ruralgme.org))
  - Disappointing rural-ness to slot expansion
- Increased openness to staffing models, partly born from innovation during pandemic and new provider types
- Return to pre-pandemic nurse staffing models (albeit at higher wages)?
- New provisions for Family Therapists and LPCs

## Other resources of note

# Other rural health research resources

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- Some examples of rural health research tools / websites of note that may be useful for this Committee

# Rural Health Research Gateway

- Dissemination for all Rural Health Research Center products
- Funded by HRSA
- Can search by topic, center

- Subscribe to alerts!



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[Browse Research](#)
[Webinars](#)
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[Other Resources](#)

## RECAP: Quality Star Ratings – Hospitals, Skilled Nursing Facilities, and Home Health Agencies

[View Recap: Quality Star Ratings](#)

### Rural Health Research Gateway

The Rural Health Research Gateway provides easy and timely access to research conducted by the Rural Health Research Centers, funded by the [Federal Office of Rural Health Policy](#). Gateway efficiently puts new findings and information in the hands of our subscribers, including policymakers, educators, public health employees, hospital staff, and more.

- [Gateway flyer](#)
- [Popular rural health products and topics, 2022-2023](#)
- [Learn more](#)

## RECAP

### Rural Behavioral Health Workforce

August 2023

Funded by the Federal Office of Rural Health Policy (FHRP), within the Health Resources and Services Administration (HRSA), the Rural Health Research Gateway disseminates work of the FHRP-funded Rural Health Research Centers (RHRC) to diverse audiences. This resource provides a summary of research conducted by the HRSA RHRC on the behavioral health workforce.

The Health Resources and Services Administration has designated Mental Health Professional Shortage Areas (MHPSA) identifying areas that lack professionals who can provide mental and behavioral health services. As of March 31, 2023, there were 4,040 MHPSA in rural areas, with 2,141 practitioners needed to remove the designations. This recap examines the behavioral health workforce, including the distribution of social workers, psychologists, psychiatric nurse practitioners, counselors, and psychiatrists.

**Social Workers, 2014-2021**  
From 2014 to 2021, both rural and urban areas experienced increases in the supply of social workers, including clinical social workers and school social workers.  
In 2014, 30.8% of rural counties and 9.8% of urban counties lacked any social workers. By 2021, 21.8% of rural counties and 5.4% of urban counties lacked a social worker. See Table 1. The ratio of social workers per 100,000 residents also increased from 2014 (19.3 in rural counties, 58.5 in urban counties) to 2021 (37.7 in rural counties, 96.4 in urban counties). See Table 2.

**Psychologists, 2014-2021**  
Data for psychologists included those with specialties in substance use disorders, adult development and aging, clinical, clinical child and adolescent, cognitive and behavioral, counseling, educational, family, group

psychotherapy, health, health services, intellectual and developmental disabilities, perinatal, medical, pediatrics, psychology, rehabilitation, school, and women.  
In 2014, 48.5% of rural counties and 19.2% of urban counties had no psychologists. By 2021, these percentages had decreased slightly to 43.3% of rural counties and 15.7% of urban counties. See Table 1. The ratio of psychologists per 100,000 residents also increased from 2014 (13.8 in rural counties, 50.8 in urban counties) to 2021 (13.8 in rural counties, 59.3 in urban counties). See Table 2.

**Psychiatric Nurse Practitioners, 2014-2021**  
Psychiatric nurse practitioners were defined to include both psychiatric and mental health nurse practitioners. Among the five types of behavioral health providers studied, across a wide-county psychiatric nurse practitioner was least common. In 2014, 82.5% of rural and 65.7% of urban counties had no psychiatric nurse practitioners. By 2021, 58.5% of rural and 30.9% of urban counties lacked a psychiatric nurse practitioner. See Table 1.

In 2014, psychiatric nurse practitioners had the lowest ratio per 100,000 residents among the five behavioral health workforce provider types, with 1.4 in rural counties and 1.9 in urban counties. By 2021, psychiatric nurse practitioners had a ratio of 3.6 in rural and 6.8 in urban counties per 100,000 residents. See Table 2.

**Table 1. Percent of Counties without Behavioral Health Professionals, 2014-2021<sup>1,2,3,4</sup>**

Profession	County Type	2014	2015	2016	2017	2018	2019	2020	2021
Social Workers	Rural	30.8%	27.4%	26.7%	26.2%	25.1%	23.9%	22.6%	21.8%
	Urban	9.8%	8.8%	7.9%	7.0%	6.8%	6.4%	5.4%	
Psychologists	Rural	48.5%	47.5%	47.3%	47.8%	47.2%	46.2%	45.4%	43.3%
	Urban	19.2%	18.6%	18.8%	18.1%	17.6%	16.0%	15.6%	15.7%
Psychiatric Nurse Practitioners	Rural	82.5%	81.2%	79.9%	79.0%	77.6%	74.6%	71.0%	58.5%
	Urban	65.7%	62.4%	62.0%	61.4%	59.5%	56.1%	53.0%	30.9%
Counselors	Rural	26.1%	23.0%	22.7%	21.8%	21.1%	20.2%	19.8%	18.4%
	Urban	9.2%	7.3%	7.0%	6.4%	5.7%	5.5%	5.1%	4.9%

### Rural Health Research Recaps

- Access brief summaries on key rural health issues
- Key findings from the work of the Rural Health Research Centers

### Research Alerts

- Email notifications when new research products are completed
- See five most recent alerts

### Research Publications

- Access policy briefs, chartbooks, journal articles, and other products developed under the Centers' Research Projects

### Research Centers

- Learn about the Rural Health Research Centers Program
- View list of currently funded research centers
- Learn about their areas of expertise

### Dissemination Toolkit

- Learn how to create health research products
- Tips for developing policy briefs, fact sheets, journal articles and more

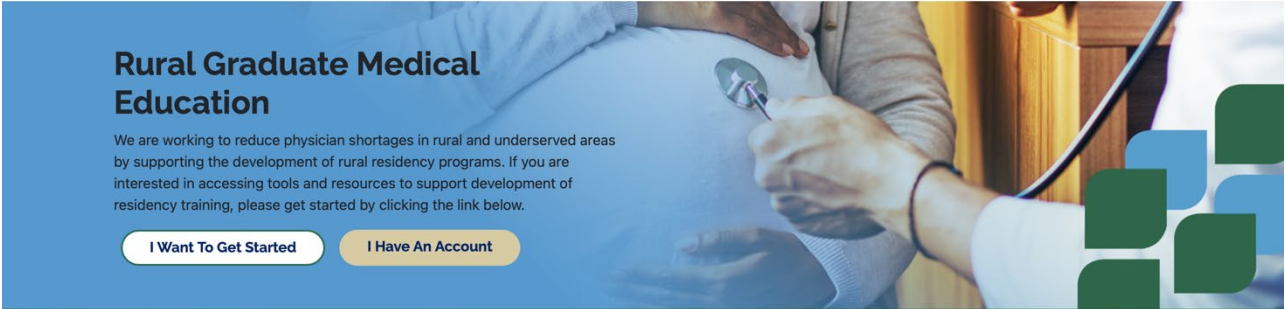


# Rural GME and THC GME

- Two Technical Assistance Centers funded by HRSA
- Focus on GME but portal has many toolkits of note



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**Rural Graduate Medical Education**




We are working to reduce physician shortages in rural and underserved areas by supporting the development of rural residency programs. If you are interested in accessing tools and resources to support development of residency training, please get started by clicking the link below.

[I Want To Get Started](#) [I Have An Account](#)

**Our Impact**

The U.S. Health Resources and Services Administration (HRSA) funded the Rural Residency Planning and Development (RRPD) Program and our Technical Assistance Center to create new rural residencies. Below are data on RRPD program outcomes to date.

NUMBERS AS OF DATE: 3/4/2024

Icon	Value	Description
	72	Grant recipients starting new rural track programs
	42	New accredited rural residency programs
	545	ACGME approved resident positions



# NAC for Rural Health and Human Services

- Advises Secretary on rural matters
- Often looks at workforce (or workforce-adjacent) topics



## MATERNAL AND OBSTETRIC CARE CHALLENGES IN RURAL AMERICA

POLICY BRIEF AND RECOMMENDATIONS TO THE SECRETARY

MAY 2020

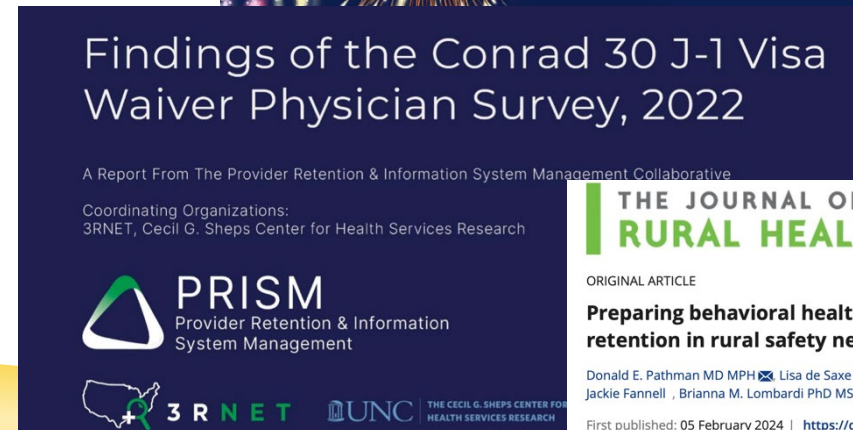
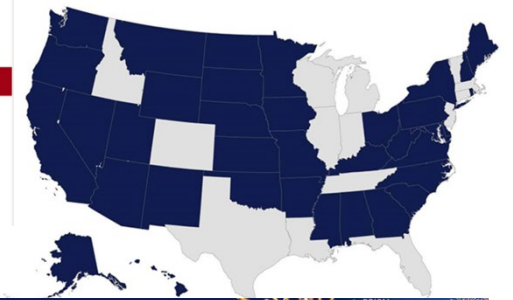
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# PRISM / 3RNET

- Partnership between BHW, FORHP, 3RNET & UNC to track experience of sites and participants in NHSC, SLRP, and other programs
- More than ten years, lots of participants, 85K questionnaires completed.
- Helps states and HRSA understand and support sites and participants and provide context on clinical experience in safety net settings — most of which are NHSC sites



Overall Work and Practice Satisfaction of  
Licensed Clinical Social Workers in the National  
Health Service Corps Loan Repayment Program  
*Jonathan Yun, Lisa de Saxe Zerden, Gary Cuddeback, Thomas Konrad, and Donald E. Pathman*



# North Carolina Rural Health Research Program

## Location:

Cecil G. Sheps Center for Health Services Research  
University of North Carolina at Chapel Hill

Website: <http://www.shepscenter.unc.edu/programs-projects/rural-health/>

Email: [ncrural@unc.edu](mailto:ncrural@unc.edu)

 Follow @ncrural

## Colleagues:

Susie Gurzenda, MS  
Mark Holmes, PhD  
Ann Howard  
Tyler Malone, PhD  
Julie Perry

George Pink, PhD  
Kristin Reiter, PhD  
Kristie Thompson, MA

# Resources

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## **North Carolina Rural Health Research Program**

<http://www.shepscenter.unc.edu/programs-projects/rural-health/>

## **Rural Health Research Gateway**

[www.ruralhealthresearch.org](http://www.ruralhealthresearch.org)

## **Rural Health Information Hub (RHIhub)**

<https://www.ruralhealthinfo.org/>

## **National Rural Health Association**

[www.ruralhealthweb.org](http://www.ruralhealthweb.org)

## **National Organization of State Offices of Rural Health**

[www.nosorh.org](http://www.nosorh.org)

For more than 30 years, the Rural Health Research Centers have been conducting research on healthcare in rural areas.



The Rural Health Research Gateway ensures this research lands in the hands of our rural leaders.

[ruralhealthresearch.org](http://ruralhealthresearch.org)

