



# Challenges and Opportunities in Rural Healthcare

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# Acknowledgements

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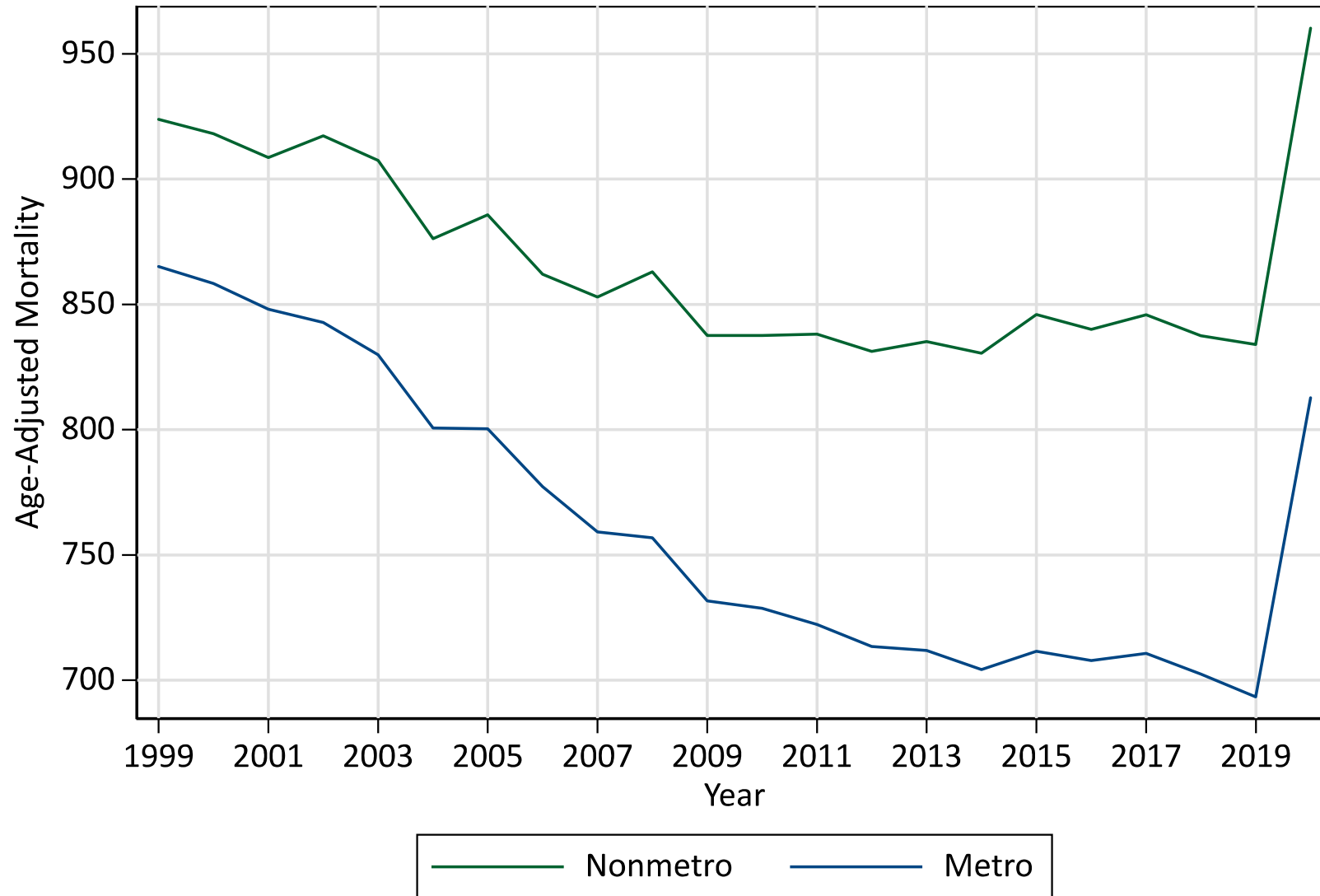
# Emerging (and Emerged!) Issues in Rural Healthcare

# Start from the lodestar

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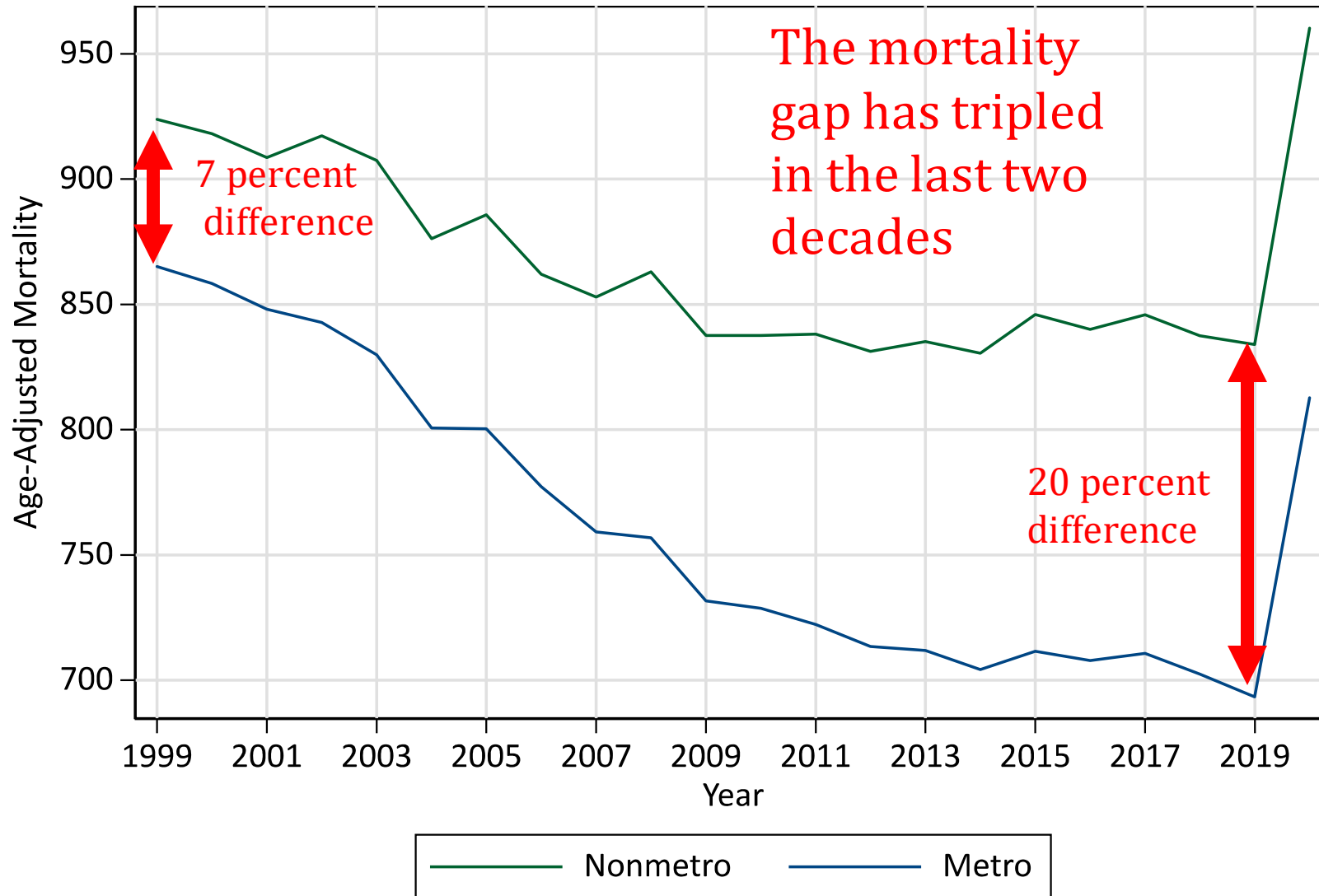
- My research largely focuses on the “supply side”
  - Workforce
  - Hospitals
  - Clinics
  - Insurance plans
- But ultimately what really matters is the health of the population
  - And the ultimate measure of population health is mortality
- So what has happened to mortality among rural populations?

# Rural communities have higher mortality and the disparity has grown



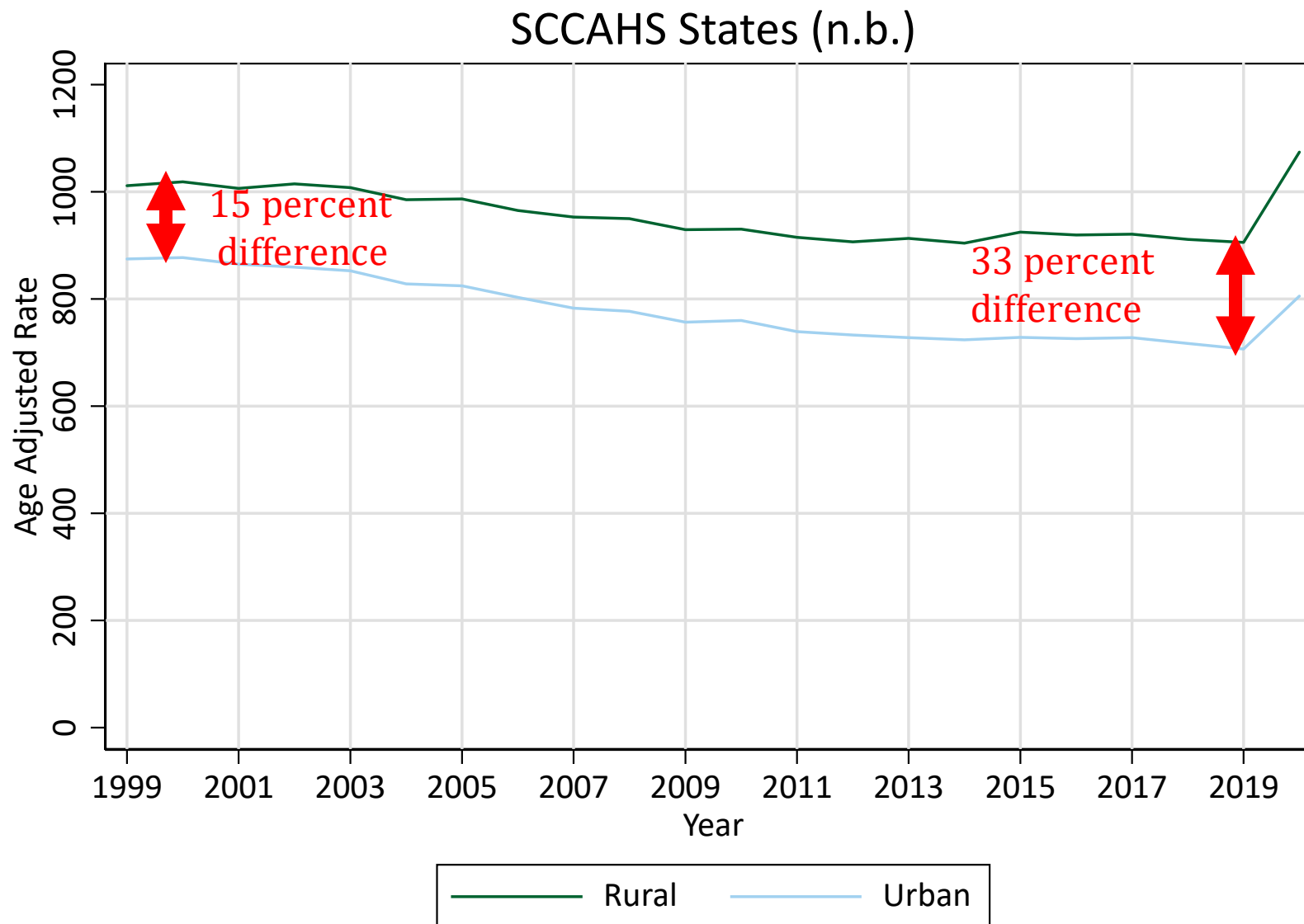
Source: CDC Multiple Cause of Death. 2013 Metro status.

# Rural communities have higher mortality and the disparity has grown

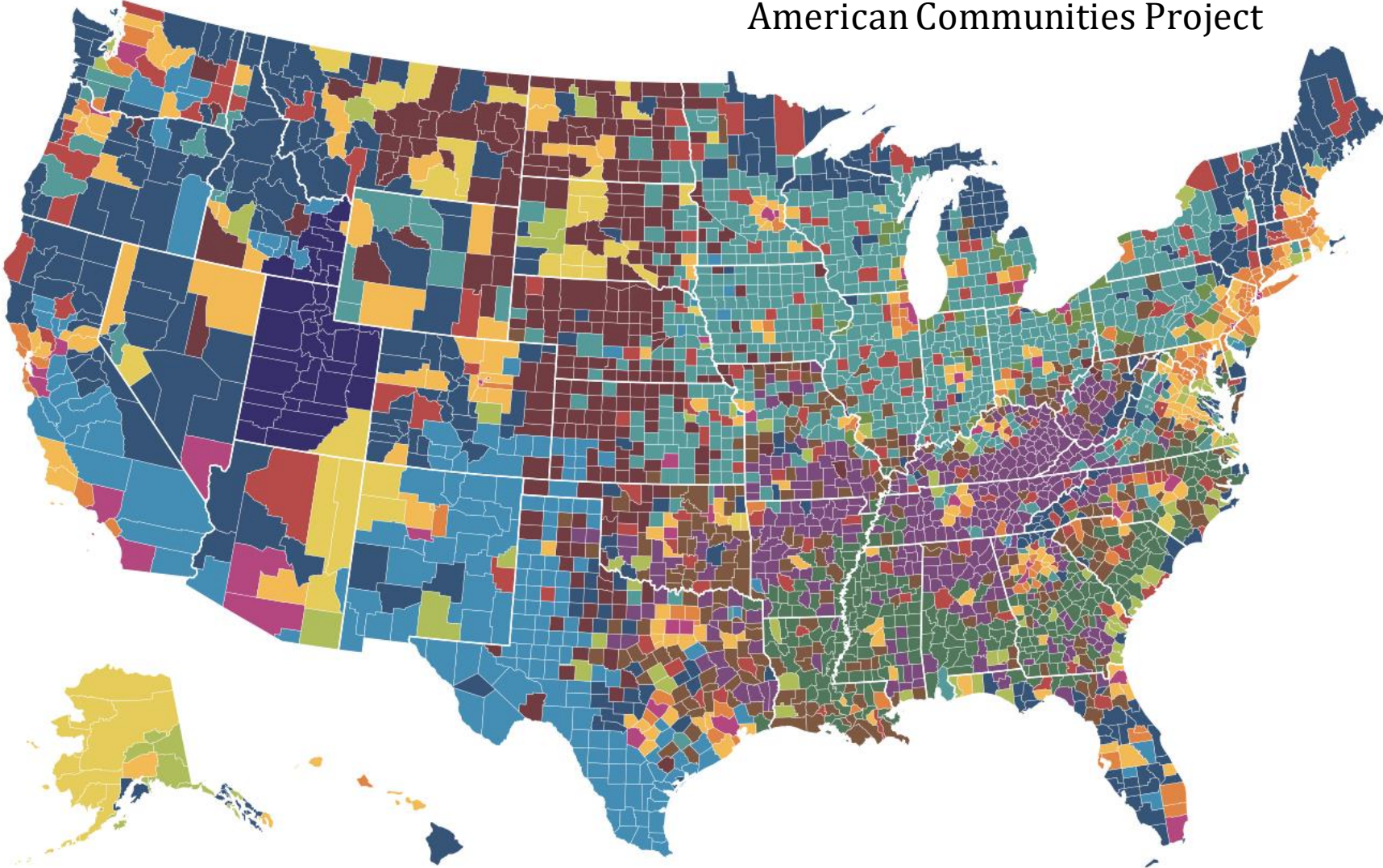


Source: CDC Multiple Cause of Death. 2013 Metro status.

# The mortality gap is even larger among AL, FL, GA, MS, NS, SC

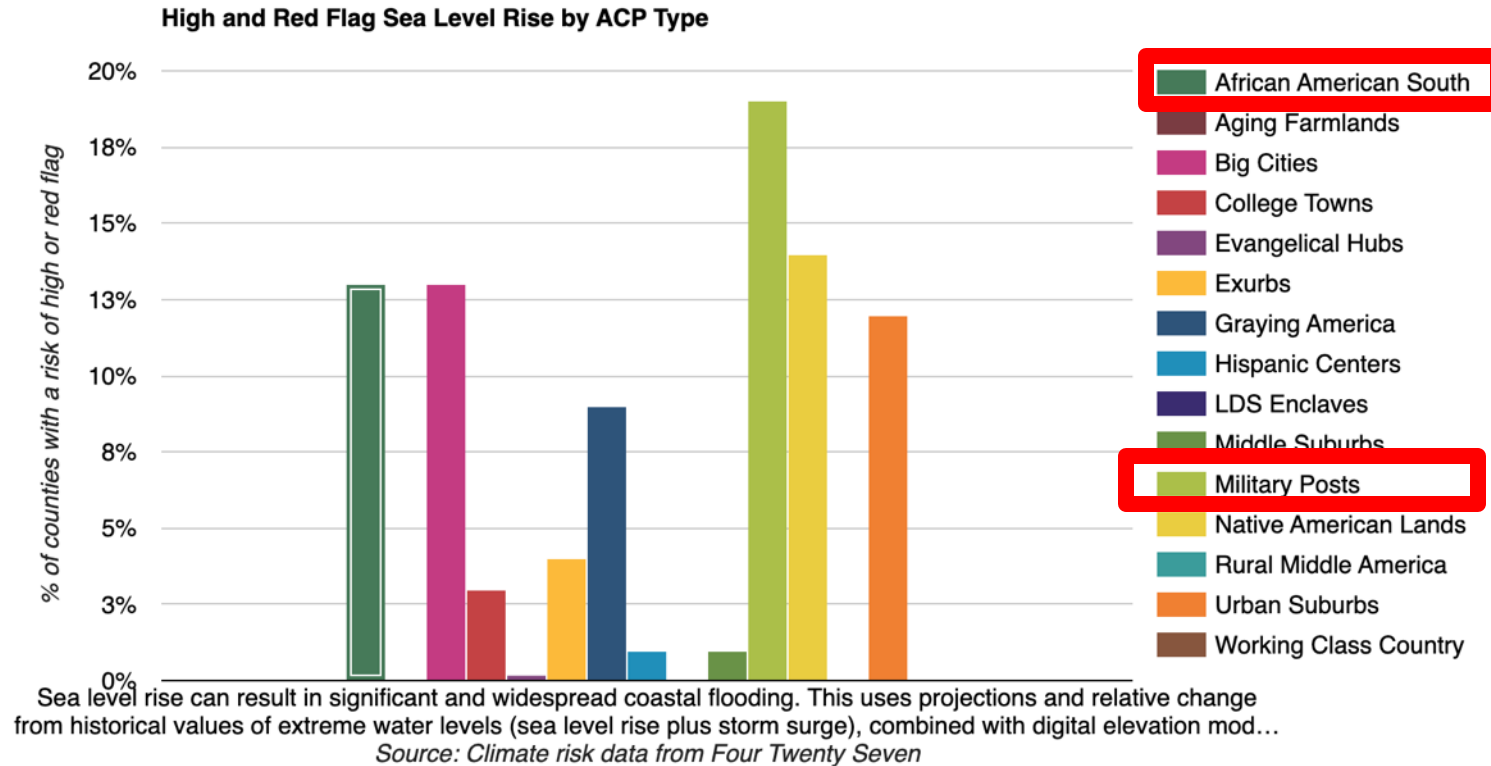


# Meanwhile, threats to rural communities from climate change are considerable (here sea level rise)



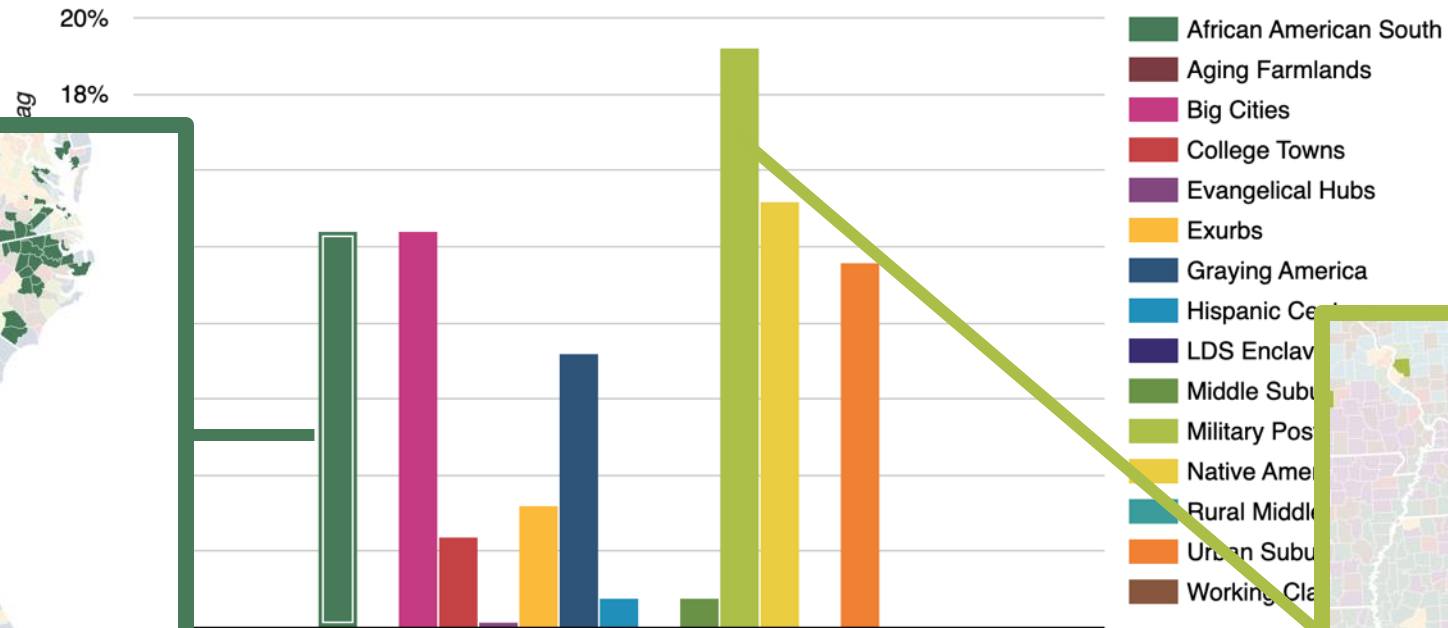


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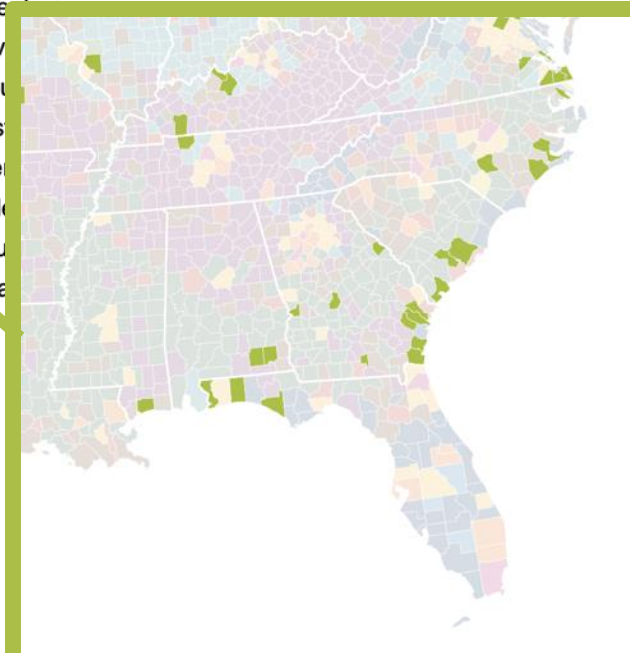
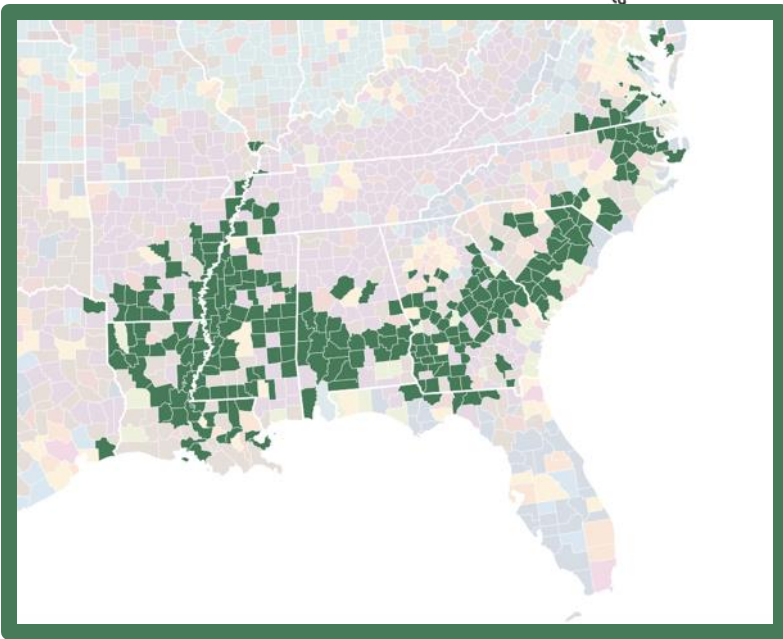


# Meanwhile, threats to rural communities from climate change are considerable

High and Red Flag Sea Level Rise by ACP Type



... result in significant and widespread coastal flooding. This uses projections and relative change  
... of extreme water levels (sea level rise plus storm surge), combined with digital elevation mod...  
Source: Climate risk data from Four Twenty Seven



# Six things we spend our time watching

# Six topics

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1. Rural hospital closures
2. Long-term profitability
3. Peri-pandemic period
4. The REH
5. Workforce
6. Change in specialty services

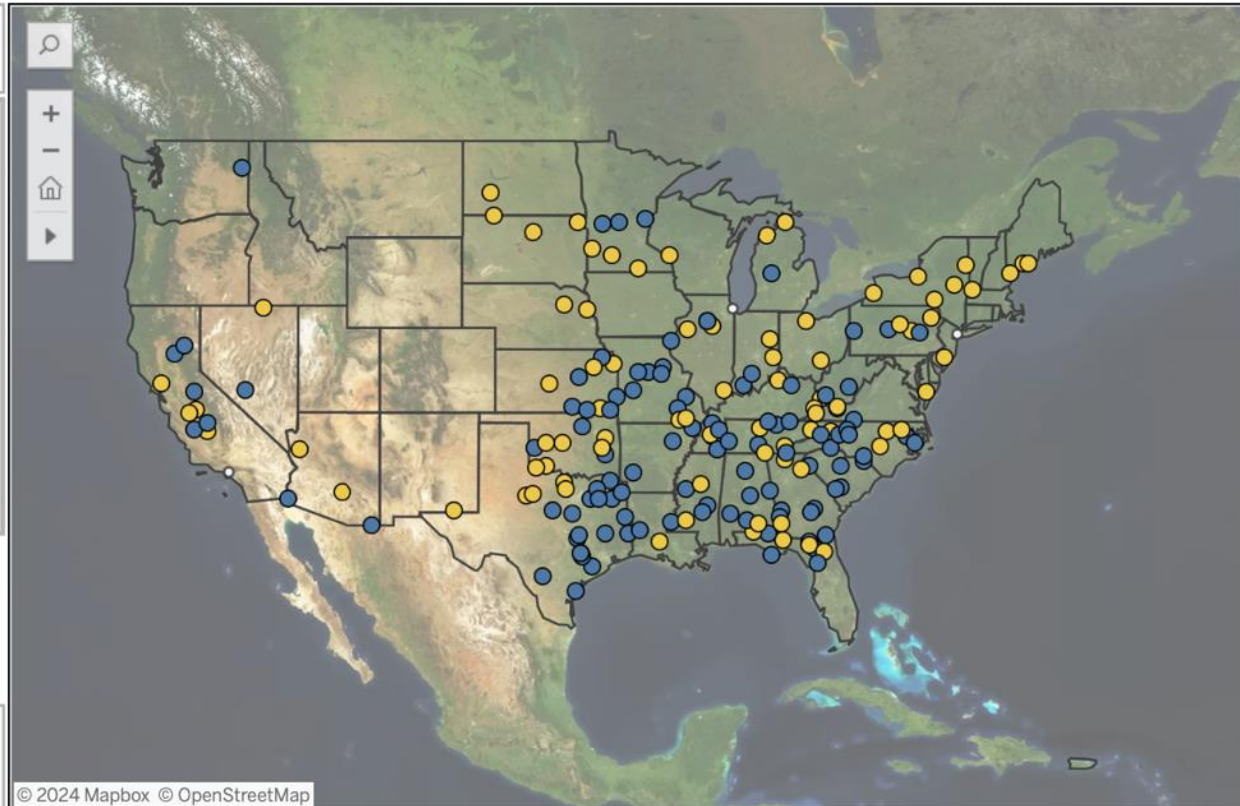
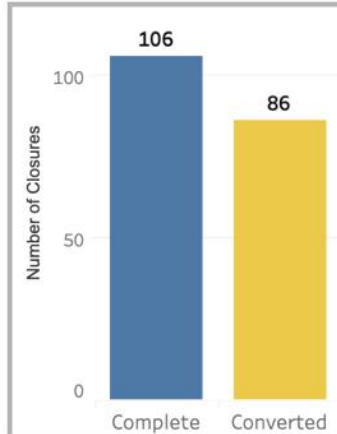
# 1. Rural hospital closures fell during COVID but they are beginning to resume



# 192 Rural Hospital Closures\* since January 2005

## Rural Hospital Closures Maps, 2005 - Present

Data Visualization



© 2024 Mapbox © OpenStreetMap

\*Complete: Facilities no longer provide health care services.

\*\*Converted: Facilities no longer provide in-patient services, but continue to provide some health care services [e.g., primary care, skilled nursing care, long-term care].



# Plug: rural hospital closure updates

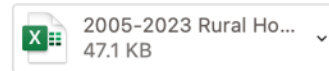
## Rural Hospital Closure Update



○ 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

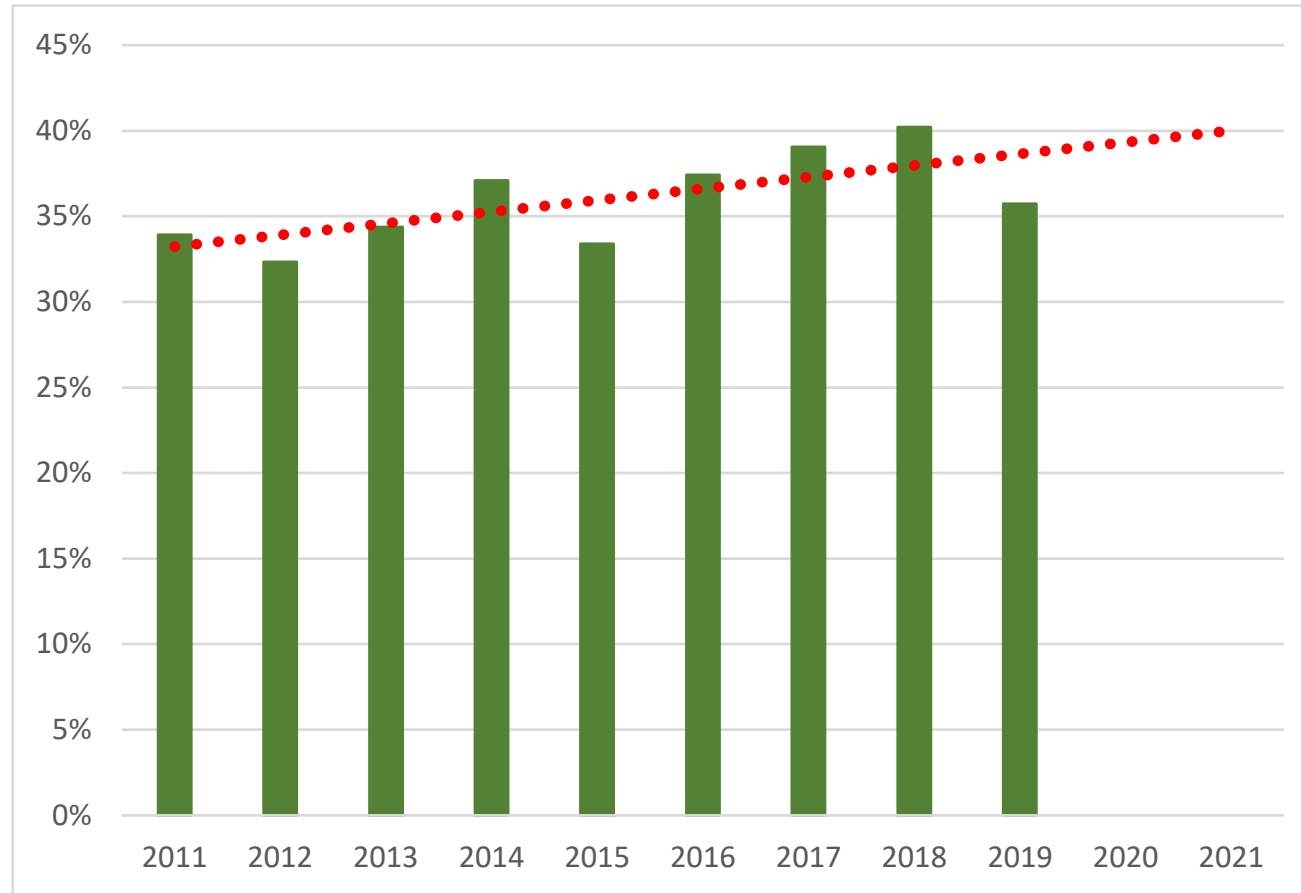
March 2022

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

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

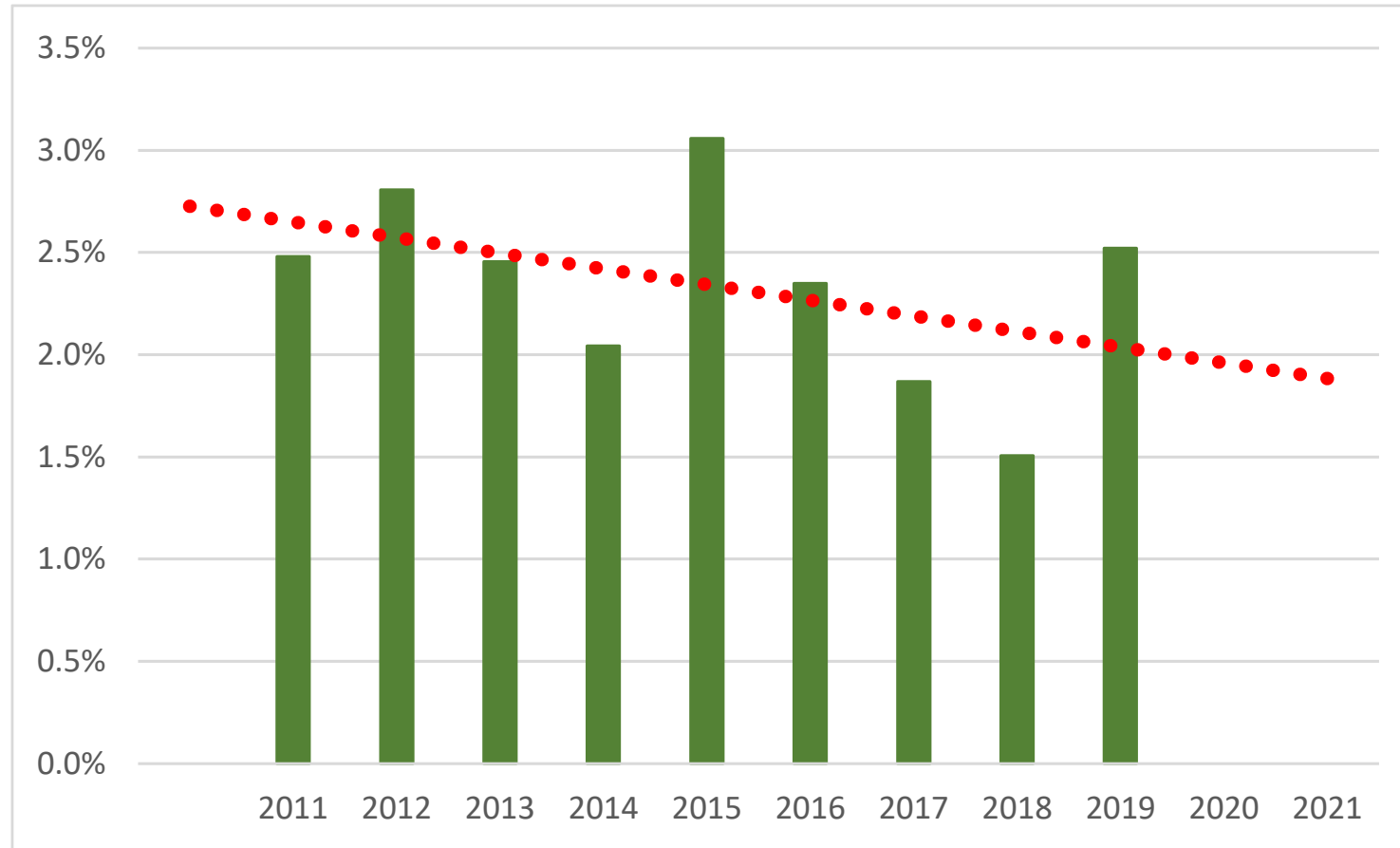


# The percentage of rural hospitals with a negative total margin was trending upward before COVID funding



**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...

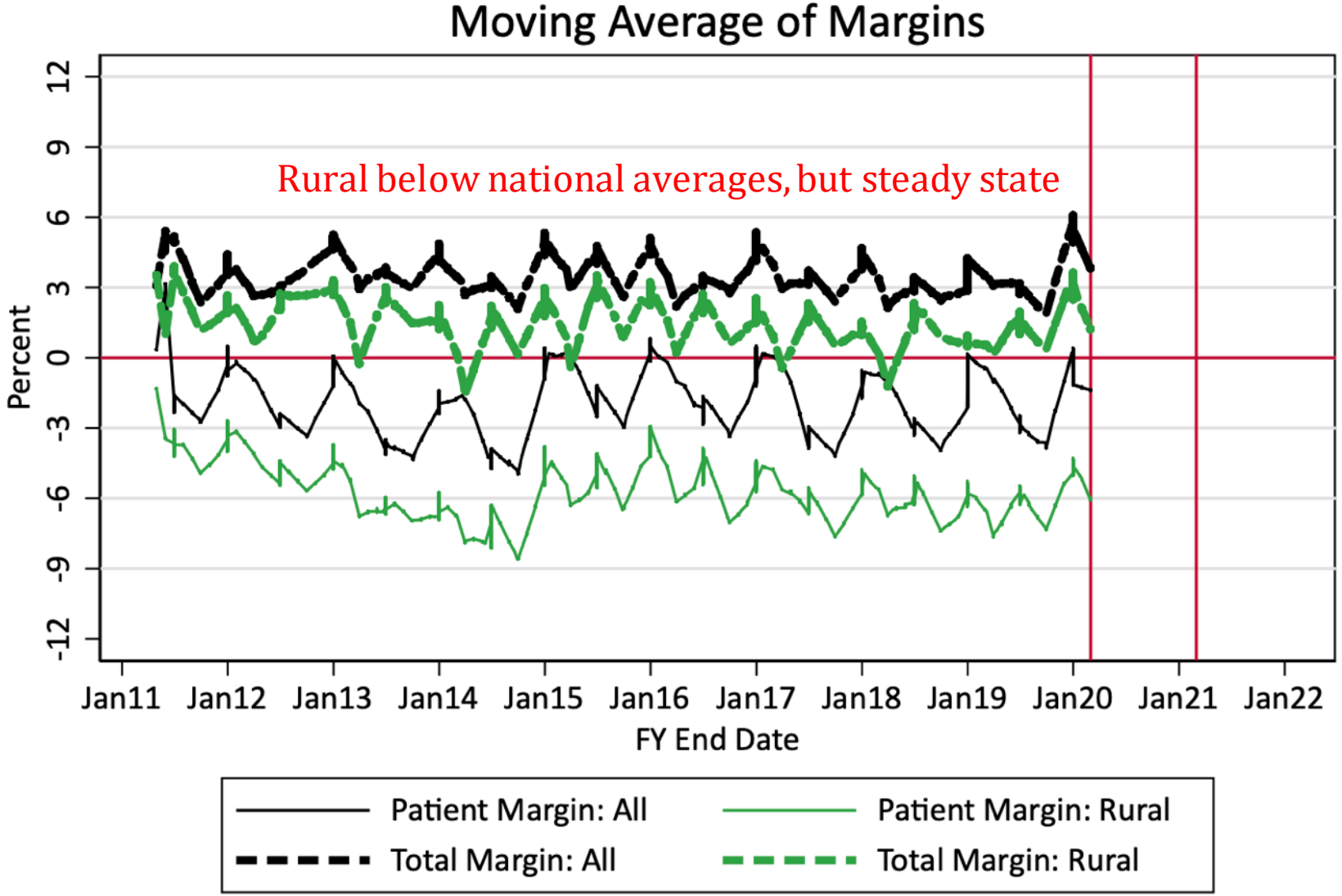
Table 1. Estimated Distribution of Provider Relief Funding to Hospitals as of February 2021 (millions)

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%
<b>Total</b>	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>)

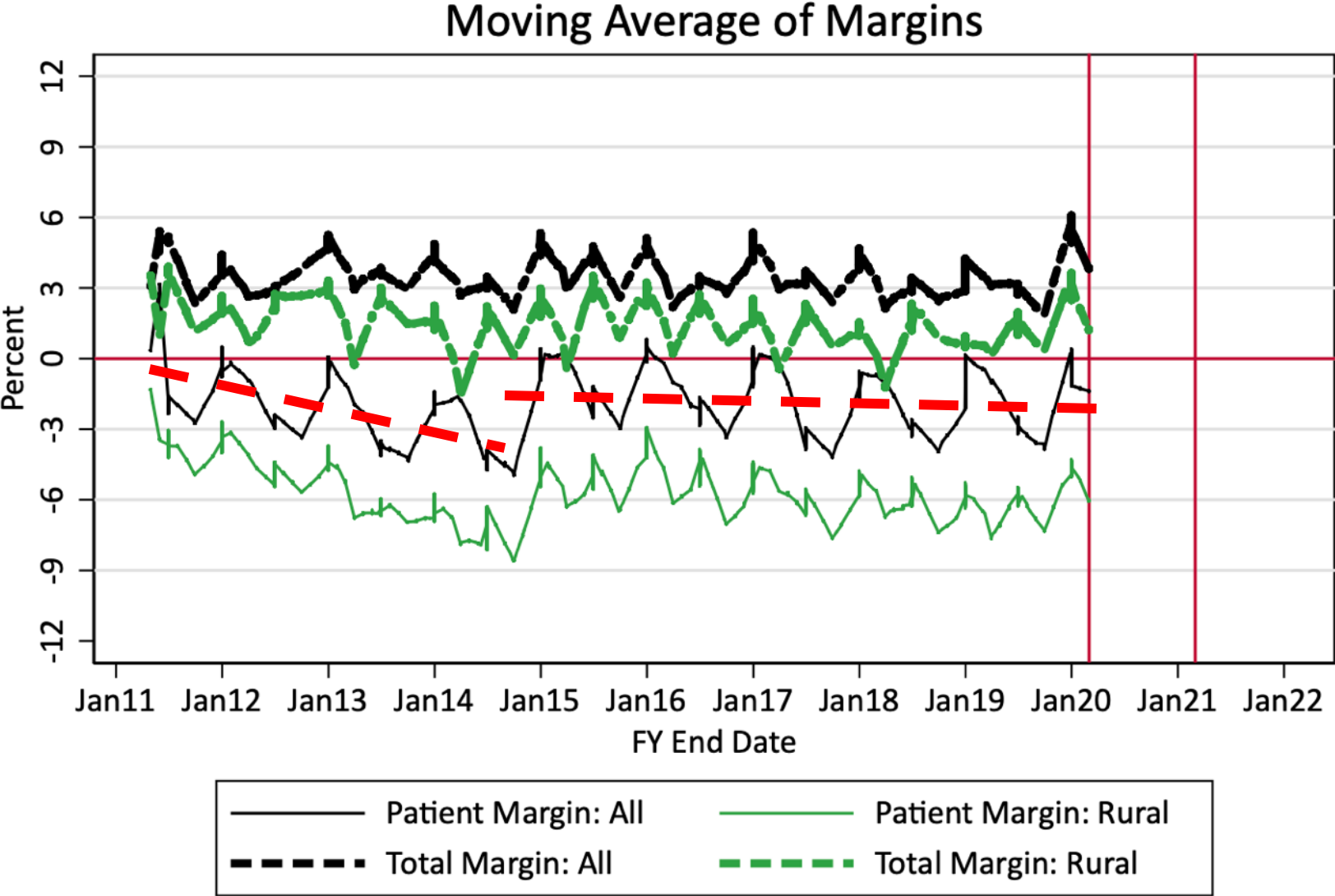
- The Provide Relief Funds, Paycheck Protection Program, and timing differences in reporting could temporarily distort reported profitability measures and conceal the long-term financial challenges facing rural hospitals.

# 3. Trends pre- and peri- pandemic



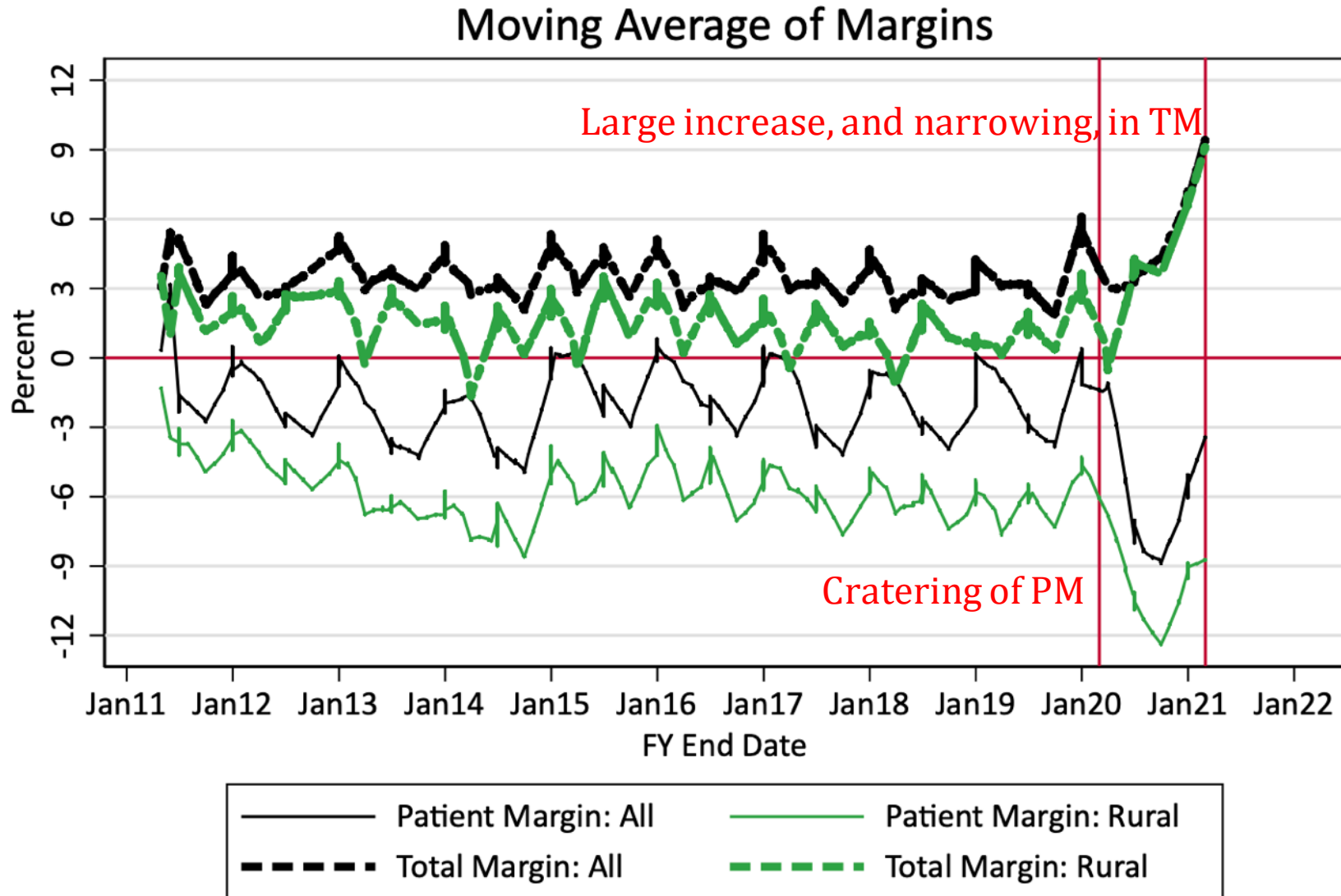
Red vertical lines denote 3/1/2020 and 3/1/2021

# Trends pre- and peri-pandemic



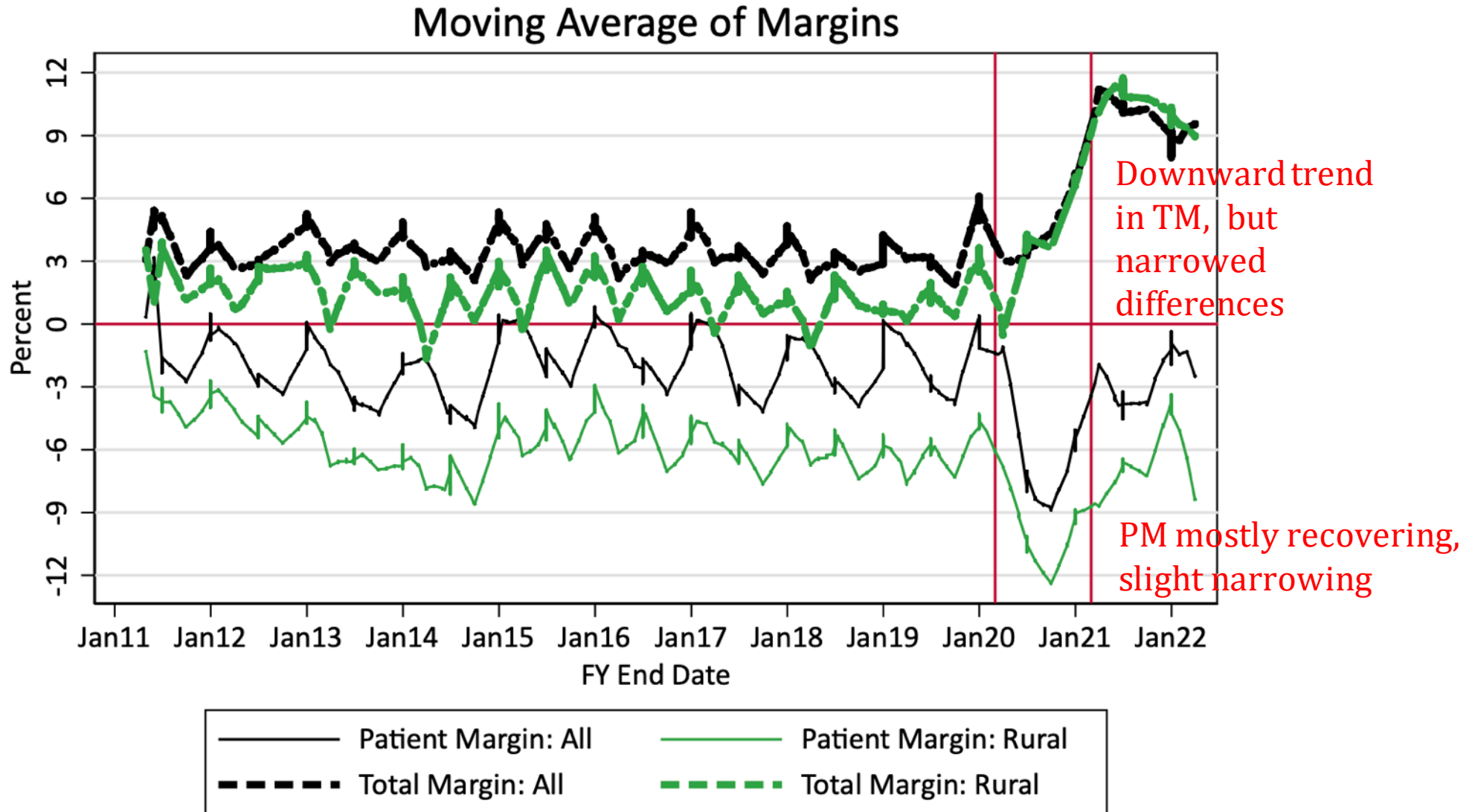
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# Trends pre- and peri-pandemic



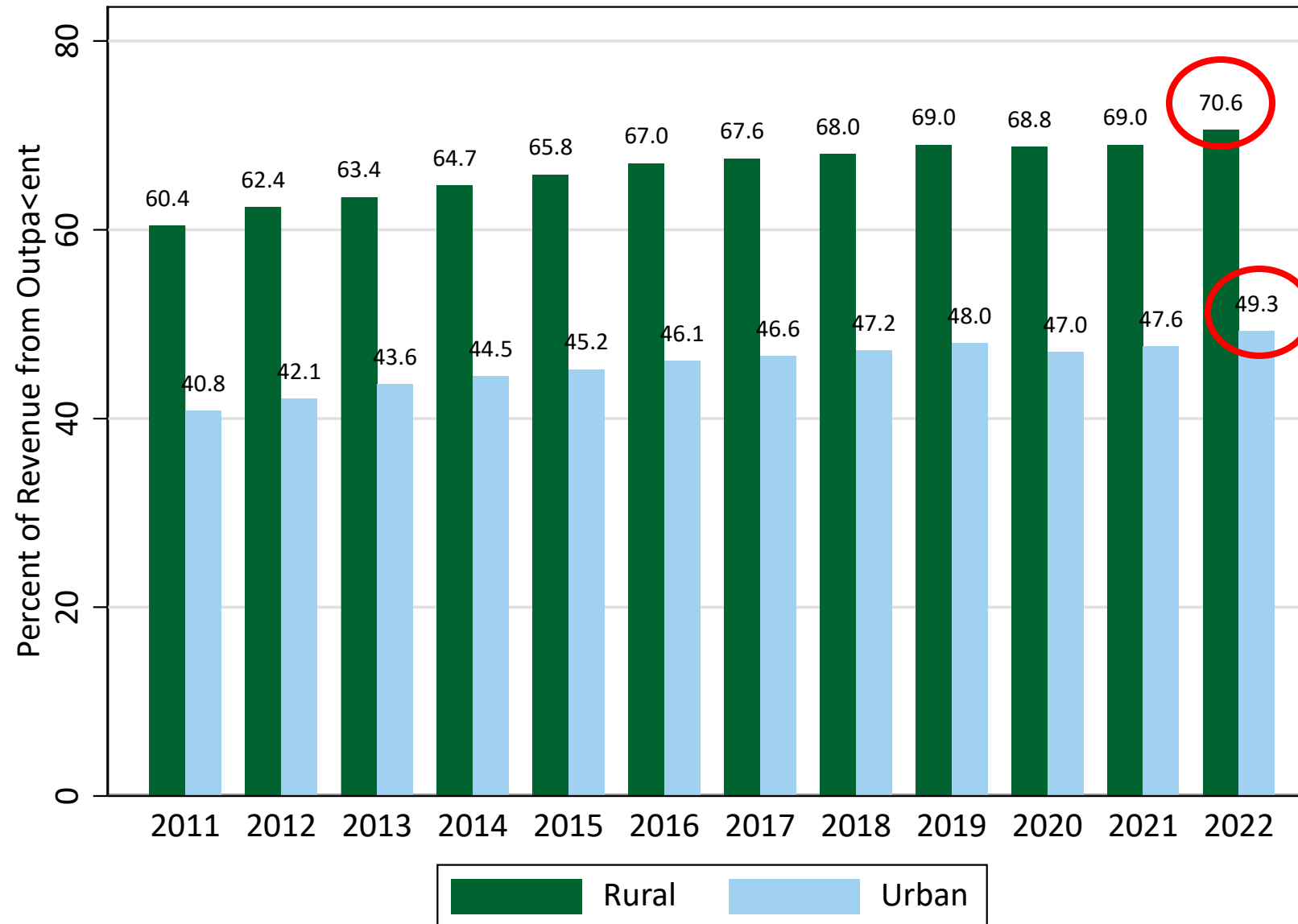
Red vertical lines denote 3/1/2020 and 3/1/2021

# Trends pre- and peri-pandemic



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

# Meanwhile, rural hospitals are increasingly 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?

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- 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?



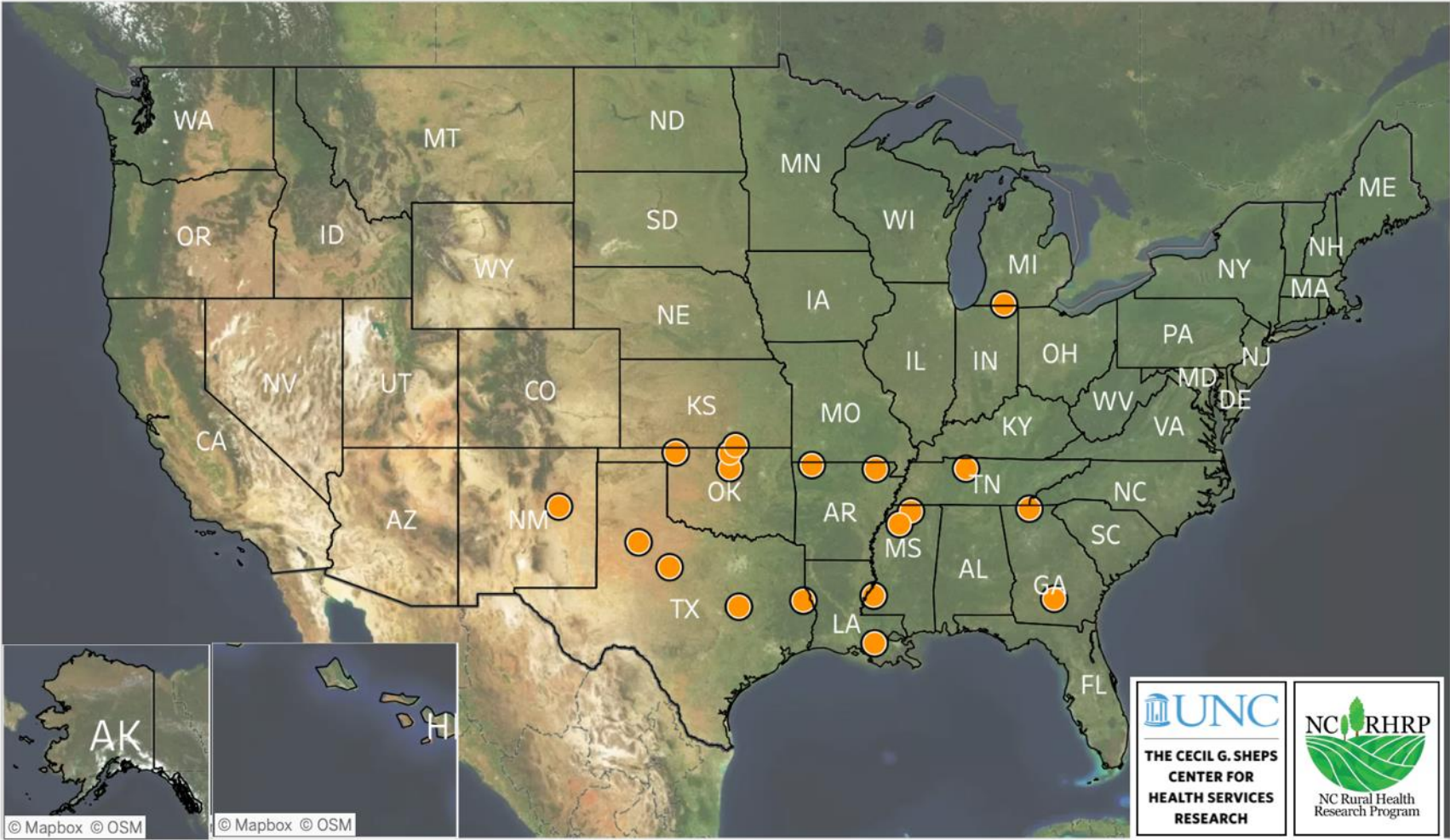
**RURAL EMERGENCY HOSPITAL**  
POLICY BRIEF AND RECOMMENDATIONS TO THE SECRETARY

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

# Sorry graph



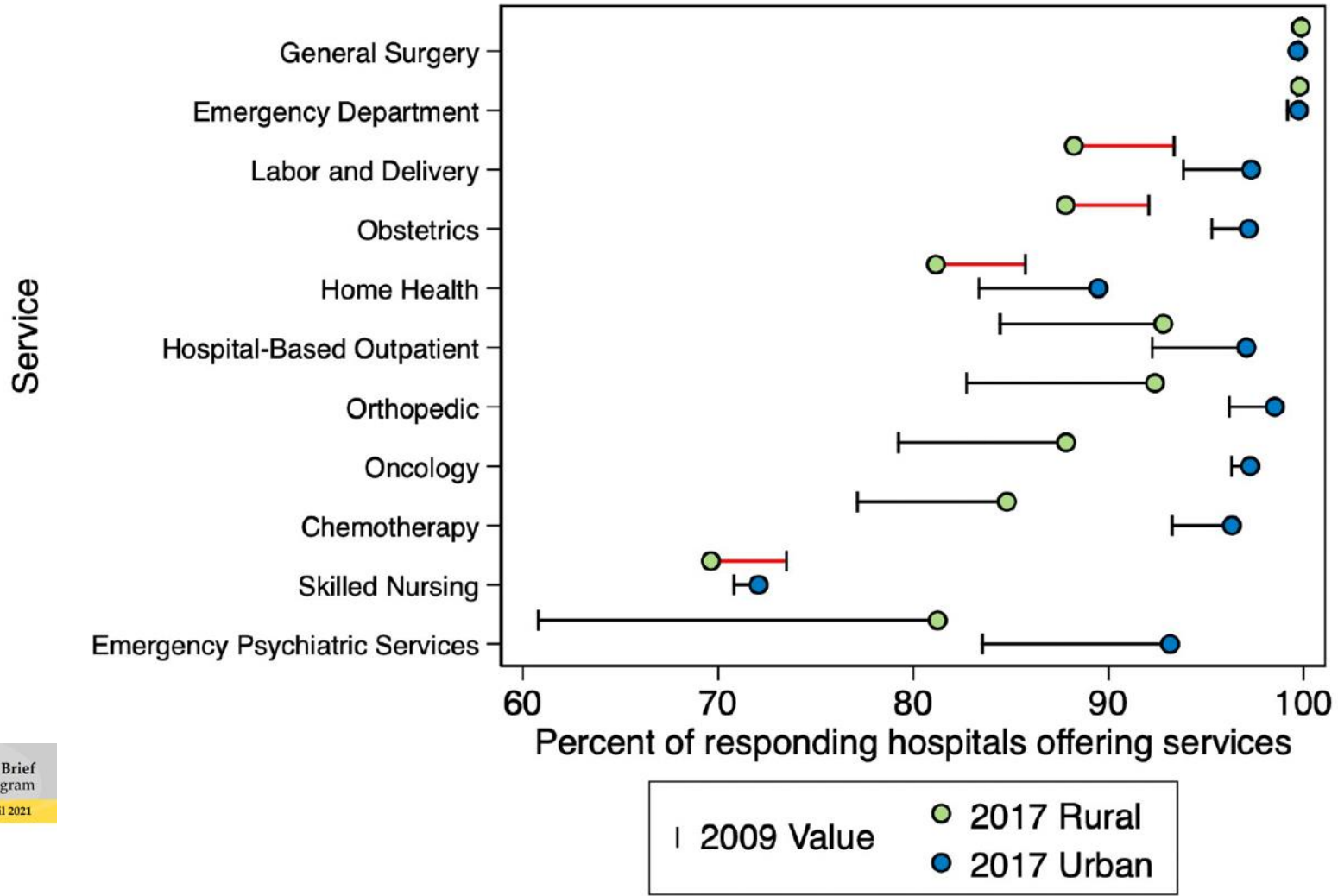
Start here

End here

# 6. Nationwide, some (specialty) services are eroding in rural hospitals

Figure 1. Changes in Hospital-based Services between Rural and Urban Hospitals, 2009 and 2017

Rural hospitals are less likely to offer L&D, OB/GYN, skilled nursing and home health



Red lines denote an increase. Black lines denote a decrease.

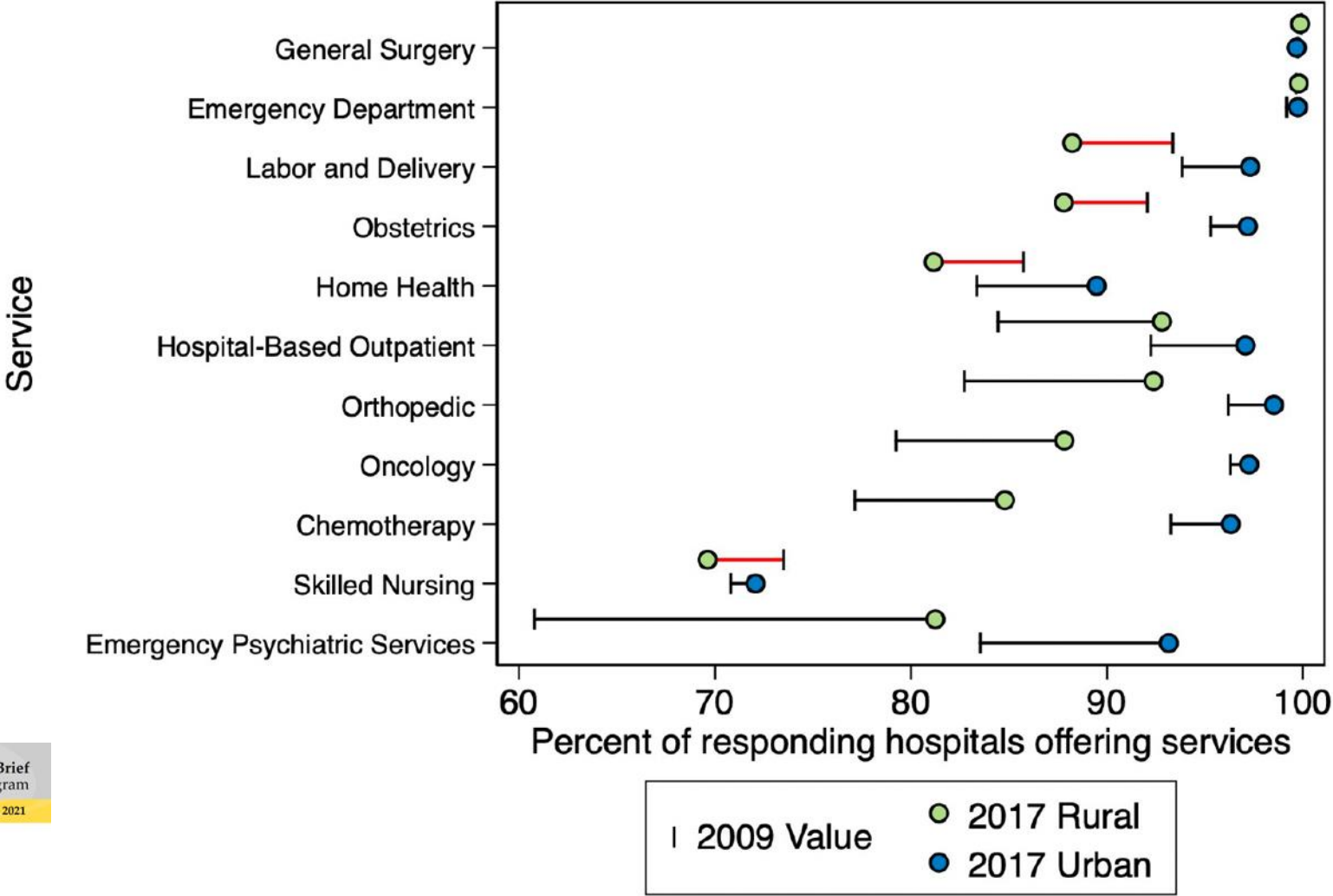


# Where are the opportunities?

# Nationwide, some (specialty) services are **growing** in rural hospitals

Figure 1. Changes in Hospital-based Services between Rural and Urban Hospitals, 2009 and 2017

Rural hospitals are **more** likely to offer oncology, orthopedic, emerg psych



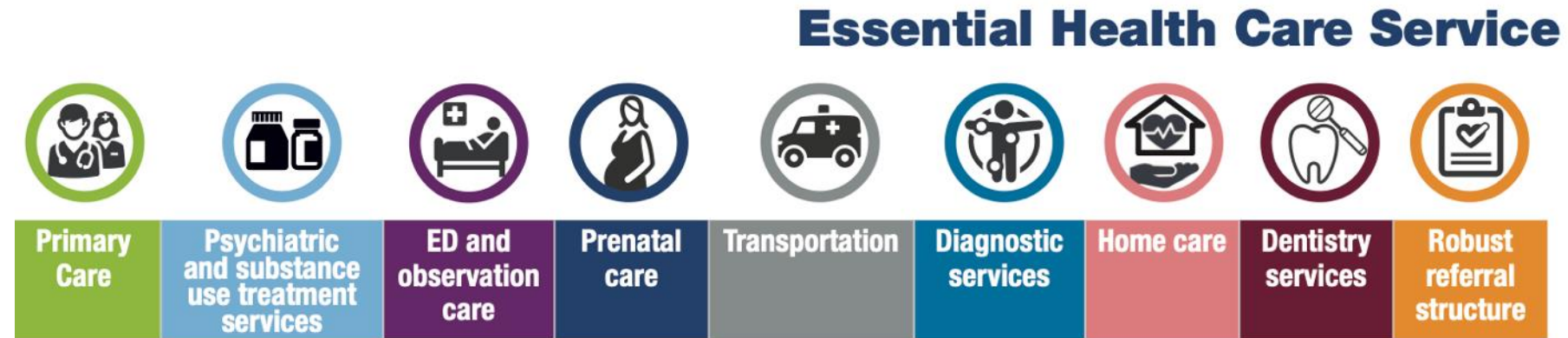
Red lines denote an increase. Black lines denote a decrease.

# Rural healthcare innovates

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- Some of the most exciting new models of healthcare delivery have stemmed from rural – necessity, mother, yadda yadda yadda
  - IHS maternity care model -> UNC Chatham’s Labor & Delivery Unit
  - Project ECHO showing the power of tele-training
  - Community paramedicine
  - Remote monitoring
- Rural communities have shown they can adapt to the needs and resources in their communities

# AHA (2016): What strategies are useful for each essential service?




*"In taking on this charge, we determined it was critical to also identify those **essential health care services we believed should be maintained for individuals living in vulnerable rural and urban communities.**"*

# AHA (2016): What strategies are useful for each essential service?

**Table 1**

**Essential Health Care Service**












	Primary Care	Psychiatric and substance use treatment services	ED and observation care	Prenatal care	Transportation	Diagnostic services	Home care	Dentistry services	Robust referral structure
Addressing the Social Determinants of Health					x				x
Global Budget Payments	x	x	x	x	x	x	x		x
Inpatient/Outpatient Transformation Strategy	x	x	x	x		x			x
Emergency Medical Center	x		x		x	x			x
Urgent Care Center	x					x			x
Virtual Care Strategies	x	x	x						x
Frontier Health System	x	x	x	x	x	x	x		x
Rural Hospital-Health Clinic Strategy	x	x	x	x		x		x	x
Indian Health Services Strategies	x	x	x	x	x	x	x		x

<https://www.aha.org/system/files/content/16/ensuring-access-taskforce-report.pdf>

# AHA (2016): What strategies are useful for each essential service?

**Essential Health Care Service**

<b>Table 1</b>	Primary Care	Psychiatric and substance use treatment services	ED and observation care	Prenatal care	Transportation	Diagnostic services	Home care	Dentistry services	Robust referral structure
<b>Addressing the Social Determinants of Health</b>					X				X
<b>Global Budget Payments</b>	X	X	X	X	X	X	X		X
<b>Inpatient/Outpatient Transformation Strategy</b>	X	X	X	X		X			X
<b>Emergency Medical Center</b>	X		X		X	X			X
<b>Urgent Care Center</b>	X					X			X
<b>Virtual Care Strategies</b>	X	X	X						X
<b>Frontier Health System</b>	X	X	X	X	X	X	X		X
<b>Rural Hospital-Health Clinic Strategy</b>	X	X	X	X		X		X	X
<b>Indian Health Services Strategies</b>	X	X	X	X	X	X	X		X

**Emerging Strategy**

<https://www.aha.org/system/files/content/16/ensuring-access-taskforce-report.pdf>

# Takeaways

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- ▶ Rural healthcare faces some considerable headwinds...
- ▶ ...but the needs of Rural America are better understood – and being better addressed than historical
- ▶ Let rural communities adapt to the assets and needs locally – no one better understands what is local

# 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](https://ruralhealthresearch.org)