

# EVOLVING ROLES OF RURAL HOSPITALS: EVIDENCE FROM PANDEMIC EXPERIENCES

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**IOWA**

Department of  
Health Management  
and Policy



RURAL POLICY RESEARCH INSTITUTE

# SETTING THE STAGE



Multiple stories behind the data of institutions in peril and people in need of services



Recommended reading for the story lines seen in one community and surrounding region: *The Hospital* by Brian Alexander



The context of experiences from dealing with a pandemic

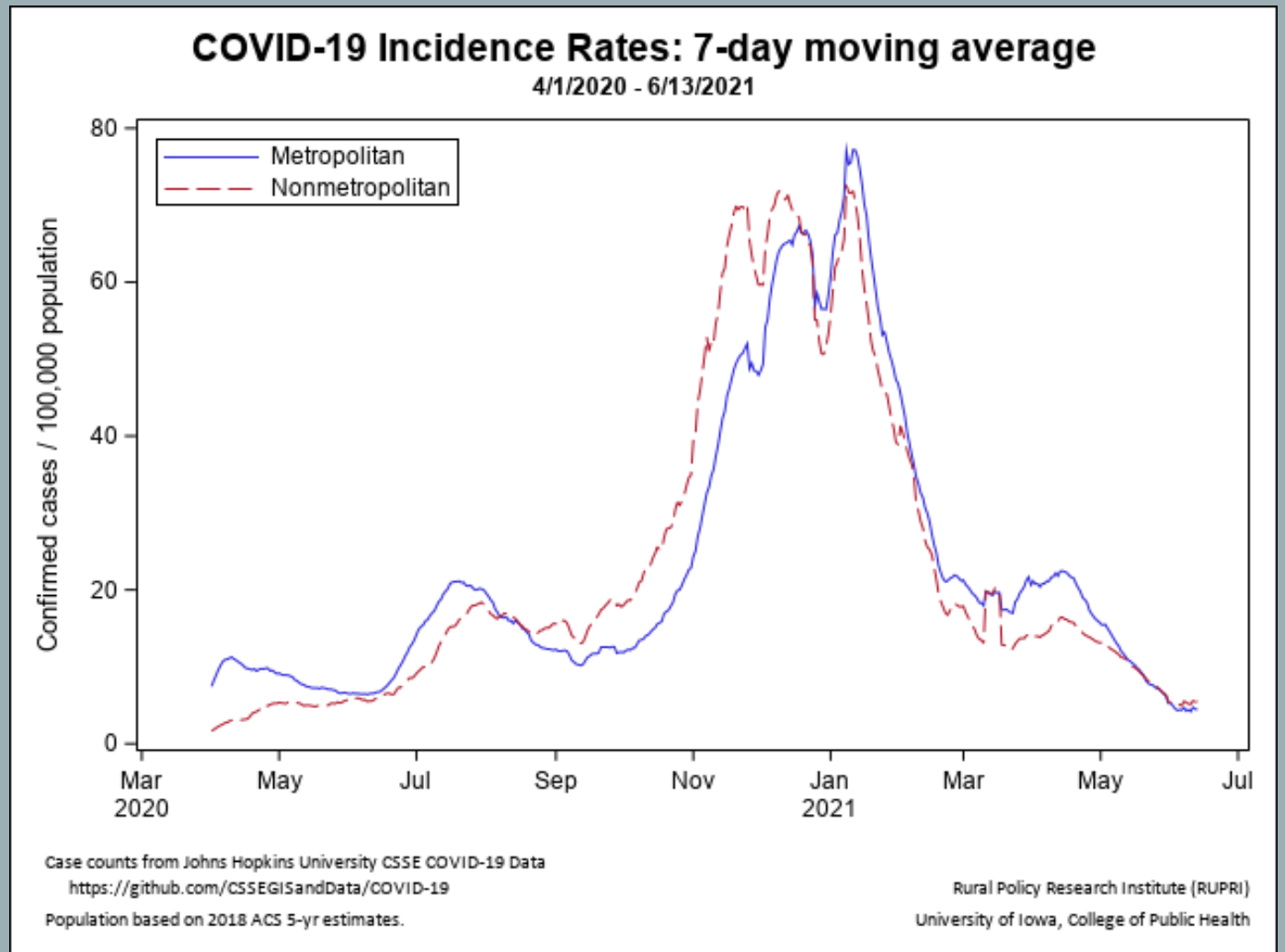


The opportunities to use resources generated by response to the pandemic

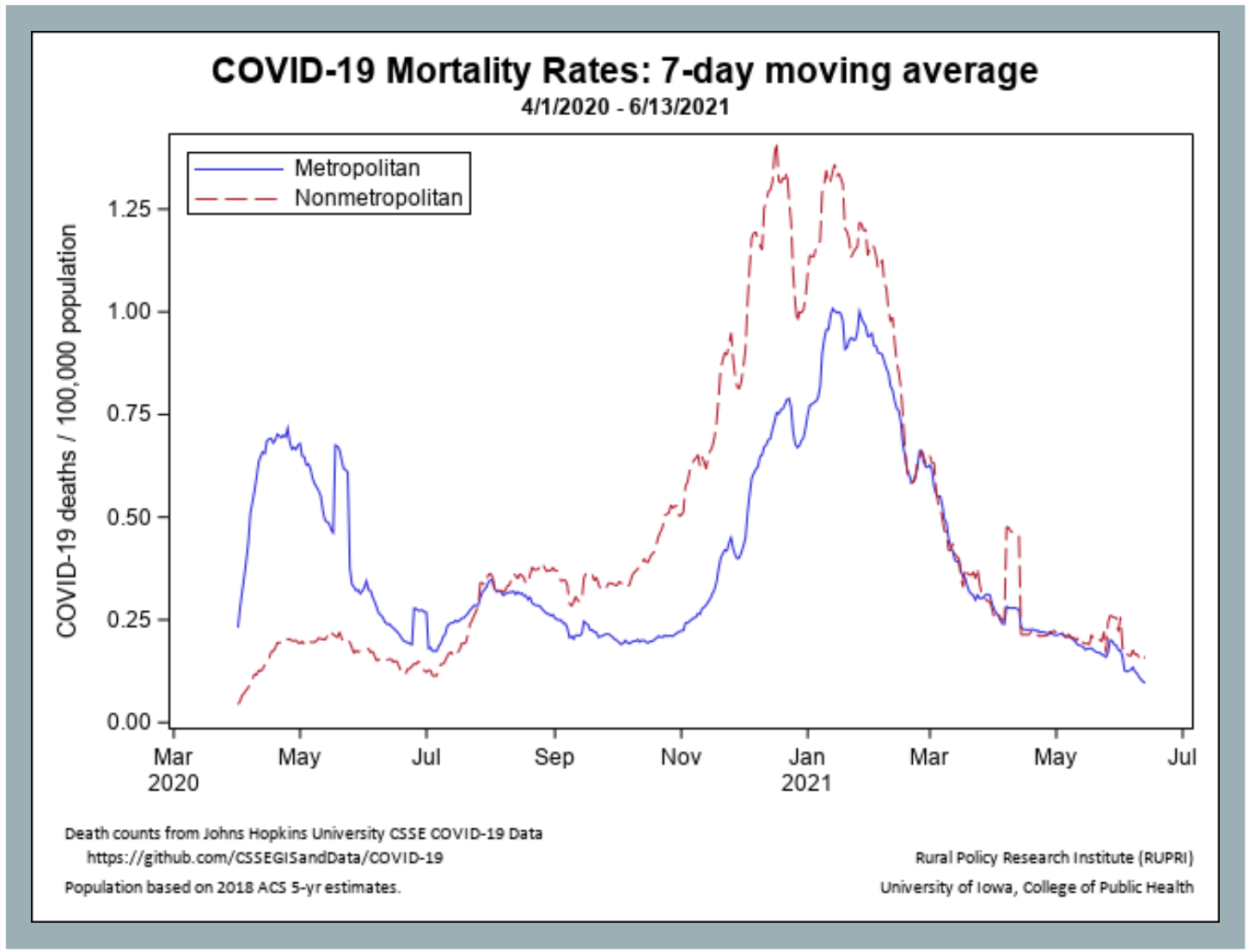
# THE CHALLENGE OF COVID-19

- Data on the incidence rates, 7-day moving average
- Data on the death rates, 7-day moving average
- Maps of the southern states

# DATA ON THE INCIDENCE RATES, 7-DAY MOVING AVERAGE



**DATA ON THE  
DEATH RATES,  
7-DAY  
MOVING  
AVERAGE**



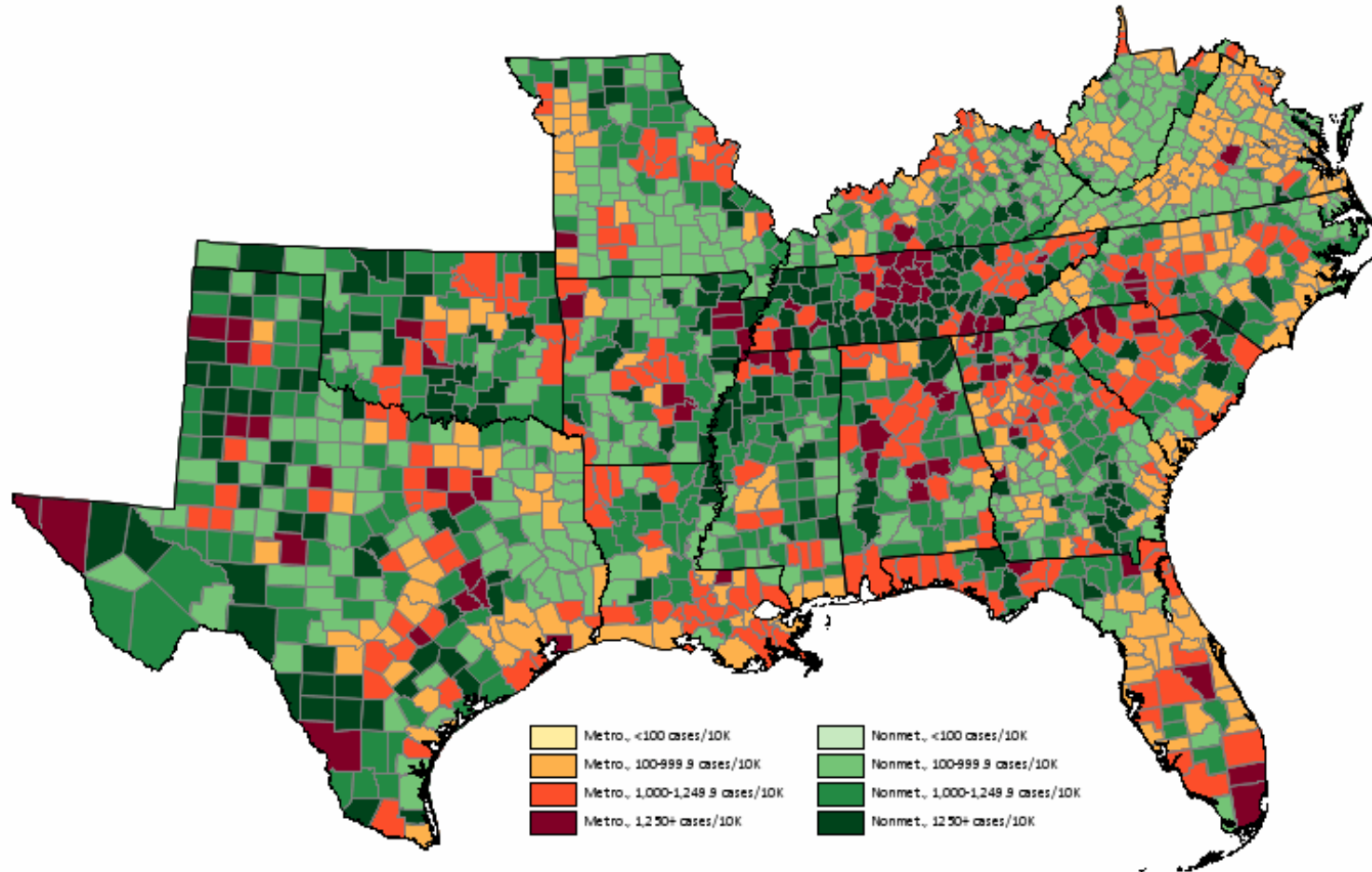
# MAP OF THE SOUTHERN STATES

## Southeast Counties with COVID-19 Cases

June 20, 2021

Metro cases: 10,651,485 Nonmetro cases: 2,295,093

\*Metro rate: 384.78 Nonmetro rate: 498.04



\* Confirmed cases / 10,000 population based on 2018 ACS 5-yr estimates.  
Rural Policy Research Institute (RUPRI)  
University of Iowa, College of Public Health

Data source: Johns Hopkins University CSSE COVID-19 Data  
<https://github.com/CSSEGISandData/COVID-19>

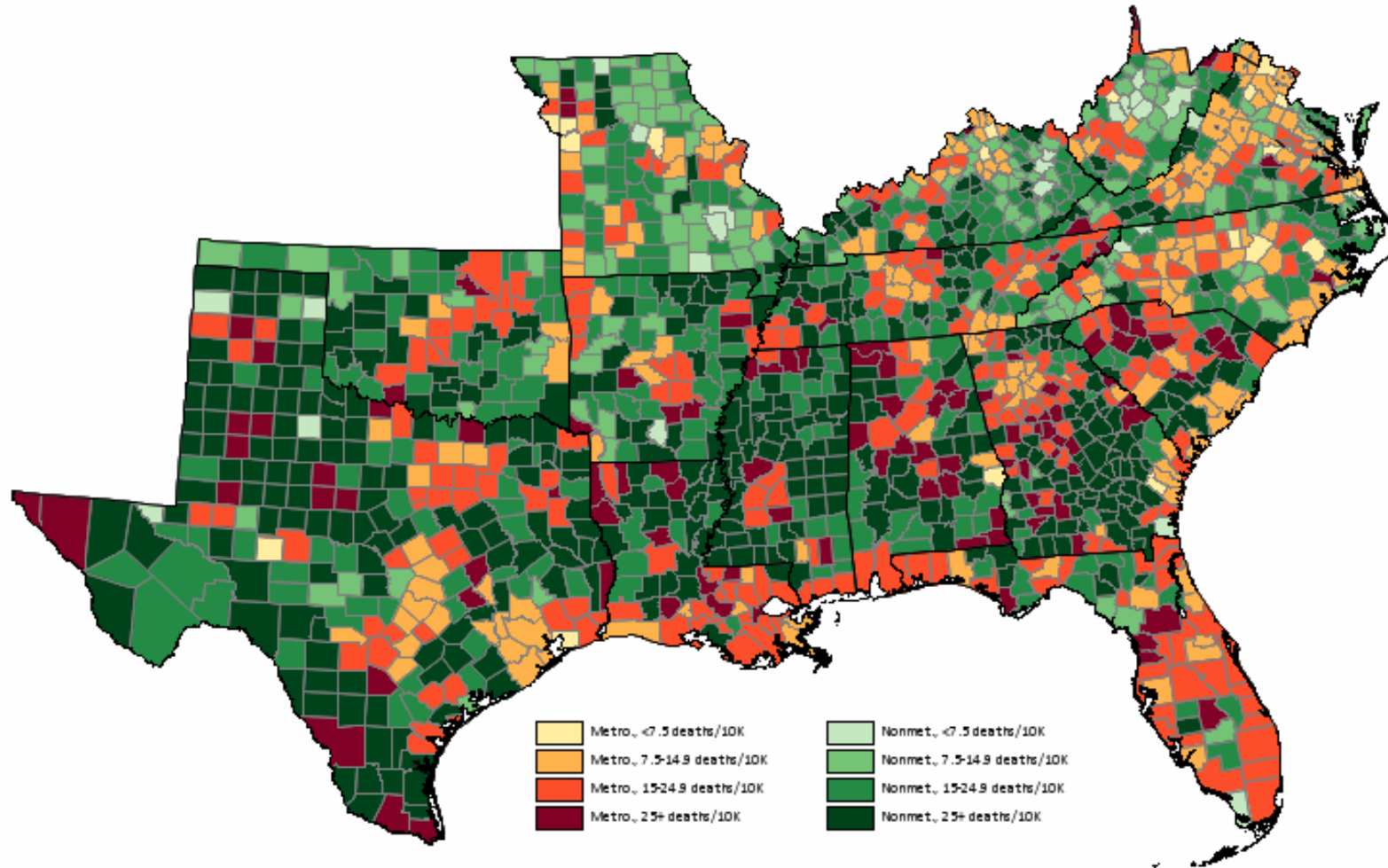
# MAP OF THE SOUTHERN STATES

## Southeast Counties with COVID-19 Deaths

June 20, 2021

Metro deaths: 168,686 Nonmetro deaths: 50,651

\*Metro rate: 6.09 Nonmetro rate: 10.99



\* Deaths / 10,000 population based on 2018 ACS 5-yr estimates.  
Rural Policy Research Institute (RUPRI)  
University of Iowa, College of Public Health

Data source: Johns Hopkins University CSSE COVID-19 Data  
<https://github.com/CSSEGISandData/COVID-19>

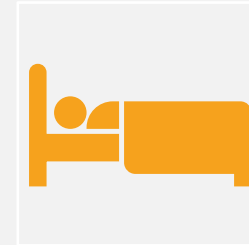
# MEETING THE CHALLENGE: ICU BED CAPACITY



Multiple resource challenges,  
including equipment  
(ventilators) and personnel  
(general nursing, specialists)



Capacity of the  
facilities to treat  
advanced cases



Measure the  
availability of ICU  
beds



**Table 1. General Medical and Surgical Beds and COVID-19 Confirmed Cases**

County Type	Counties with no general medical and surgical beds			Counties with general medical and surgical beds				
	Counties	Total Pop. <sup>1</sup>	COVID Cases <sup>2</sup>	Counties	Total Pop. <sup>1</sup>	COVID Cases <sup>2</sup>	Median Cases/bed	Counties w/ 1+ case/bed
Metropolitan (n=1,166)	226	6.26M	4,237.4	940	256.19M	189,839	0.55	209
Nonmetropolitan (n=1,976)	460	4.71M	2,818.3	1,516	41.59M	24,373	0.33	167
Nonmetropolitan, micropolitan (n=641)	77	1.04M	600.3	564	26.12M	15,893	0.46	93
Nonmetropolitan, noncore (n=1,335)	383	3.67M	2,218.0	952	15.47M	8,480	0.26	74

1. Population based on 2010 decennial census.

2. Average daily new cases Jan. 9 – Jan. 15 based on data obtained from Johns Hopkins University COVID-19 Data Repository

**Table 2. Medical/Surgical ICU Beds and COVID-19 Confirmed Cases**

County Type	Counties with no medical/surgical ICU beds			Counties with medical/surgical ICU beds				
	Counties	Total Pop. <sup>1</sup>	COVID Cases <sup>2</sup>	Counties	Total Pop. <sup>1</sup>	COVID Cases <sup>2</sup>	Median Cases/bed <sup>3</sup>	Counties w/ 1+ case/bed
Metropolitan (n=1,166)	383	12.48M	8,034.3	783	249.96M	186,042	3.69	742
Nonmetropolitan (n=1,976)	1,207	16.42M	9,361.3	769	29.87M	17,830	2.46	630
Nonmetropolitan, micropolitan (n=641)	171	4.09M	2,455.1	470	23.07M	14,038	2.91	416
Nonmetropolitan, noncore (n=1,335)	1,036	12.34M	6,906.1	299	6.80M	3,792	1.90	214

1. Population based on 2010 decennial census.

2. Average daily new cases Jan. 9 – Jan. 15 based on data obtained from Johns Hopkins University COVID-19 Data Repository

# KEY ISSUES FOR HOSPITALS

- Capacity to treat
- Managing interruptions in traditional revenue streams
- Adapting to new claims and new technologies

# KEY ISSUES FOR HOSPITALS

- Treating underserved populations, including those lacking insurance coverage: rural hospital is the safety net provider in the community for acute care services
- Taking on public health functions

# MAKING THE RIGHT INVESTMENTS

- Thinking of sub-state and inter-state regions: learning from the experience of sharing resources during pandemic to manage wisely to deliver care across the continuum
- Meeting the challenge of flexing up in capacity (physical) and resources (personnel and equipment)
- Role of telehealth; may mean different use of capital
- Role of information exchange accentuated as well by pandemic – another investment

# THE CASE FOR INVESTMENTS IN LOCAL RURAL HOSPITALS

- Capacity to serve in times of greatest need, with services close to home – improve chances for early treatment, trust in providers
- Role of the hospitals in meeting public health needs – more than the bricks and mortar (indeed, may not need all the bricks and mortar)
- Interaction of acute care and public health obvious during pandemic – should be apparent across the continuum of care

**ROLE FOR  
STATE  
POLICY:  
INVESTING  
PUBLIC  
FUNDS**

- Immediate fiscal relief for lost revenue and increased uncompensated costs during pandemic – all states
- Improving availability of personnel: Alabama Office of Primary Care and Rural Health; Oklahoma Physician Manpower Training Commission; Mississippi Rural Physicians Scholarship Program
- Supporting telehealth investments: Virginia pilot program includes use of telehealth services; Mississippi reimbursement for distant sites

**ROLE FOR  
STATE  
POLICY:  
INVESTING  
PUBLIC  
FUNDS**

- Hospital operations, including assistance for transformation: Alabama Rural Hospitals Resource Center; Georgia Rural Hospital Improvement Program;
- Community collaborations, including with public health: North Carolina supporting local health departments and the Old North State Medical Society

Source: Nick Bowman, “Rural Hospitals During the COVID-19 Pandemic,” SLC Regional Resource. Southern Legislative Conference. June, 2021. accessed June 23, 2021:

<https://www.slcatlanta.org/research/index.php?pub=646>



**ROLE FOR  
STATE  
POLICY:  
REGULATORY  
ACTIONS**

- Continuous review of scope of practice statutes and regulations to promote optimum use of personnel
- Review of hospital regulations to facilitate transitions to appropriate configurations
- Inter-state compacts that facilitate appropriate use of telehealth

# RURAL DEVELOPMENT

- Goal is strong communities able to be resilient when challenged by exogenous shocks like the pandemic
- Need to focus on the capitals that constitute the comprehensive wealth framework: physical, financial, human, intellectual, political, natural, social, and cultural
- Rural hospitals and collaborators contribute to financial, human, intellectual, and social in very direct ways

# CONCLUSION

- Be prepared for repeat experiences in the future
- Secure the role of rural hospitals and their financial future
- In the context of rural community development

## FOR FURTHER INFORMATION

- **The RUPRI Center for Rural Health Policy Analysis**
  - <http://cph.uiowa.edu/rupri>
- **The RUPRI Health Panel**
  - <http://www.rupri.org>
- **Rural Telehealth Research Center**
  - <http://ruraltelehealth.org/>
- **The Rural Health Value Program**
  - <http://www.ruralhealthvalue.org>

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