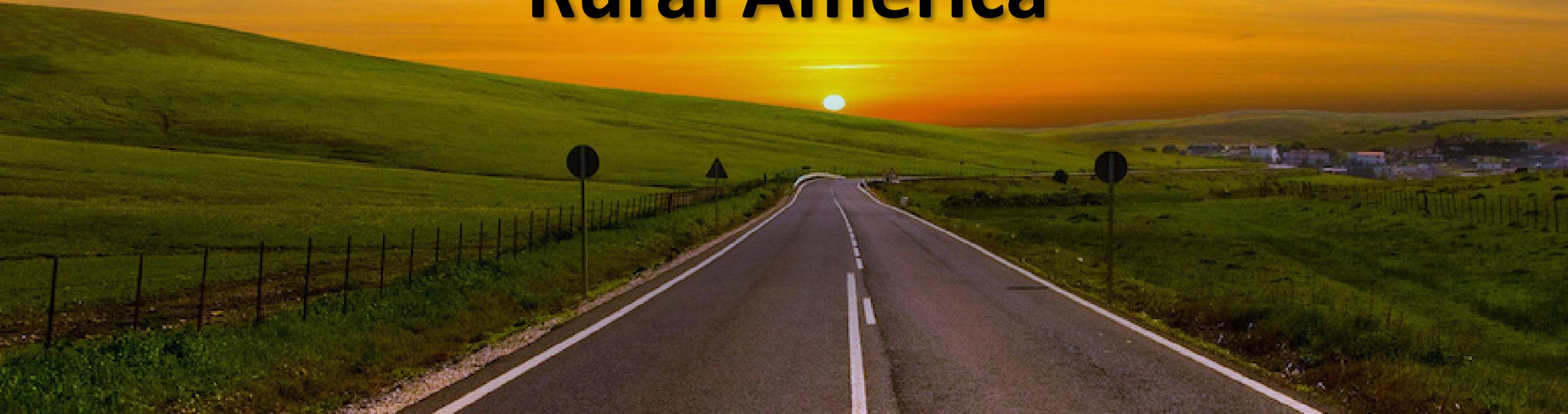


Delivery of Healthcare In Rural America



Community Address, Dakota Wesleyan University

September 28, 2021

Keith J. Mueller, PhD

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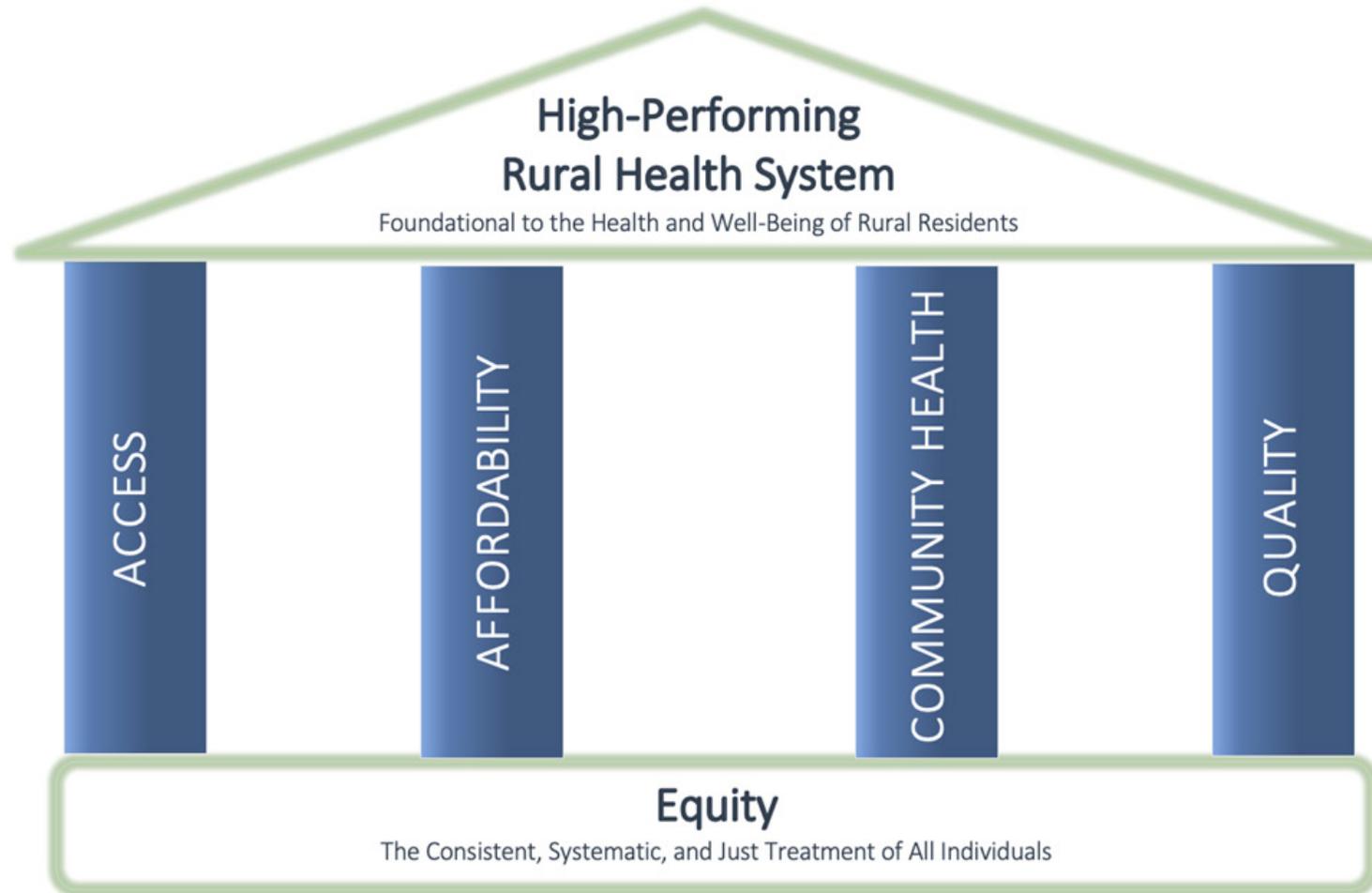
Themes to Explore

- What do we want a rural health system to be?
- What challenges do provider systems and communities face?
- What are the headwinds of change?
- How does rural health emerge on the other side?

What Do We Want?

- Framework developed by Health Panel in 2011, updated 2021: The High-Performing Rural Health System
- The RUPRI Health Panel envisions rural health services that are affordable and accessible for all rural residents through a sustainable health system that delivers high quality, high value services. A high-performing rural health system informed by the needs of each unique rural community and population groups will improve community health and well-being.

Pillars of a High-Performing Rural Health System



How Do We Get There?

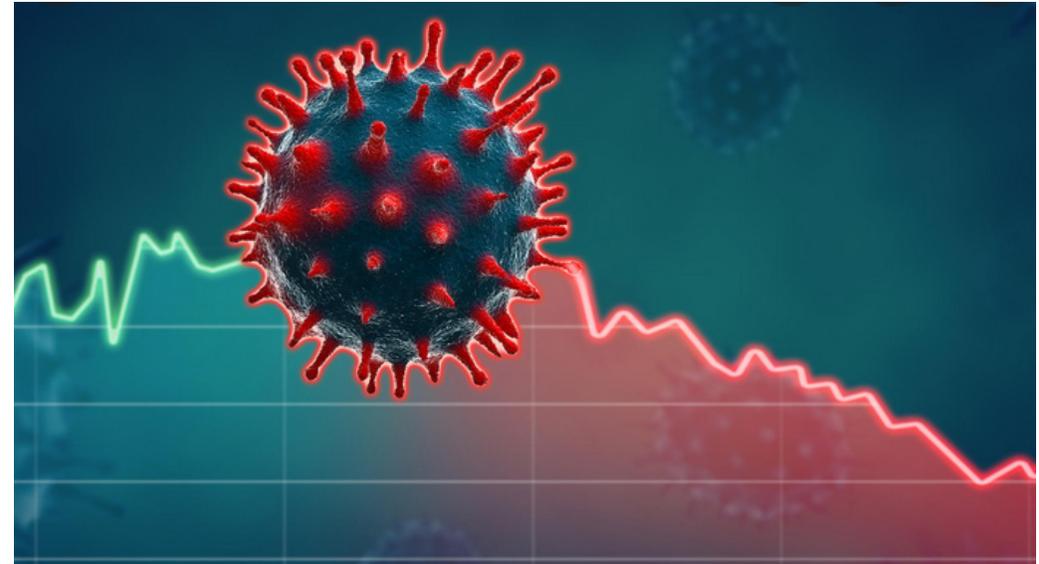
- Keep the goal of sustainable system achieving those pillars in all planning
- Requires the “bandwidth” to develop integrated systems of care
- Means dealing with the present to achieve the future
- So, first things first

Major challenge: A Pandemic

- The Challenges to rural communities and healthcare delivery
- Highlights important role of services currently provided by rural hospitals
- Building from what we learn in responding to this emergency:
 - It is public health
 - It shows us the capacity to absorb increases in demand is more than one place at a time

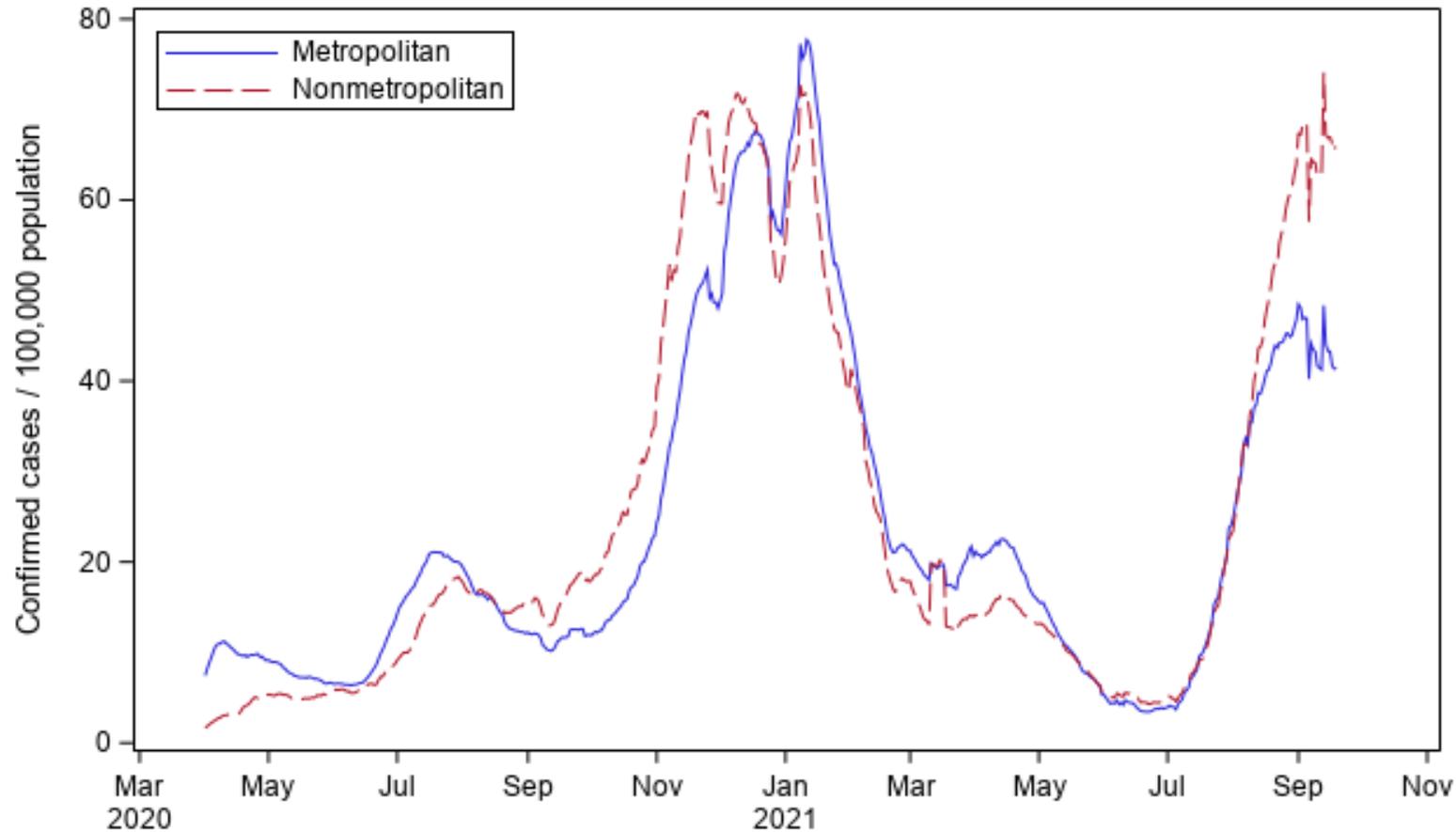
The Challenge of COVID-19

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



COVID-19 Incidence Rates: 7-day moving average

4/1/2020 - 9/15/2021

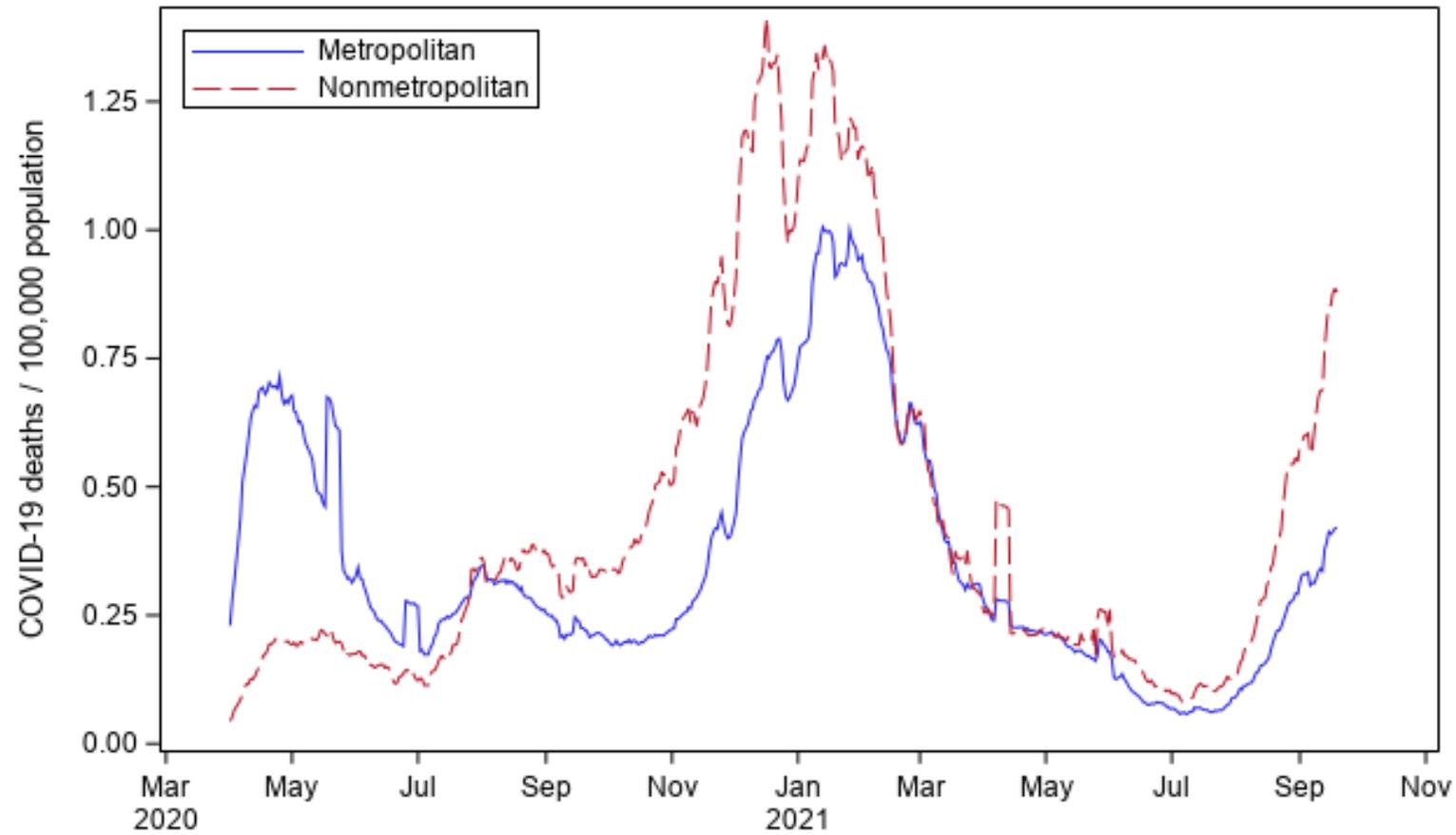


Case counts from Johns Hopkins University CSSE COVID-19 Data
<https://github.com/CSSEGISandData/COVID-19>
Population based on 2018 ACS 5-yr estimates.

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COVID-19 Mortality Rates: 7-day moving average

4/1/2020 - 9/15/2021



Death counts from Johns Hopkins University CSSE COVID-19 Data
<https://github.com/CSSEGISandData/COVID-19>
Population based on 2018 ACS 5-yr estimates.

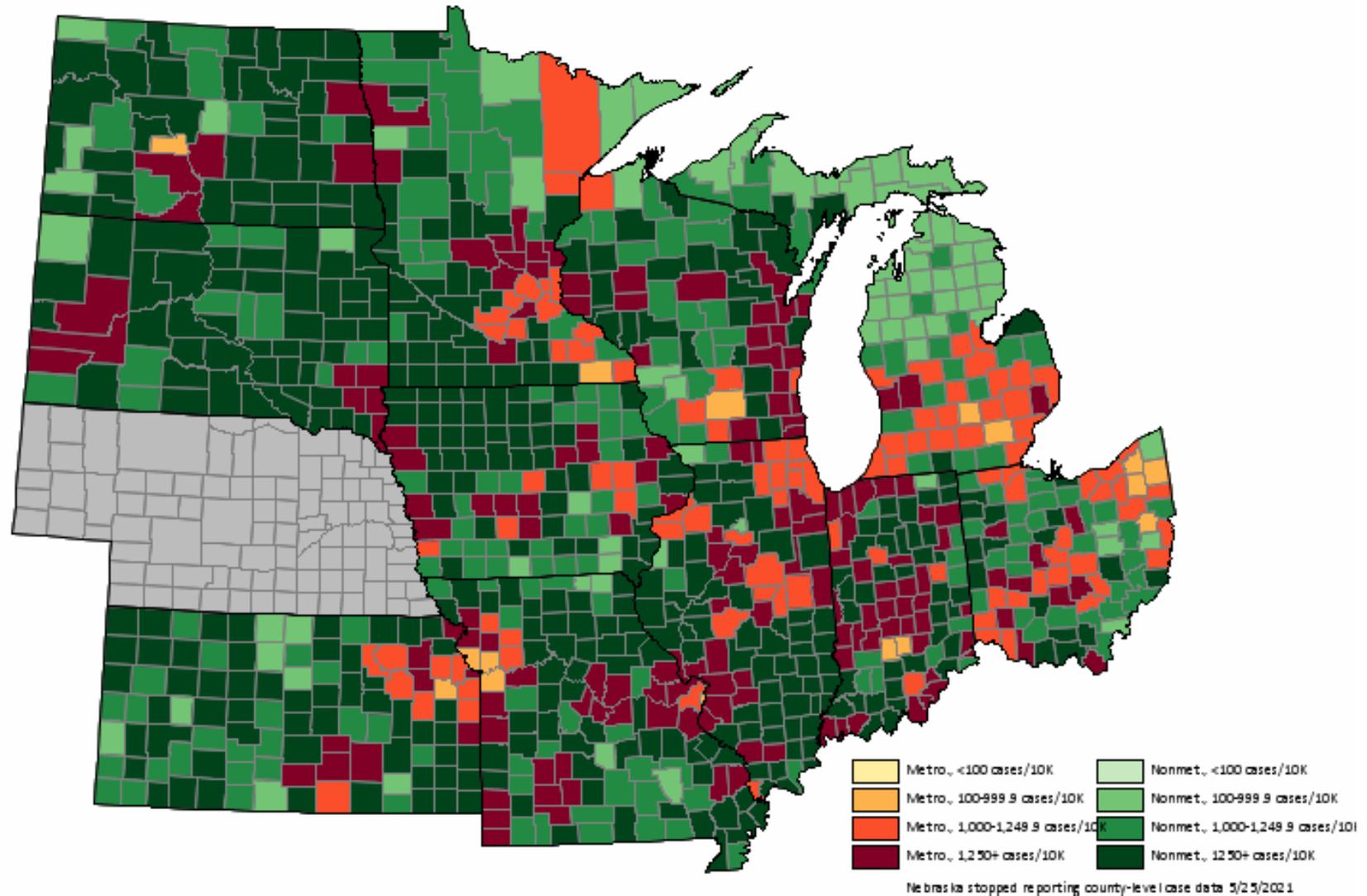
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Midwest Counties with COVID-19 Cases

September 19, 2021

Metro cases: 6,494,514 Nonmetro cases: 1,962,938

*Metro rate: 234.61 Nonmetro rate: 425.96

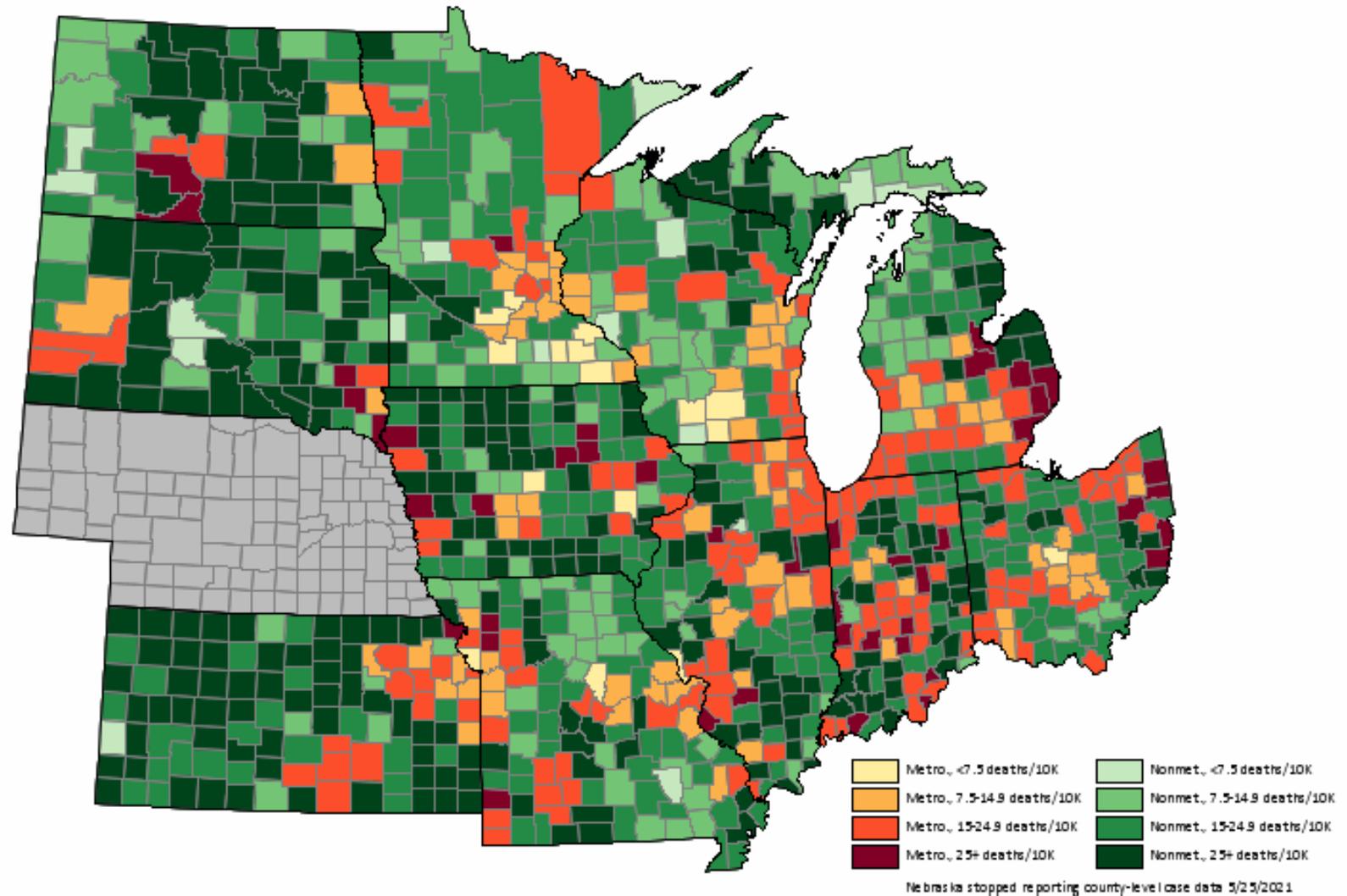


Midwest Counties with COVID-19 Deaths

September 19, 2021

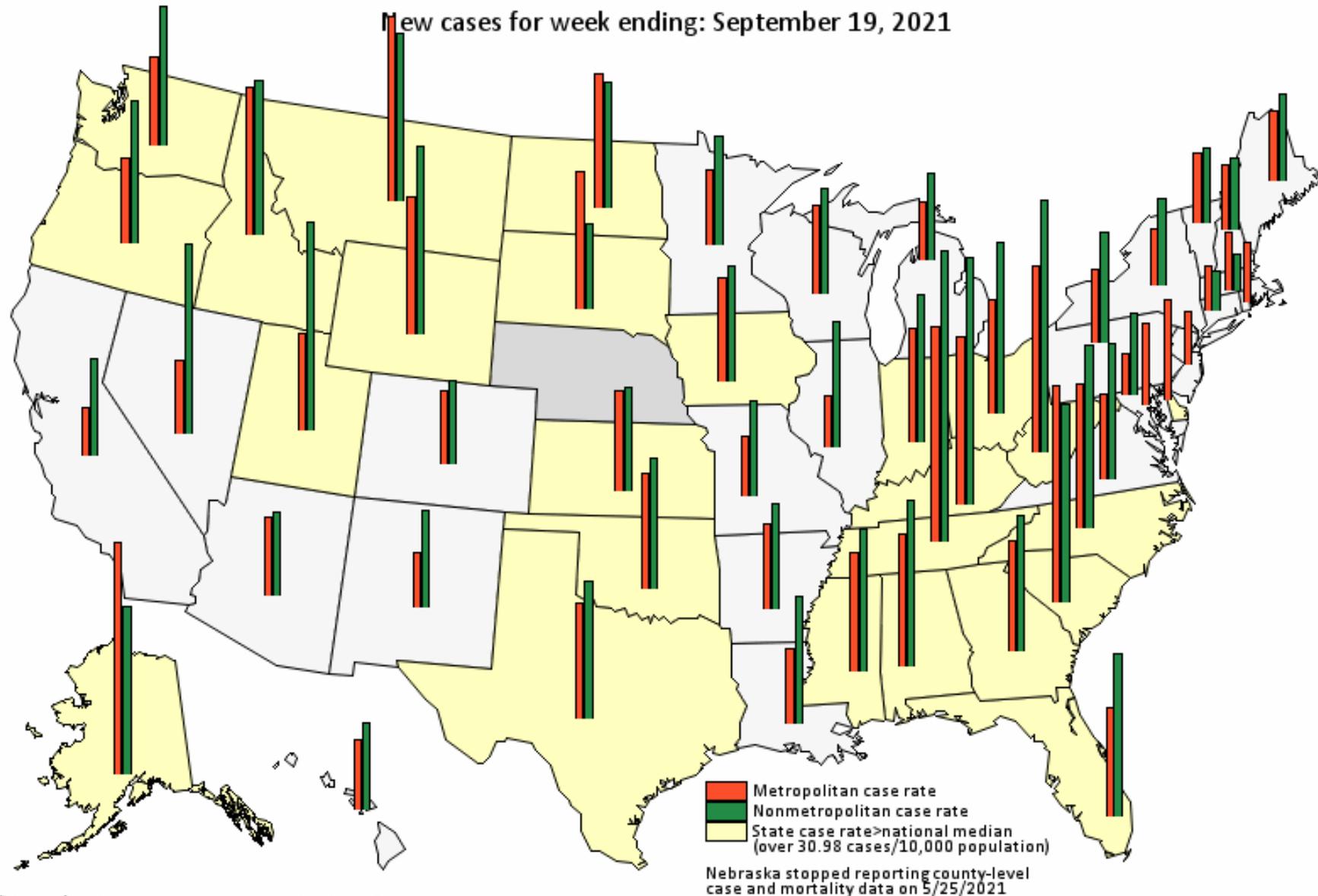
Metro deaths: 95,518 Nonmetro deaths: 32,597

*Metro rate: 3.45 Nonmetro rate: 7.07



Metropolitan/Nonmetropolitan COVID-19 Cases

New cases for week ending: September 19, 2021



* Cases / 10,000 population based on 2018 ACS 5-yr estimates.
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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. ¹	COVID Cases ²	Counties	Total Pop. ¹	COVID Cases ²	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

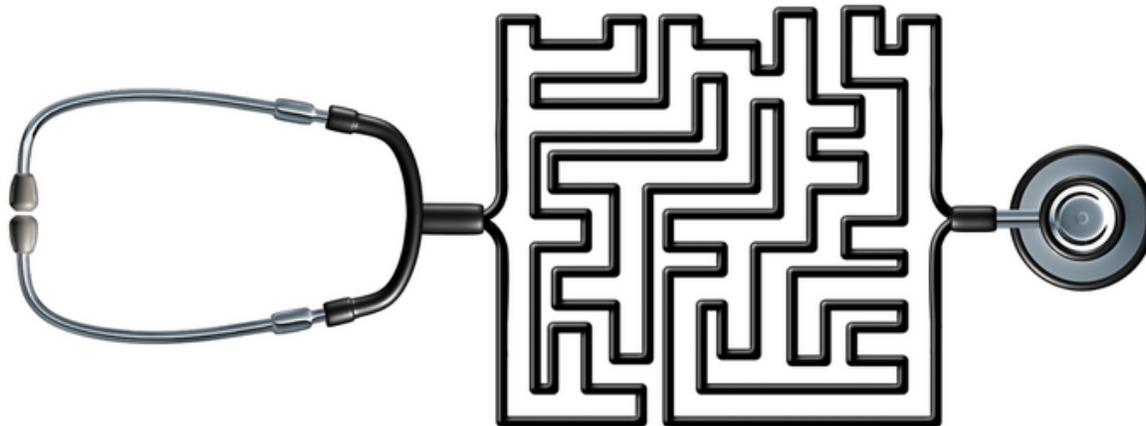
County Type	Counties with no medical/surgical ICU beds			Counties with medical/surgical ICU beds				
	Counties	Total Pop. ¹	COVID Cases ²	Counties	Total Pop. ¹	COVID Cases ²	Median Cases/bed ³	Counties w/ 1+ case/bed
Metropolitan (n=1,166)	383	12.48M	8,034.3	783	249.96M	186,042	3.69	742
Nonmetropolitan (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

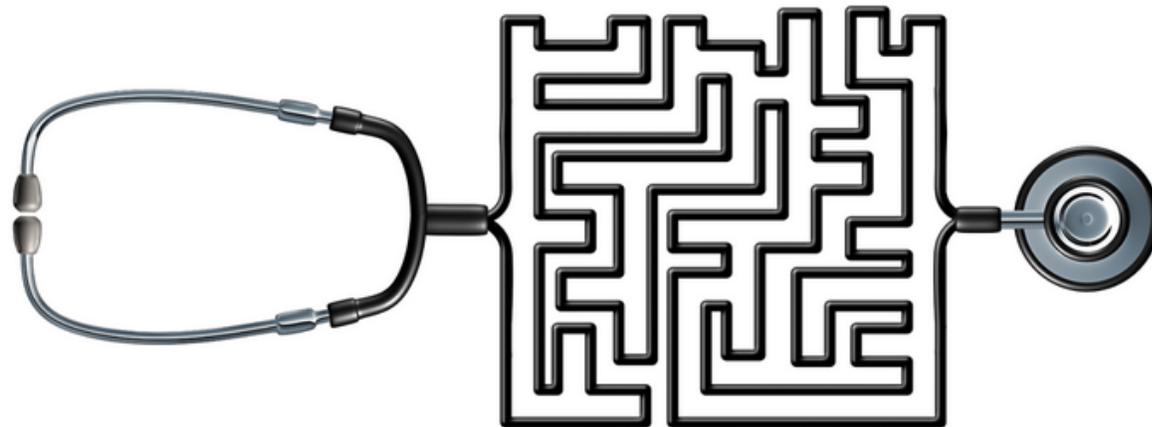
Key Issues for Hospitals

- 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



The Big Picture

- Nexus of clinical care and public health
- Intersection of public and private policies with demands on healthcare system
- Challenges to models of integrated care
- Challenges to the pillars of the high-performing rural health system

A more lasting challenge: Behavioral Health

- Higher rates of suicide among rural residents: 19.7 per 100,000 compared to 12.7 per 100,000 among urban residents – deaths of despair
- Higher rates of alcohol-related behavior among rural youth, including binge drinking and driving under the influence of alcohol
- Prevalence of drug use higher – opioids, heroin, prescription medications, and methamphetamines (meth)

Context: Subpopulations at High Risk

- Women: double rates of depressive symptoms compared to urban women; higher rates of illicit opiate use
- Children and adolescents: ages 2-8 with higher prevalence of mental, behavioral, or developmental disabilities (18.6 percent vs. 15.2 percent; more likely to exhibit high-risk behaviors)
- Veterans: experience higher rates of mental health issues than general population



Context: Subpopulations at High Risk

- Minority, Ethnic, American Indian, and Alaska Native Populations
- Older Adults dealing with issues in transportation, social isolation, shortages of geriatric behavioral health specialists
- Individuals with Co-occurring conditions



Consequences of Higher Prevalence

- Increased risk of substance use disorder because of underlying behavioral health issues
- Impacts on families
- Exacerbating other chronic conditions
- Demand for services on systems with limited capacity
- SUD and overdose leading to death, exposure to HIV and hepatitis C virus

Challenging Times

- Ongoing Opioid and Meth crises
- Economic Dislocation (predates COVID-19) and associated stress levels
- COVID-19 and associated uncertainty clouding immediate and near term future

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Service Needs: Access Challenges

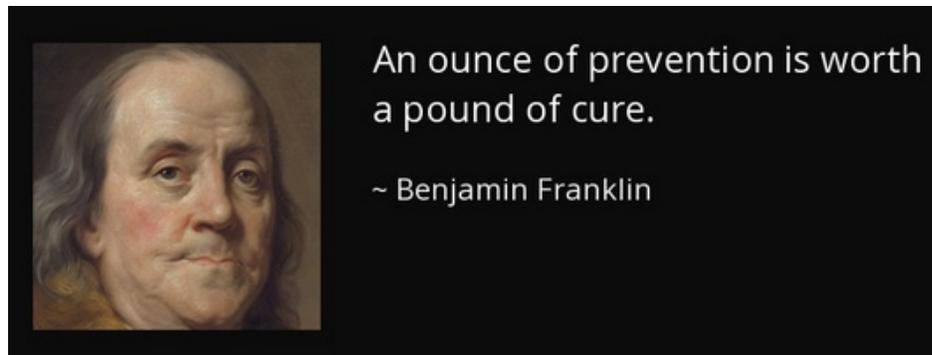
1. **Accessibility and Availability:** personnel, facilities, technology
2. **Acceptability:** culturally appropriate care
3. **Affordability:** inclusion in insurance coverage; costs of deductibles; cost of medication
4. **Stigma:** stereotypes and visibility of seeking services

Services: Element of Comprehensive and Continuous Care

- Community engagement in comprehensive approaches
- Addressing emergent needs
 - Early identification from a variety of organizations including law enforcement, schools, churches, local businesses
 - Collaborations across community organizations to address underlying economics, quality of life in the community (alternatives for personal activities)
 - Counseling (discrete)
 - Longer term needs: support alternative delivery modalities, including peer-to-peer

Prevention

- Addressing harmful alcohol use through legal means and community education
- Reducing access to lethal means of suicide
- School-based social and emotional learning programs
- Community-based parenting programs
- Training programs to help identify people with mental illness



Treatment and Recovery

- Integration of behavioral health and general medical care
- Regionalizing services; including use of tele-behavioral health
- Self-help groups in recovery
- Peer recovery services



Meet the challenges to health amidst changing delivery and finance models

- 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
- And, last but not least, changes in financing from volume-based fee-for-service to value-based payment and global budgets

Value-based Care and Payment

- Shift emphasis from individual encounter to repair damage to population-based model to prevent damage
- Shift financial risk from a model of insurance reserves absorbing all losses to providers accepting financial risk for keeping “enrolled lives” healthy
- Means changing payment and finance to population-based revenue streams to create incentives to invest in population health

Scary to Change

- Inertia supports status quo – system built to generate volume of services with payment tilted to high-acuity encounters (specialists in hospital settings)
- Healthcare organizations built financial models on that basis, thinking they had control because of negotiated prices for discrete services
- Example of how to think about local hospitals

Scary to Stay the Same

- Pandemic exposed weaknesses to old models
- Cannot assume ability to proceed regardless of cost (to individuals, communities, society)
- Headwinds of system consolidation as way of getting to scale could threaten rural systems

Potential for the Future

- Redirecting a significant percent of over \$3 trillion from much of the waste of unnecessary services and overhead to investments in the health of people in communities
- Redesigning local systems with renewed emphasis on primary care
- Using the advances in technology to bring services to people instead of forcing people to travel long distances to services

Building Blocks for the High-Performing Rural Health System

- Appropriate use of telehealth
- Primary care as the foundation
- Integrating clinic inside the walls with community-based services outside the walls



Building Blocks for the High-Performing Rural Health System

- Addressing workforce needs across the continuum
- Use of information systems to integrate patient care; local, regional and beyond
- Community coalitions to address individual and population needs



Policies to Get Us There

- Regulatory policies to allow changes to delivery models
- Learning from changes made during public health emergency, especially in telehealth
- Adapting new models to rural circumstances, such as Accountable Care Organizations
- New models for rural places, such as Rural Emergency Hospitals and Accountable Health Communities

Addendum: A Myriad of Specifics

- Accessible on the RUPRI Health Panel web site:
www.rupri.org/focus-areas/health/
 - In policy briefs and papers
 - Also in comment letters
- See other organizations: National Rural Health Association, American Hospital Association are examples
- **Bipartisan Policy Center** “bonus” slides follow

Confronting Rural America's Health Care Crisis: Bipartisan Policy Center Rural Health Task Force Recommendations

Keith J. Mueller, PhD, Task Force Member

Presented in the Roundtable on Population Health,
National Academy of Medicine

June 25, 2020

Director, Rural Policy Research Institute Center for Rural Health Policy Analysis
University of Iowa

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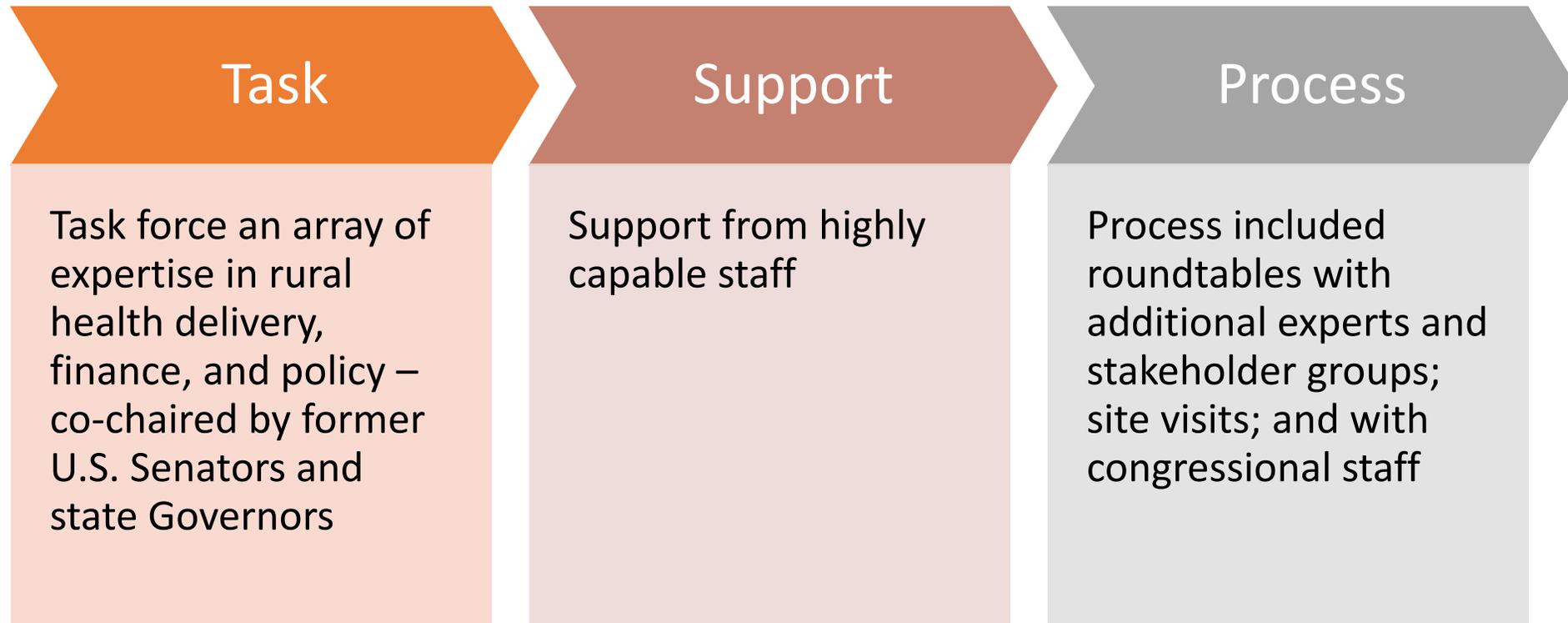
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Acknowledgements

- The Leona M and Harry B Helmsley Charitable Trust provided generous support in funding the work of the Rural Health Task force
- Members of the Honorary Congressional Task force on Rural Health provided special insight: Senator Chuck Grassley (R-IA), Senator Tina Smith (D-MN), Senator Bill Cassidy (R-LA), Senator Angus King (I-ME), Congressman Jodey Arrington (R-TX, and Congresswoman Xochitl Torres Small (D-NM)

About the Task Force and Process



Essential to Health Care Providers Participation in Population Health



Financial stability:
short term



Financial
sustainability: long
term



Flexibility in using
resources, including
healthcare workforce



Incentives and
flexibility: new
models of finance
and delivery



Infrastructure
support

Financial Stability: Hospitals

- Sequestration relief (accomplished for immediate term, committee would extend through FY 2023)
- Increase critical access hospital payment 3%
- Re-establish CAH necessary provider designation process
- Make designation of Medicare Dependent Hospitals permanent, and adjustment for low volume rural hospitals

Financial Stability: Other Providers

- Payment for rural clinicians reporting data under the Quality Payment Program
- Extend bonus payments for new advanced Alternative Payment Model participants
- Leverage patient engagement incentives to decrease rural bypass and incentivize local care utilization

Financial Stability Long Term

- Grants and loans for capital infrastructure: modify service lines or improve structure or patient safety
- Payment for rural health clinics and expand access to advanced practice clinician services in RHCs
- Increase Medicare-capped reimbursement rate for physician-owned RHCs
- Exclude enrolled accountable care organization beneficiaries when determining regional benchmark in rural areas

Flexible Use of Resources

Clarify	Clarify rules around co-location or shared space agreements that allow rural hospitals to partner with other health care providers
Allow	Allow advanced practice clinicians to work up their state scope of practice in RHCs
Exempt	Exempt rural Medicare beneficiaries from prohibition against same-day services
Remove	Remove regulatory and legislative barriers that prevent non-physician providers from practicing at the top of their license

Incentives and Flexibility

- Establish a process for rural facilities and communities to develop a Hospital Transformation Plan
- New models
 - Rural and Emergency Outpatient Hospital designation
 - Extended Rural Services Program
 - Global budget models
- Decrease qualifying participation thresholds for rural providers in Alternative Payment Models

Infrastructure Support

- Prioritize connecting rural areas with broadband through anchor institutions and direct-to-home services
- Ensure effective implementation of the Broadband Deployment Accuracy and Technological Availability Act
- Use of telehealth services supported by changes in payment, eligible providers, sites of service, and eligible services – all were included in COVID-19 related legislation and regulatory change; now task is extending beyond current pandemic

Additional Recommendations

- Increase number of rural-specific CMMI demonstrations and expedite national expansion of promising models
- Reduce administrative burden for rural providers: use readily available claims data for quality performance
- Improve access to quality maternal care in rural areas (4 specific recommendations)
- Improve utilization of currently available workforce (5 specific recommendations)

Additional Recommendations

- Strengthen the Health Resources and Services Administration rural workforce programs (2 specific recommendations)
- Expand federal rural workforce recruitment and retention initiatives (four specific recommendations)
- Authorize licensed clinicians to provide inter-state services to Medicare beneficiaries
- Direct the Office of the National Coordinator for Health Information Technology to prioritize rural-specific training curricula for the health IT workforce

Necessary Conditions to Address Population Health

- Financially secure delivery system, with predictability
- Payment systems supporting engaging in community-driven population health programming
- Flexibility for how the system is built and how professionals practice and interact
- Flexibility for how patients (persons) interact with a range of providers
- BPC Task Force recommendations are building blocks

For More Information

- The Task Force Report: <https://bipartisanpolicy.org/report/confronting-rural-americas-health-care-crisis/>
- Bipartisan Policy Center health portfolio: <https://bipartisanpolicy.org/policy-area/health/>
- Rural Policy Research Institute (RUPRI) Health Panel: <http://www.rupri.org/areas-of-work/health-policy/>

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For more than 30 years, the Rural Health Research Centers have been conducting policy-relevant research on healthcare in rural areas and *providing a voice for rural communities in the policy process.*



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



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