RURAL CANCER PREVENTION AND CONTROL ACTIVITIES IN SC

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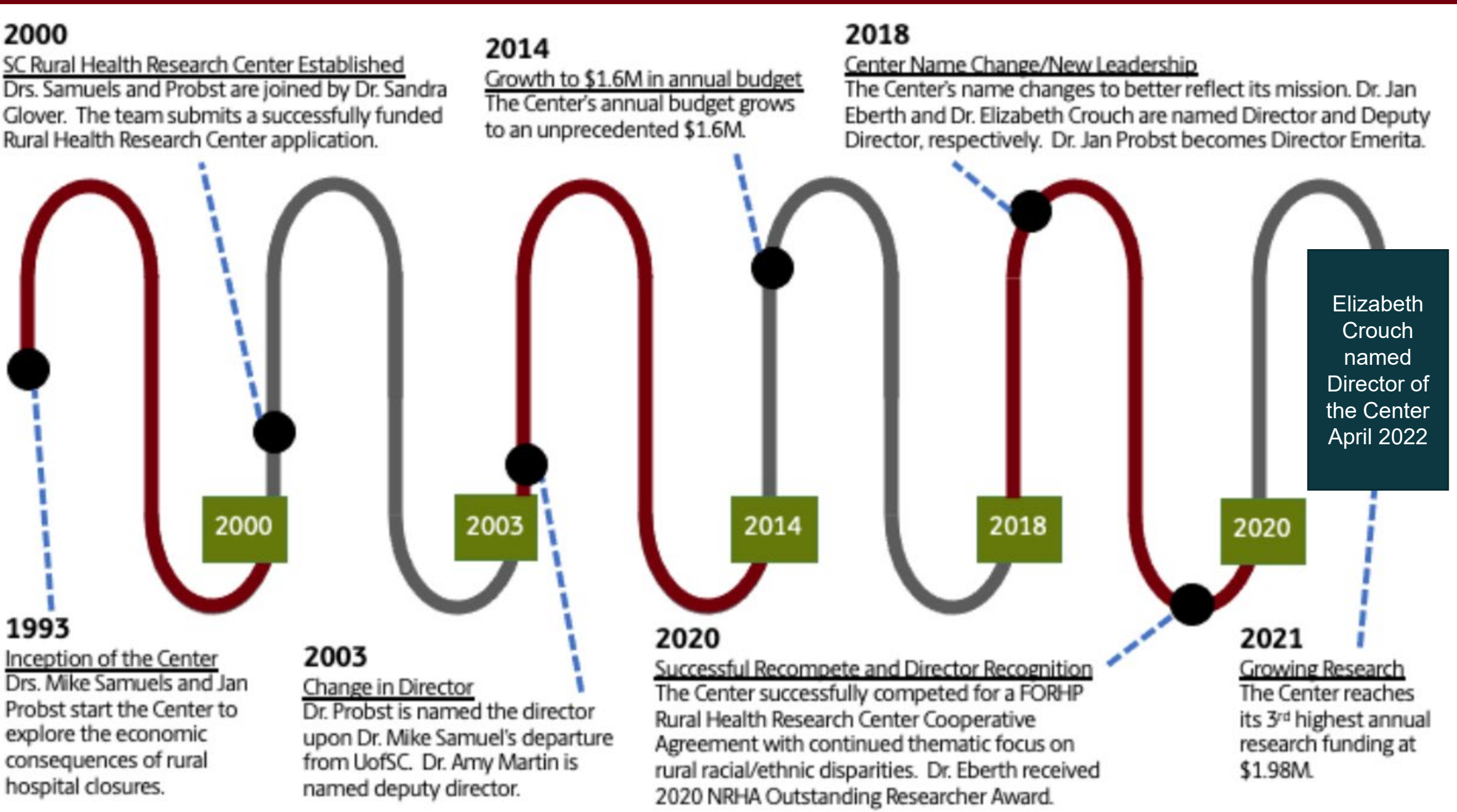
U of SC ARNOLD SCHOOL OF PUBLIC HEALTH

RURAL AND MINORITY HEALTH RESEARCH CENTER

RMHRC Mission Statement

Our mission is to illuminate, and address, health and social inequities experienced by rural and minoritized populations to promote the health of all.

We believe in **interdisciplinary** research, including methods and frameworks drawn from nursing, public health, medicine, social work, and geography.


2000
SC Rural Health Research Center Established
Drs. Samuels and Probst are joined by Dr. Sandra Glover. The team submits a successfully funded Rural Health Research Center application.
2014
Growth to $1.6M in annual budget
The Center's annual budget grows to an unprecedented $1.6M.
2018
Center Name Change/New Leadership
The Center's name changes to better reflect its mission. Dr. Jan Eberth and Dr. Elizabeth Crouch are named Director and Deputy Director, respectively. Dr. Jan Probst becomes Director Emerita.
Elizabeth Crouch named Director of the Center April 2022
2000
2003
2014
2018
2020
1993
Inception of the Center
Drs. Mike Samuels and Jan Probst start the Center to explore the economic consequences of rural hospital closures.
2003
Change in Director
Dr. Probst is named the director upon Dr. Mike Samuel's departure from UofSC. Dr. Amy Martin is named deputy director.
2020
Successful Recompete and Director Recognition
The Center successfully competed for a FORHP Rural Health Research Center Cooperative Agreement with continued thematic focus on rural racial/ethnic disparities. Dr. Eberth received 2020 NRHA Outstanding Researcher Award.
2021
Growing Research
The Center reaches its 3rd highest annual research funding at $1.98M.

CENTER GOALS

- **Conduct methodologically rigorous and policy-relevant research** to provide a clear picture of health status, health care needs, and health services utilization among rural and minority populations
- **Investigate policies** aimed at improving health and reducing barriers to care among rural and minority populations, especially persons experiencing poverty
- **Assess resources** available to, and barriers experienced by, rural and safety net health care providers
- **Promote professional development** of researchers and health care professionals to promote health equity
- **Facilitate cross-disciplinary collaborations** between researchers and community partners wishing to bridge research and practice
- **Provide expert advice** to national, state, and local government and to rural and minority constituency groups to empower policy development and advocacy

DEFINING "RURAL" IN THE UNITED STATES

- Defining a place as rural is complicated by:
  - Multiple definitions = a place can be considered rural by one variable, but not another (>15 current definitions)
  - Geographic "units" = places identified as rural by county, Census tract, or ZIP code
  - Components = definitions based on different criteria for population size, distance to closest metropolitan area, work commuting patterns, etc.

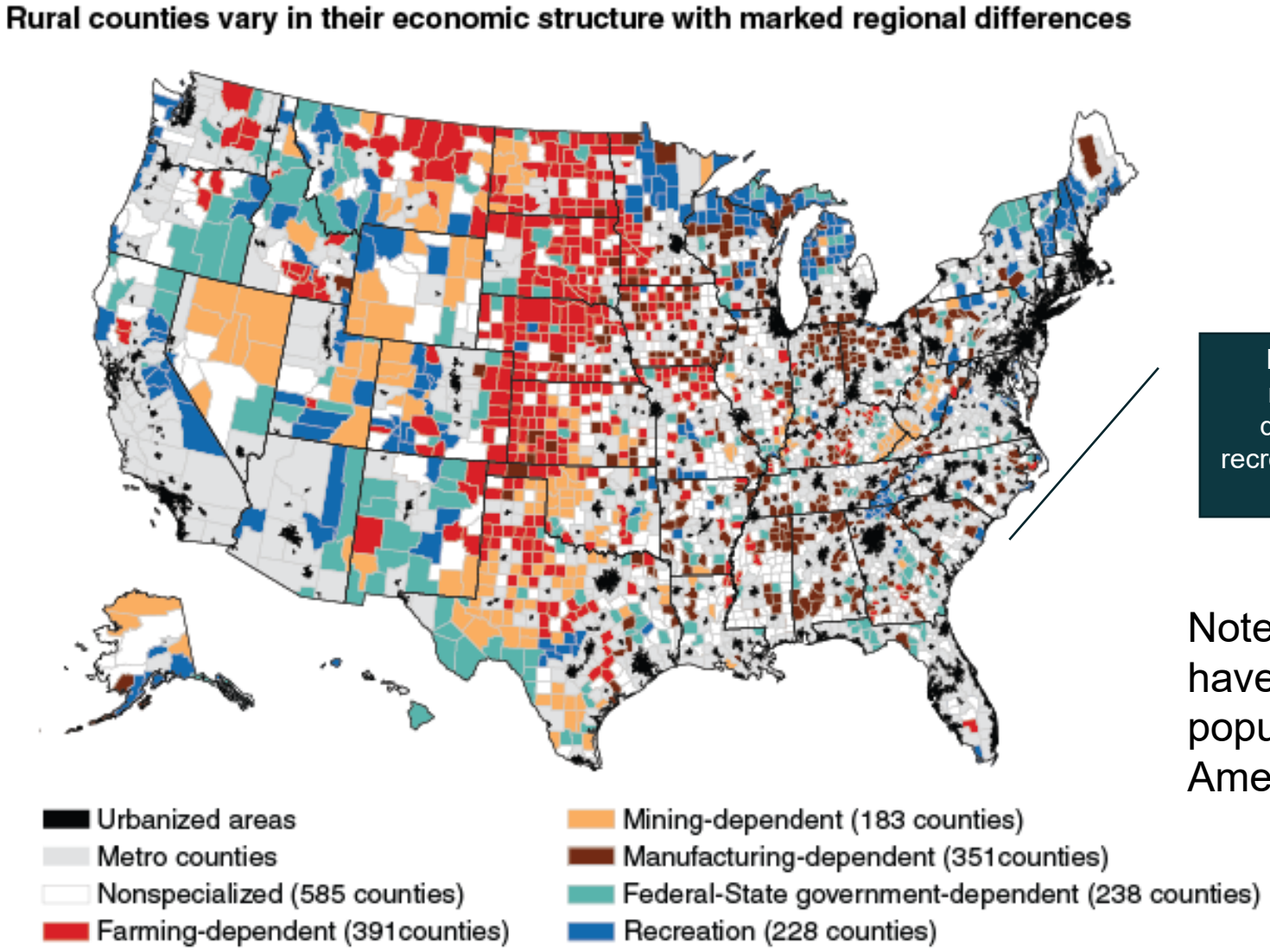

Jackson County, TN


Bamberg County, SC


Loving County, TX


Mohave County, AR

ECONOMIC DIVERSITY IN RURAL

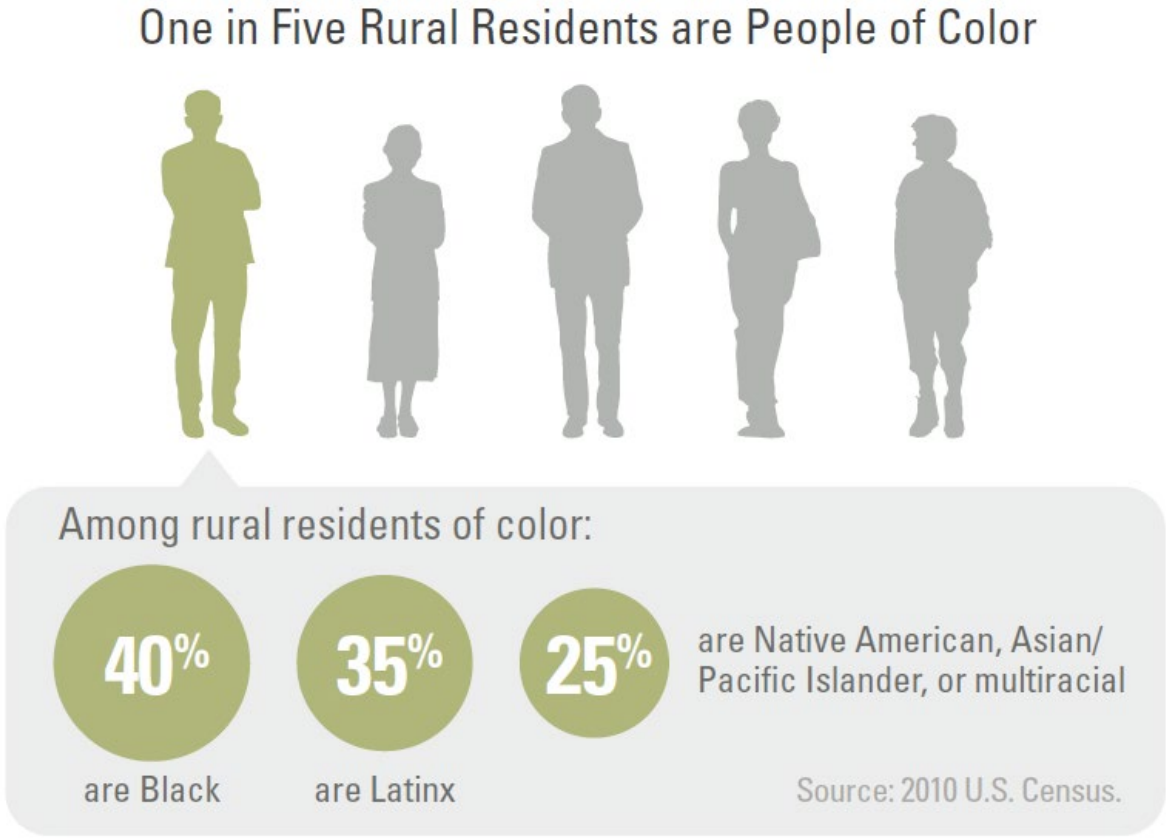


In SC, most rural counties are manufacturing or government dependent. There are a couple recreation dependent counties on the coast.

Note: Farming dependent areas have seen the greatest population declines in rural America.

RACIAL/ETHNIC DIVERSITY IN RURAL

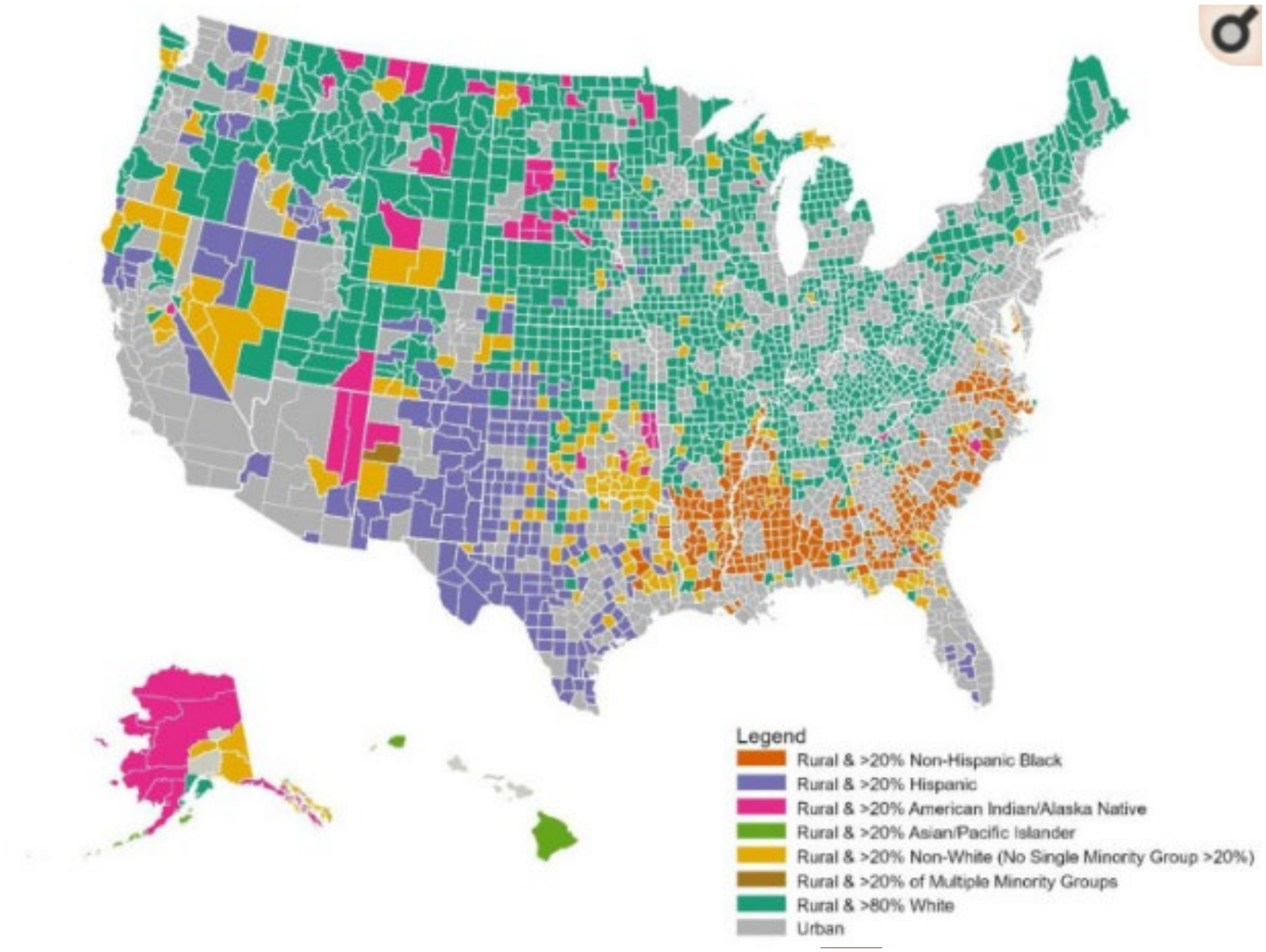
- 15-20% of the US population lives in a rural area.
- 1 in 5 rural residents are Indigenous or people of color.



Sources: Rural America at a Glance, 2018; US Census Bureau

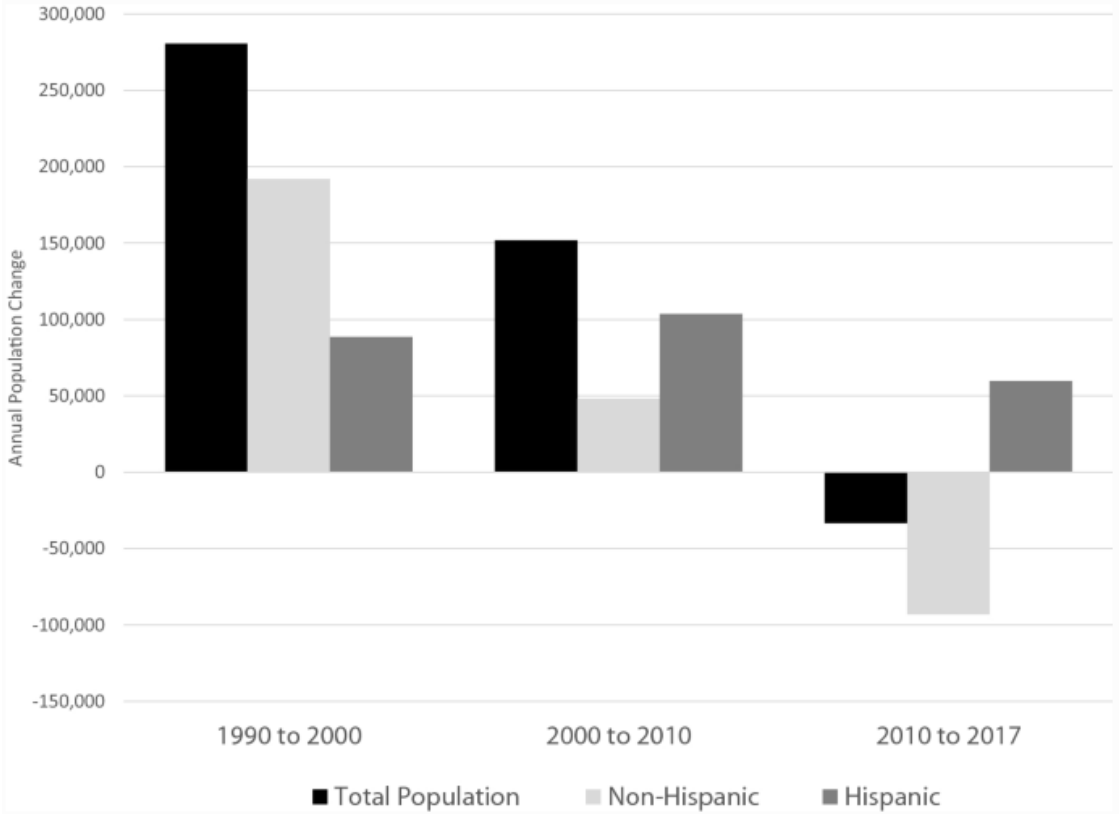
RACIAL/ETHNIC DIVERSITY IN RURAL

Rural counties with >20% residents from underrepresented racial/ethnic group are shown here.



RACIAL/ETHNIC DIVERSITY IN RURAL

- Increasing number of Hispanic residents in nonmetro areas has offset overall declines (described as “a demographic lifeline”) – 2% on average per year

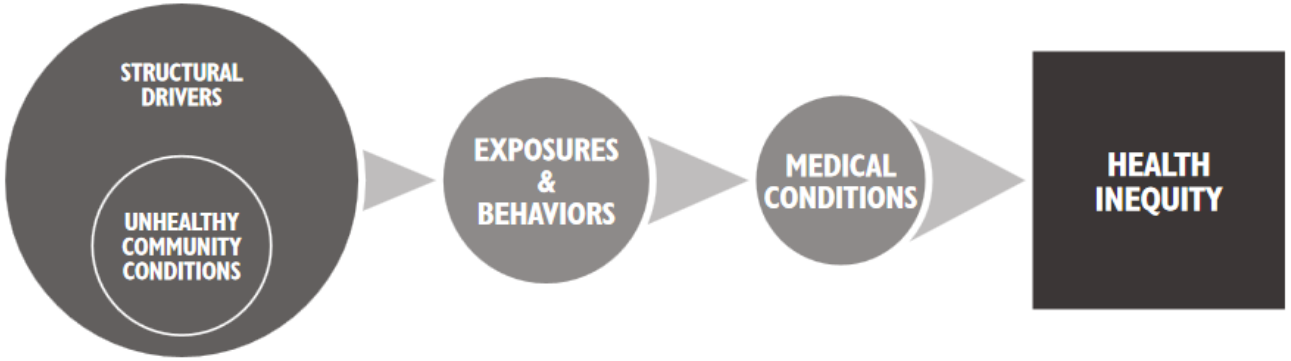


Nonmetropolitan population change by Hispanic origin, 1990–2017

Sources: Lichter & Johnson, 2020

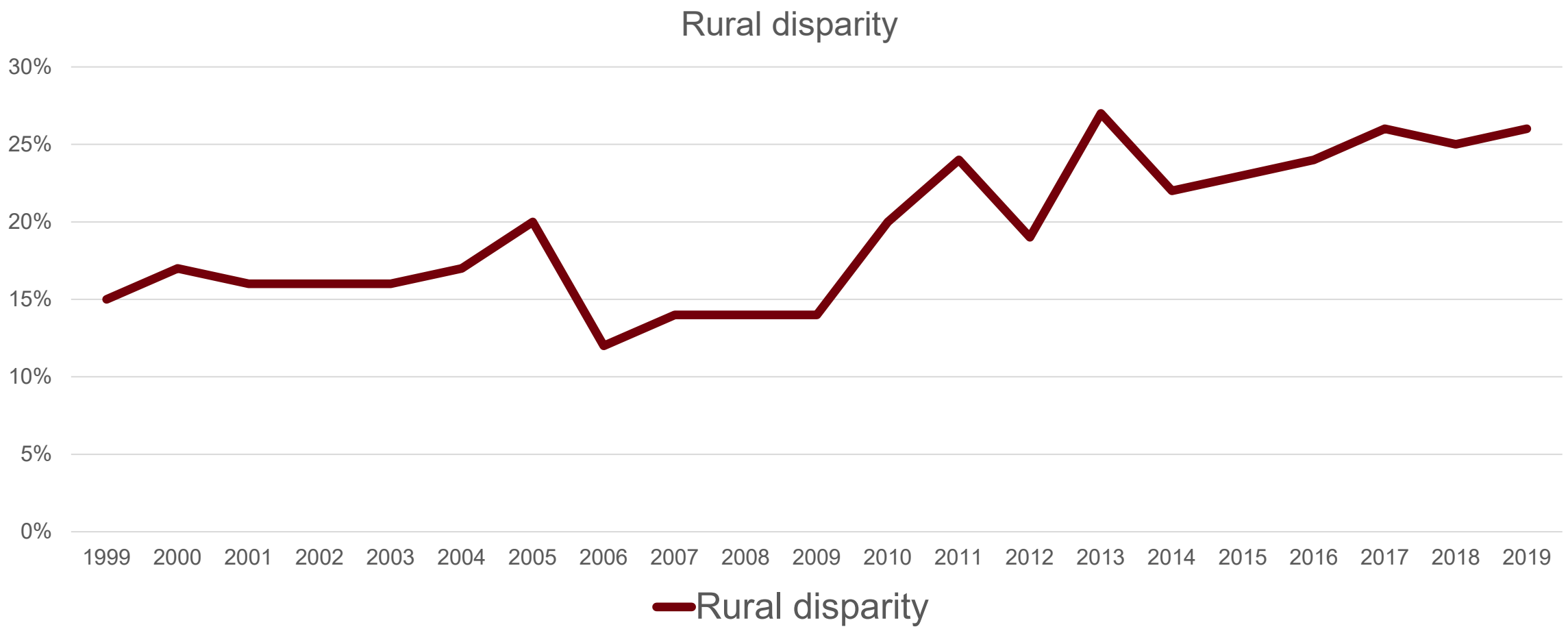
PATHS TO HEALTH INEQUITY

- Health disparities are differences which *systematically* and *negatively* impact population subgroups.
- Health inequities = disparities due to differences in social, economic, environmental or healthcare resources



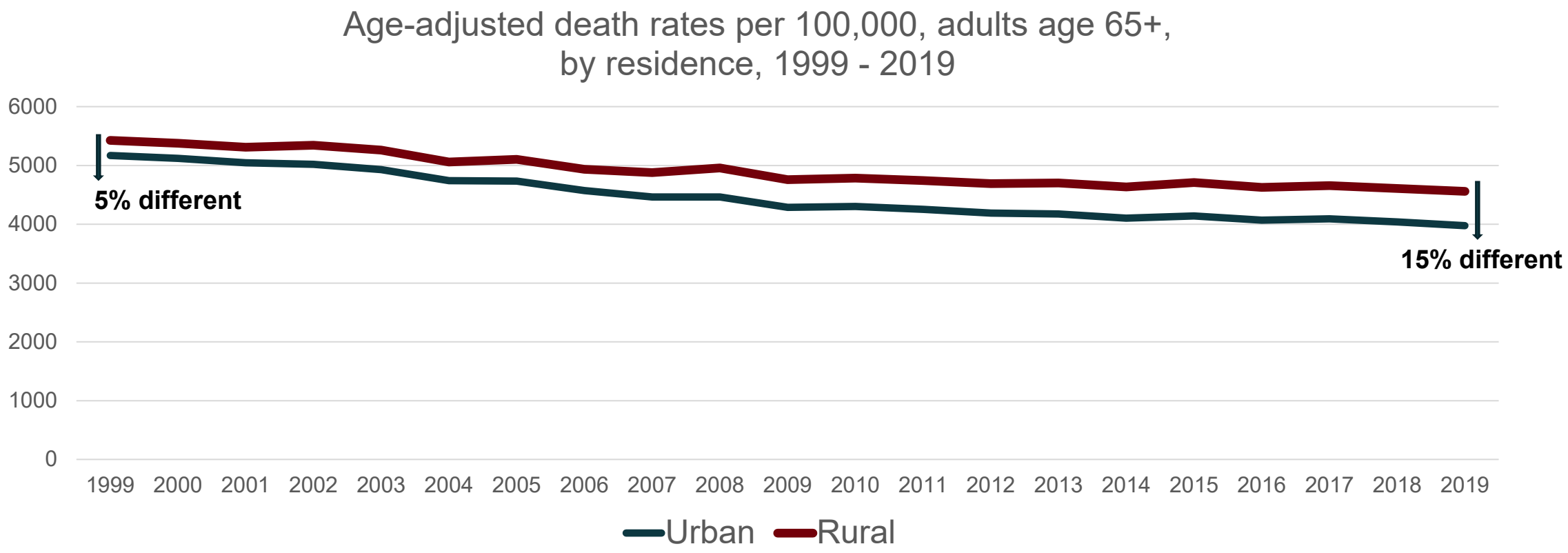
 Source: “Measuring what works to achieve health equity.” Prevention Institute, 2015.

20 YEARS OF HIGHER RURAL CHILD MORTALITY



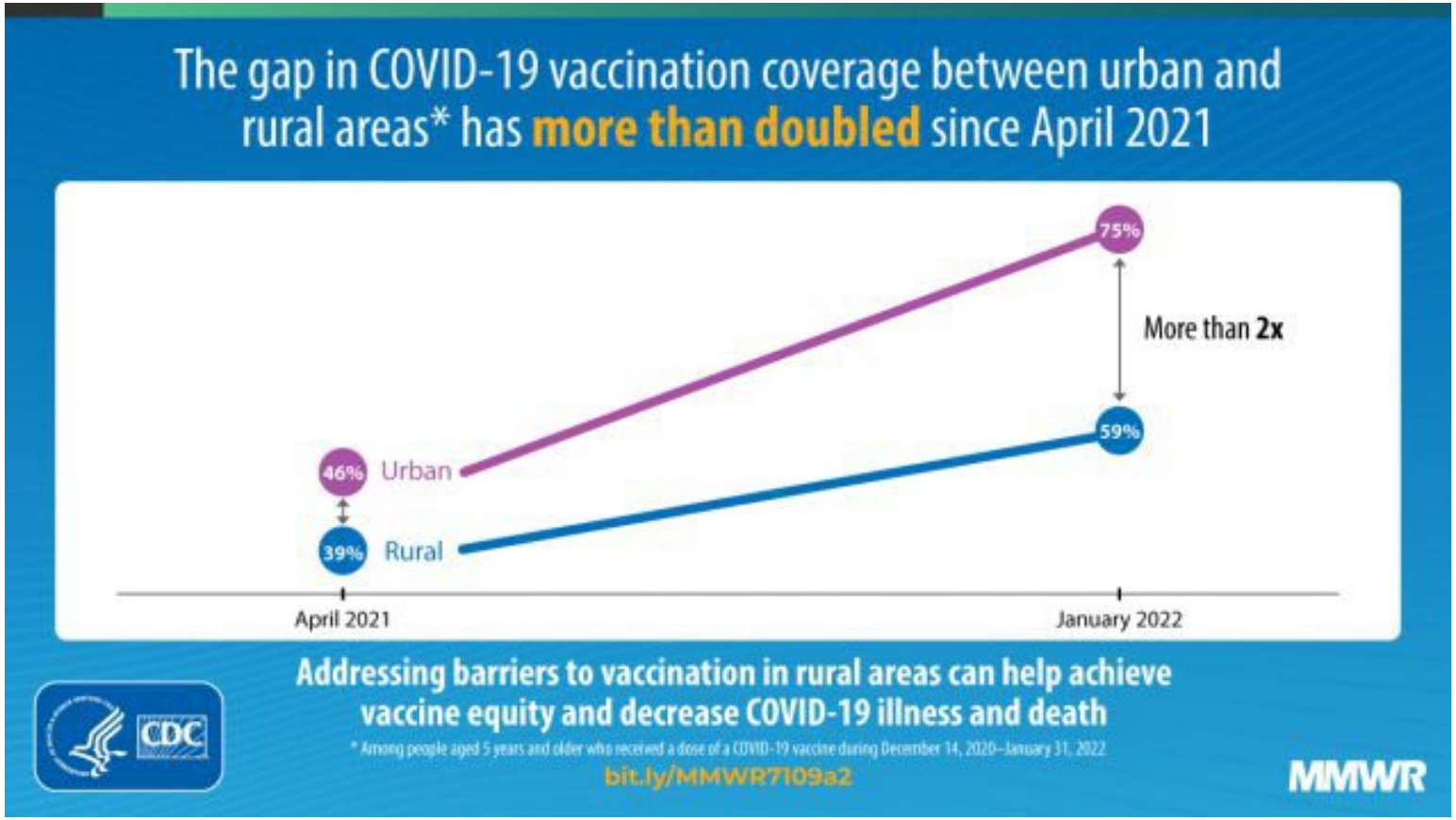
Team's analysis of CDC Wonder Data

TRENDS AMONG OLDER ADULTS



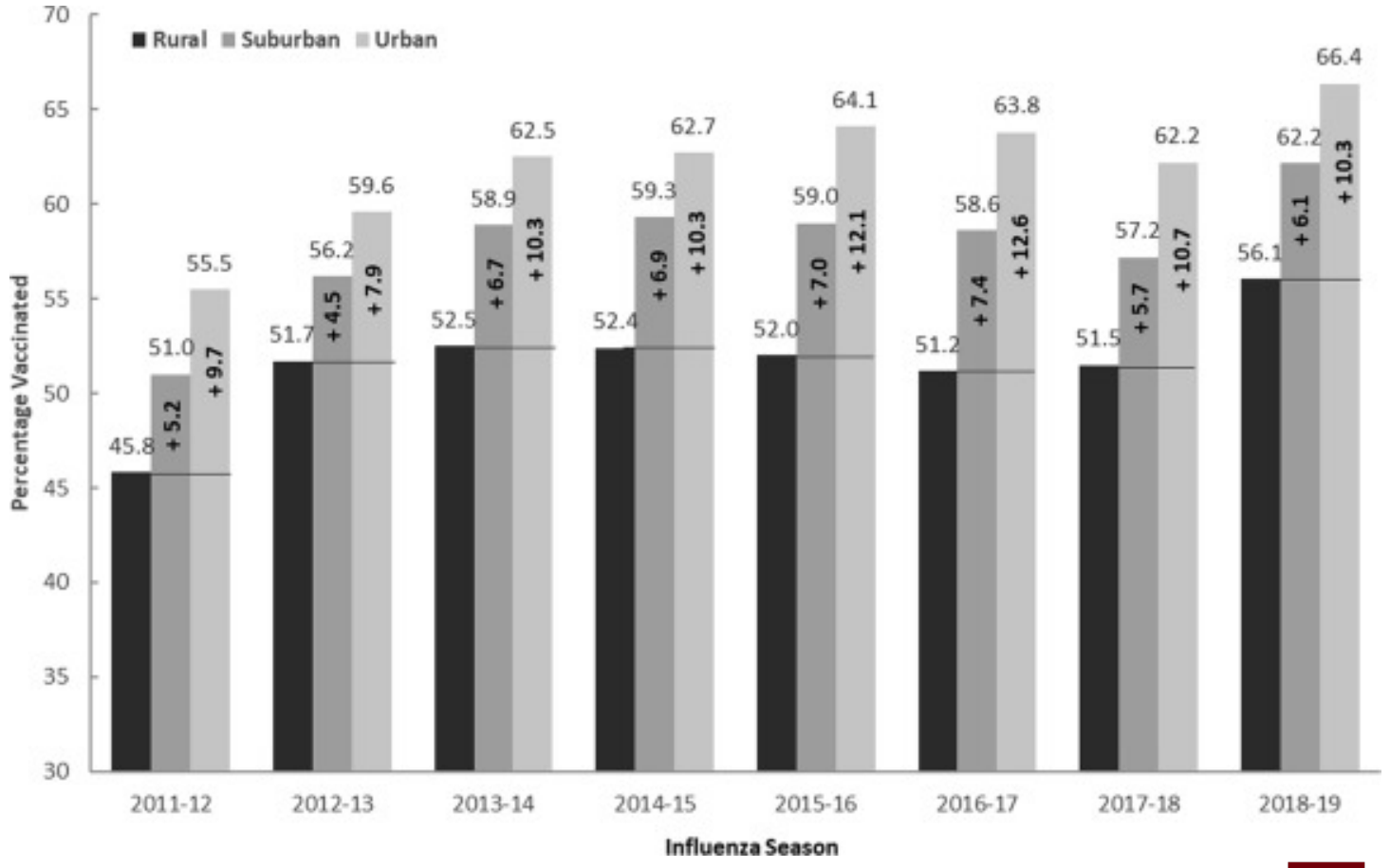
Team's analysis of CDC Wonder Data

DIFFERENCES IN COVID-19 VACCINATION RATES BY RURALITY



Source: Saelee et al. MMWR. 2022.

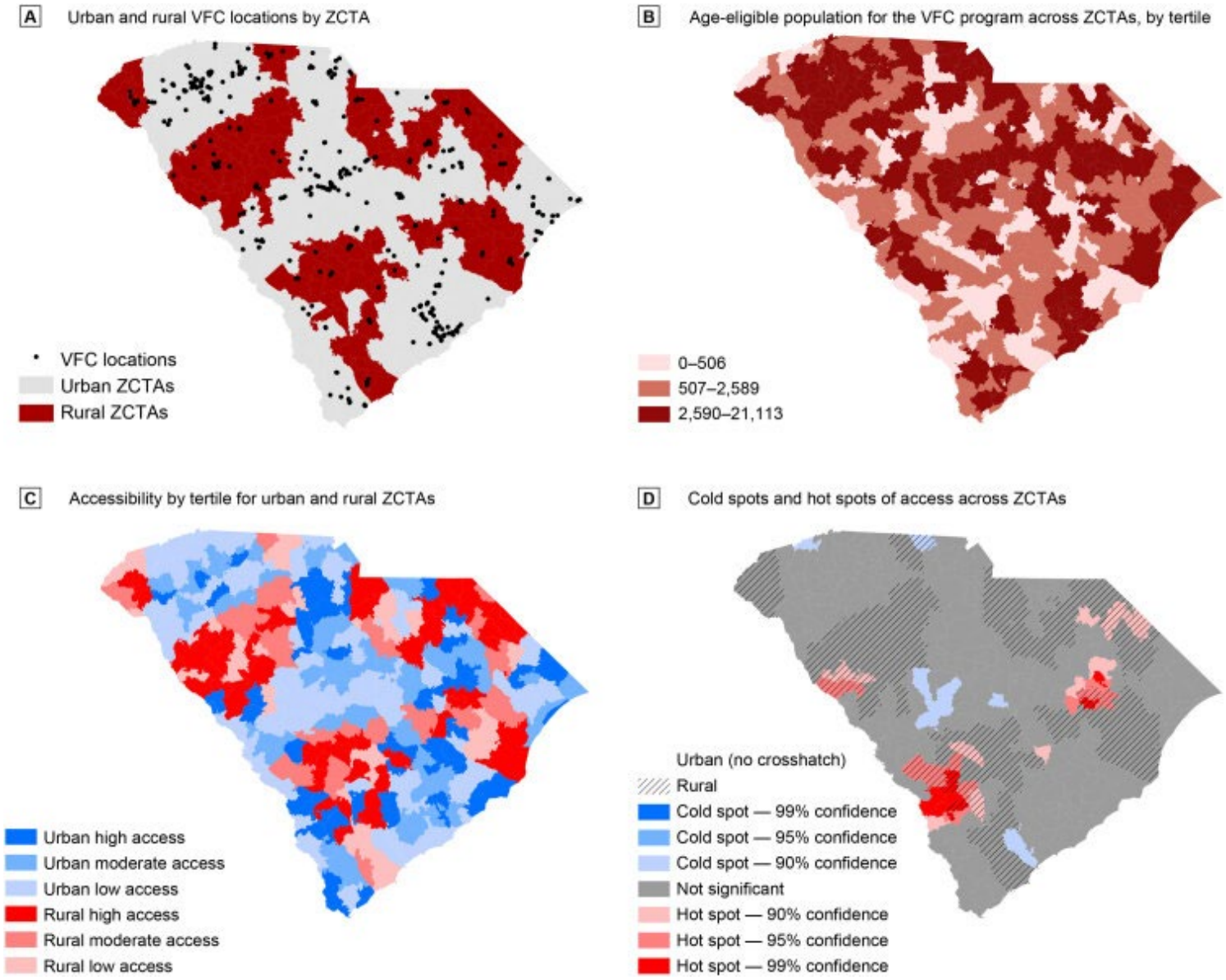
DIFFERENCES IN INFLUENZA VACCINATION RATES IN CHILDREN/ADOLESCENTS BY RURALITY



Source: Zhai et al. Vaccine. 2020. (Graph based on NIS-Flu data)

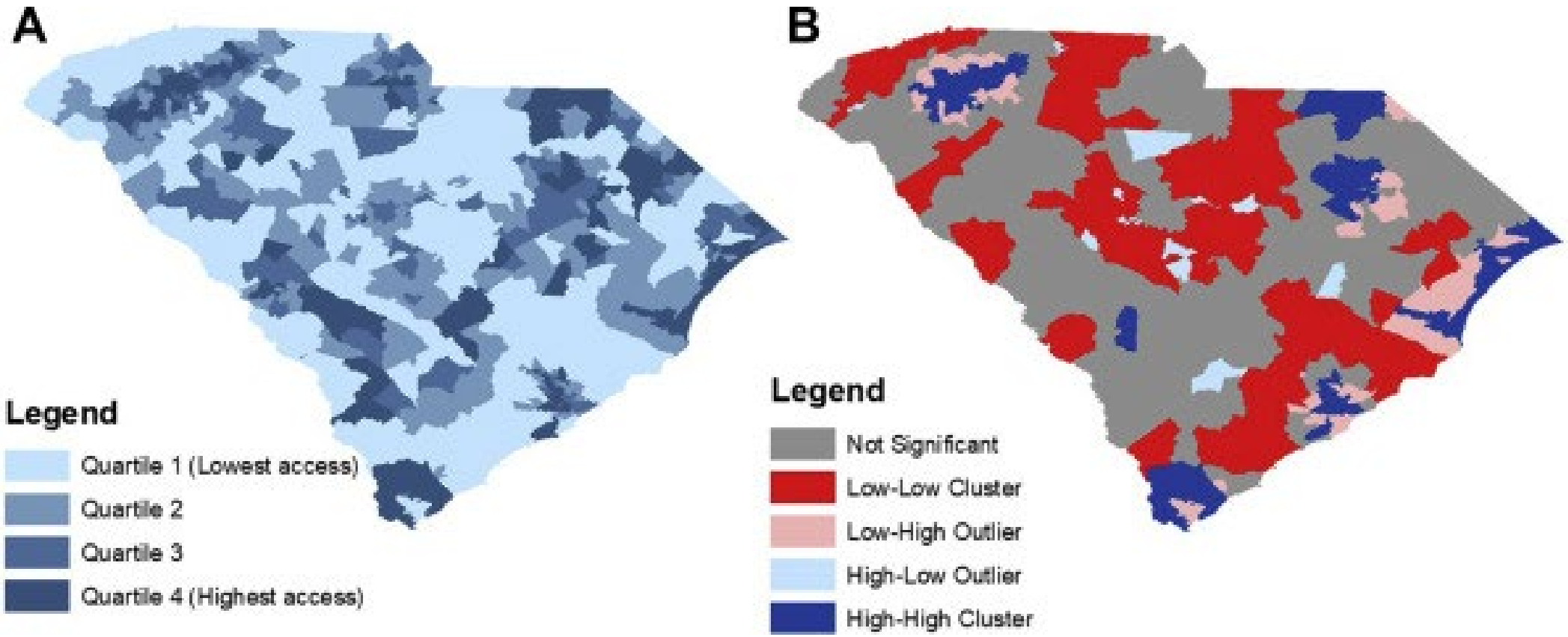
ACCESS TO VFC PROVIDERS IN SC BY RURALITY

**Great maps on VFC and other vaccination programs available on DHEC's website!



Source: Ranganathan et al. Prev Chron Dis. 2020.

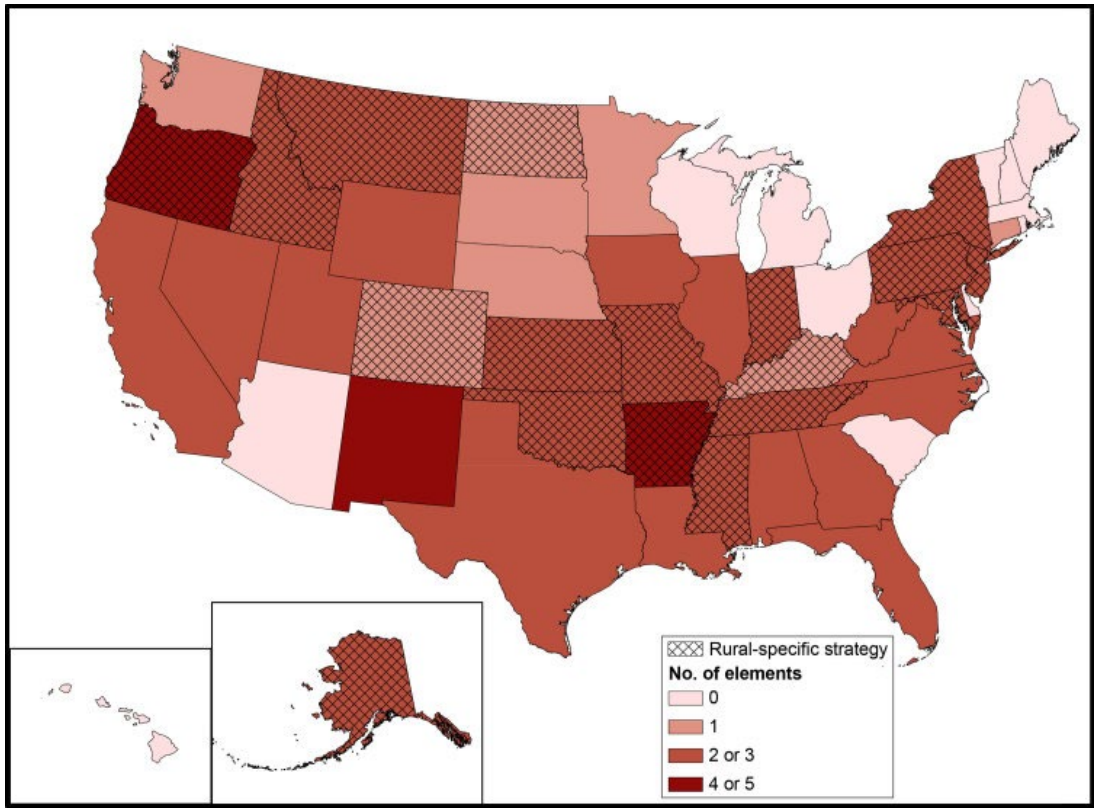
ACCESS TO PHARMACIES AMONG PERSONS AGED 10-24 YEARS IN SC



Source: Zahnd et al. J Am Pharm Assoc. 2020.

TOOLS TO ADVANCE HEALTH EQUITY

No. of elements included in cancer control plan and whether plan included a rural strategy



Source: Murphy et al. Prev Chron Dis. 2021.

- Cancer Control Plans are an ideal place to describe baseline health behaviors/outcomes (e.g., HPV vaccination rates) and develop goals and strategies to achieve health equity.
- As of January 2020, SC had no rural-specific elements.

TOOLS TO ADVANCE HEALTH EQUITY IN RURAL

- Interventions are needed at multiple levels to contribute to reduced incidence and mortality from HPV-related cancers, and to increase vaccination rates in rural communities.
  - Policy development
  - Clinic-based education
  - School entry requirements
  - Pharmacy and community education and outreach programs

Source: Vanderpool et al. Hum Vaccin Immunother. 2019.

TOOLS TO ADVANCE HEALTH EQUITY IN RURAL

- There are evidence-based interventions to improve health equity, but we need SYSTEM and POLICY change to make them widely available.
- Example intervention strategies to reduce disparities:
  - Reduce red tape to stocking/administering vaccines
  - Allows NPs, PAs, & pharmacists to practice to the full scope of their license
  - Home visitation programs to get preventive care to high-risk persons/areas
  - Offer and pay for wraparound services (e.g., navigators, transportation, etc.)
  - Incentivize providers to practice in rural settings, building/renovating facilities in rural communities, expanding telehealth services, etc.

Need political will and/or monetary resources

FUNDING AND OTHER INFO

- Primary funding for the RMHRC comes from the Federal Office of Rural Health Policy (FORHP) under cooperative agreement #U1CRH30539

- Twitter: @RMHRC_UofSC
- RMHRC website: https://rmhr.sc.edu
- Rural Health Research Gateway https://www.ruralhealthresearch.org/

THANKS!

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