



# Joint Quarterly Network Meeting CaN-D and INRPHA



June 21, 2024

*Put in the chat:*

Name, affiliation, name of your favorite rural place, or rural place you have visited recently



# GOALS FOR TODAY'S JOINT MEETING

01

Learn about two NIA-funded research networks

02

Network!

03

Identify collaborative proposal/paper ideas

# AGENDA

01

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Introduction to  
INHRPA

02

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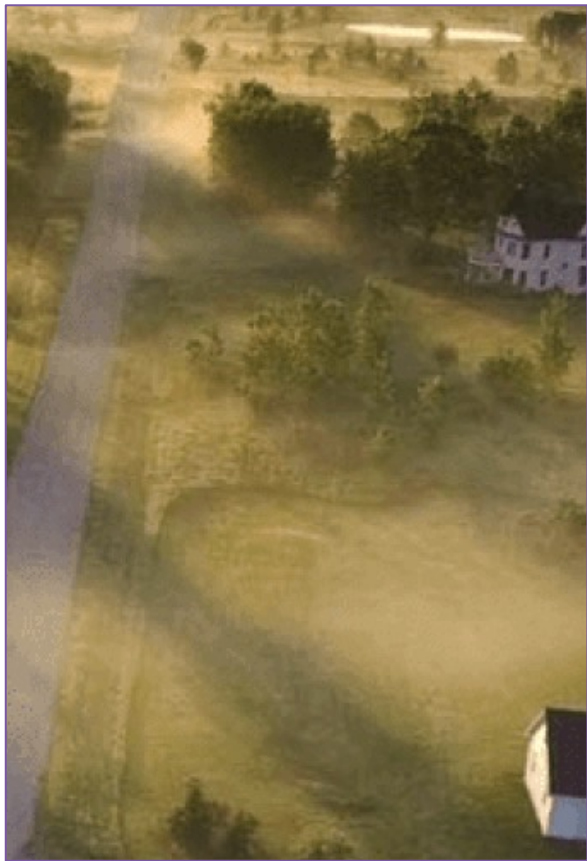
Introduction to  
CaN-D

03

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Discussion





01

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**Interdisciplinary Network  
on Rural Population  
Health & Aging**





# The Interdisciplinary Network on Rural Population Health and Aging (INRPHA)

**Leif Jensen**

**The Pennsylvania State University**

**Joint meeting of INRPHA and CaN-D**

**June 21, 2024**

The Interdisciplinary Network  
on  
Rural Population Health  
and Aging



NIH



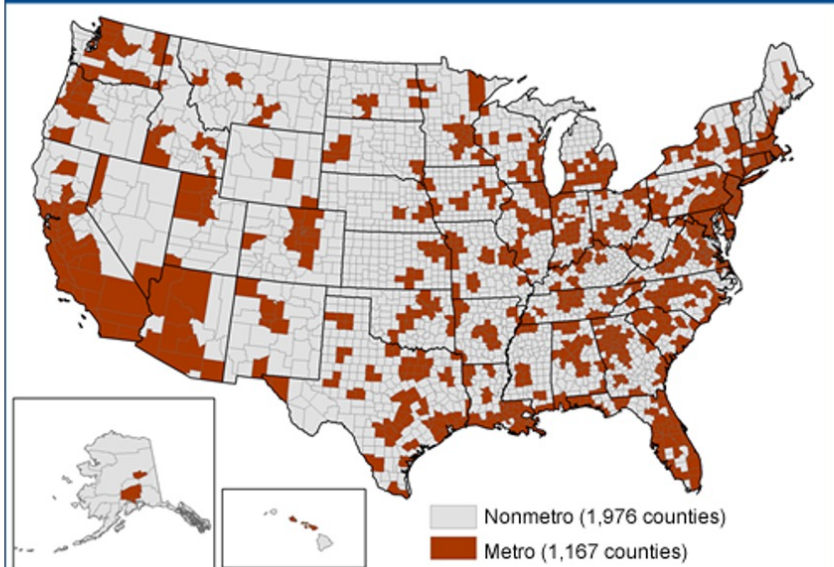
National Institute on Aging

# What is, where is, “rural” in the United States?

- Conceptual definitions
  - Economic ← rural is where farming and extractive industries are found
  - Cultural ← rural is where people have traditional values
  - Ecological ← rural is where populations are small and sparsely settled
- Operational definitions (all ecological definitions)
  - Using counties as building blocks
    - Metropolitan versus non-metropolitan areas
    - Metropolitan versus micropolitan versus non-core areas
  - Sub-county-level measures
    - Urban versus rural places
  - Hybrids (from ERS/USDA)
    - Rural-urban continuum codes (RUCC)
    - Rural-urban commuting area codes (RUCA)

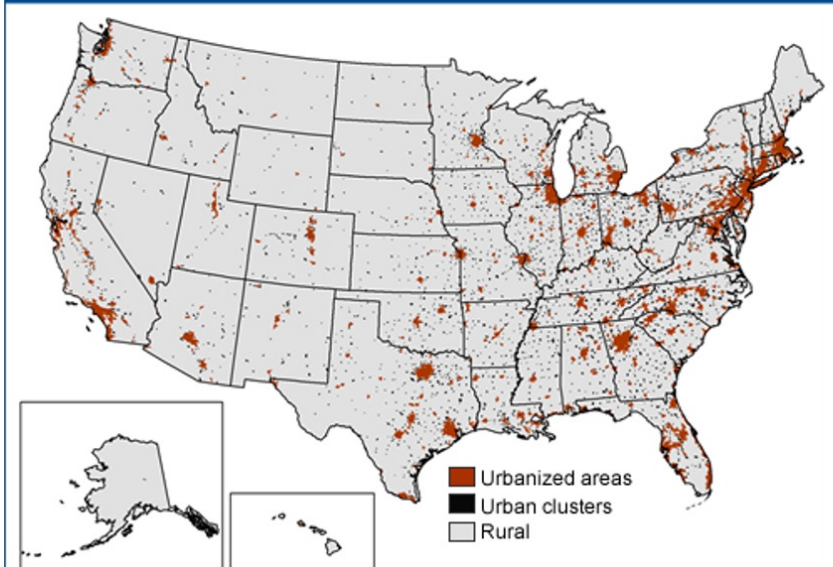
**“Nonmetropolitan” and “rural” are not the same.  
Researchers often resort to using county-level definitions (nonmetro)**

**Metro and nonmetro counties, 2013**



Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

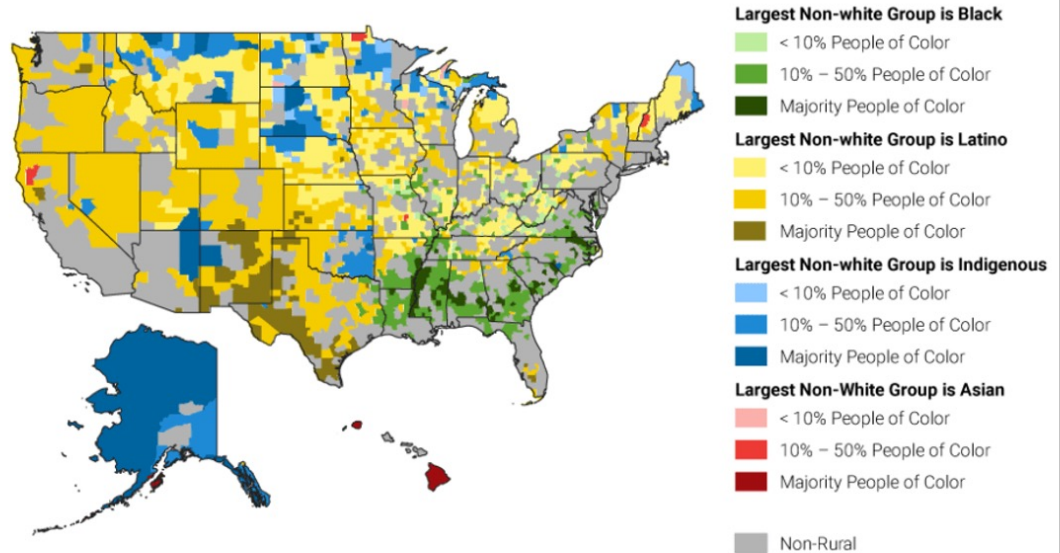
**U.S. Census Bureau's urban and rural areas, 2012**



Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

**Rural America is racially / ethnically diverse. Race/ethnic groups cluster geographically. Some of these clusters face economic challenges that have implications for population health.**

**Figure 2. Rural Americans of Color in 2020**



Source: Brookings analysis of 2020 Census data.

**B** Metropolitan Policy Program  
at BROOKINGS

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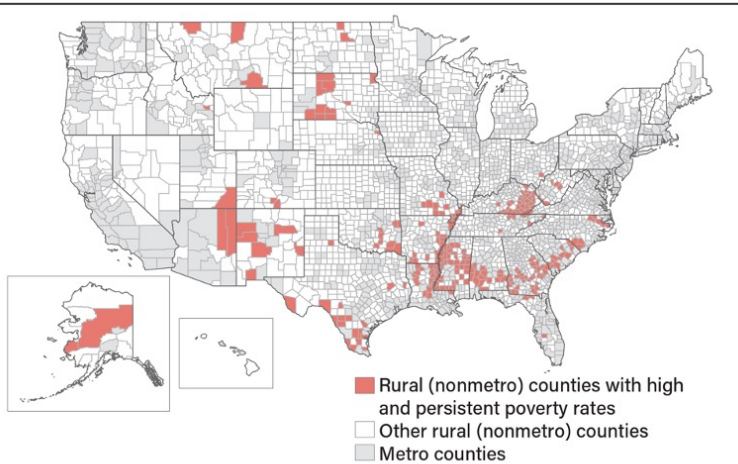


National Institute on Aging

**Persistent poverty befalls many nonmetro counties.  
Both Poverty of individuals/households and poverty of place impact population health.**

**High and persistent poverty rates in U.S. rural counties, 2019**

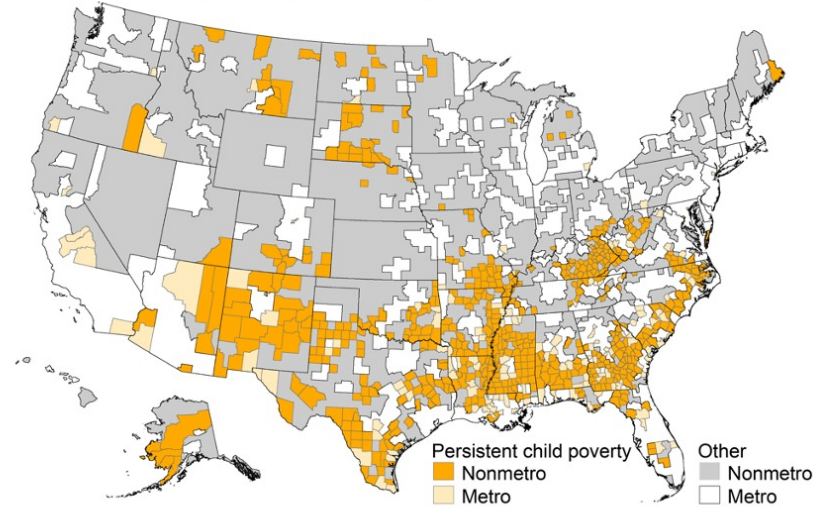
USDA Economic Research Service  
U.S. DEPARTMENT OF AGRICULTURE



Notes: High and persistent poverty county = county designated as persistent poverty (over the 30-year period ending with 2007-11) in the USDA, Economic Research Service County Typology Codes 2015 edition and high poverty in the current period (2015-2019). Nonmetro (rural) status determined by 2013 metropolitan area designations from the U.S. Office of Management and Budget.

Source: USDA, Economic Research Service using 1980, 1990, and 2000 decennial census data and American Community Survey 5-year estimates for 2007-2011 and 2015-2019.

**Persistent child poverty counties, 2015 edition**

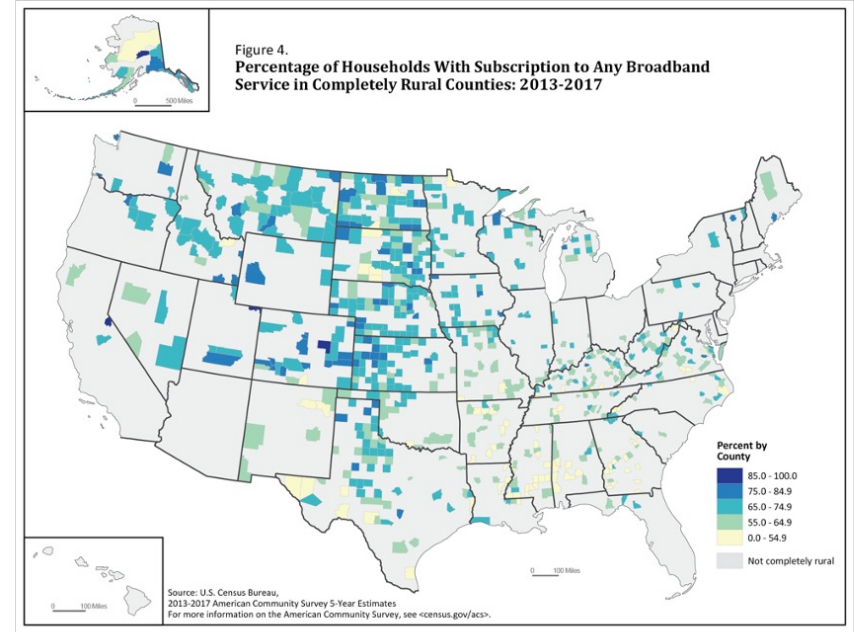
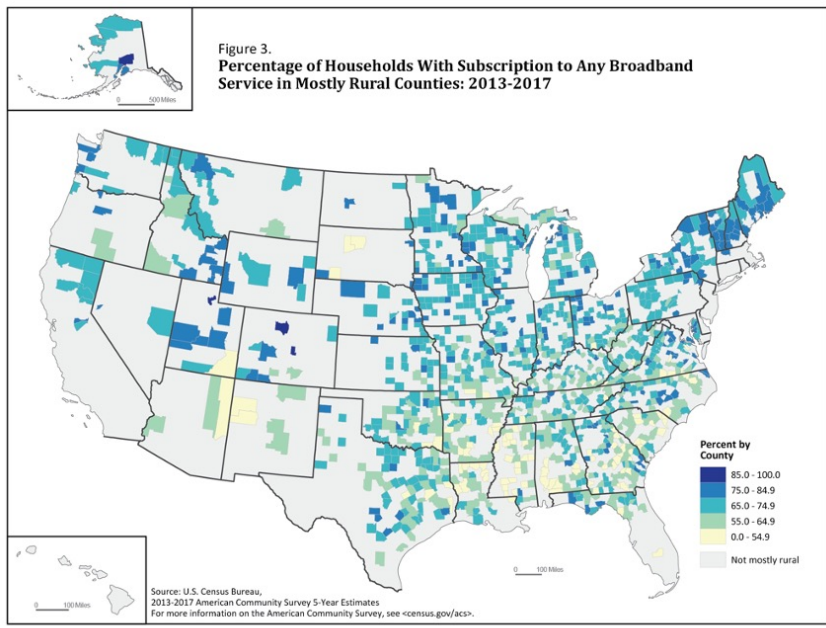


Persistent child poverty counties are those where 20 percent or more of county related children under 18 were poor, measured in the 1980, 1990, 2000 censuses, and the 2007-11 American Community Survey.

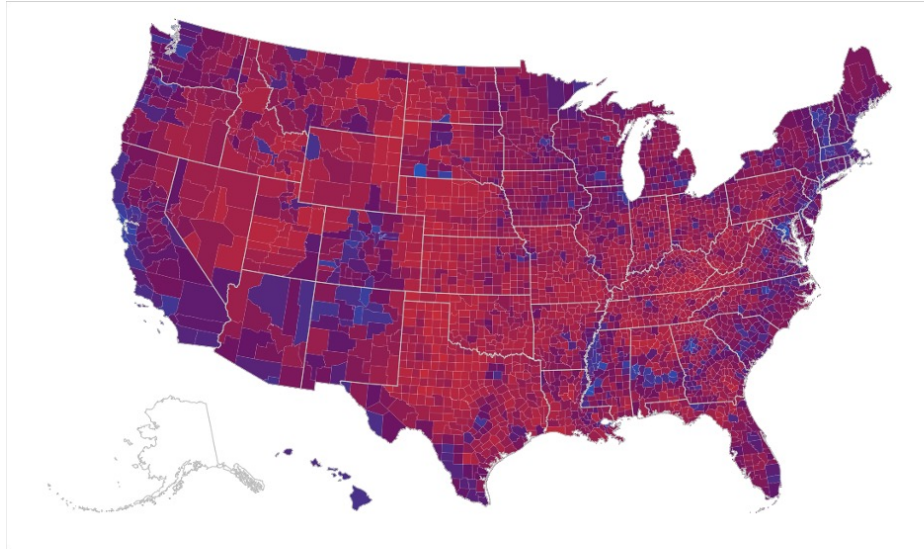
Note that county boundaries are drawn for the persistent child poverty counties only.  
Source: USDA, Economic Research Service using data from U.S. Census Bureau.



**Broadband access is spotty across mostly (left) or completely (right) rural counties.  
Has implications for access to health information, healthcare, telehealth**

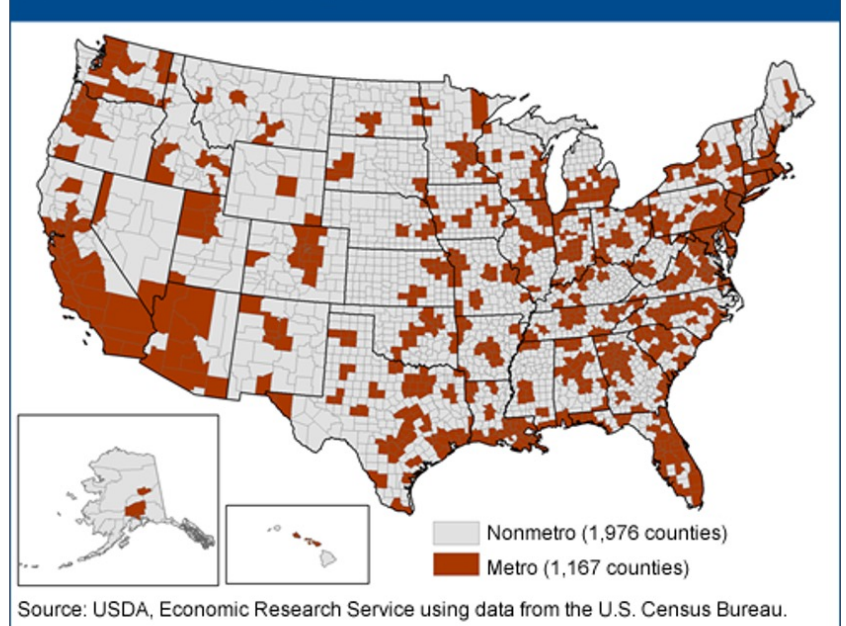


**Nonmetro areas *are* more politically conservative.**  
**Has health implications if this is related to health attitudes and behaviors.**



**2020 Presidential Election: Blue vs. Red**

**Metro and nonmetro counties, 2013**



# Why care about rural health? Generally, rural residents...

- ...enter care later than their urban counterparts and enter care with more serious and persistent issues
- ...require more extensive and expensive care
- ...have more transportation challenges
- ...have less options (i.e., public insurance, employer-sponsored health care) to pay for services and medications and have less choice among providers

## ADULTS

- More likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke than their urban counterparts
- Unintentional injury deaths are ~50 percent higher due, in part, to greater risk from motor vehicle crashes and opioid overdoses
- Higher rates of cigarette smoking, high blood pressure, and obesity
- Less leisure-time physical activity and lower seatbelt use
- Long travel distances to emergency care and primary care services

## CHILDREN and YOUTH

- More likely to be overweight or obese
- Rural parents less likely to report that their children received preventive medical or oral health visits
- More likely to die, largely due to unintentional injury



# Interdisciplinary Network on Rural Population Health and Aging (INRPHA)

(National Institute on Aging 5R24AG065159-03)

## Motivation

- Population aging occurring more rapidly in rural areas
- Rural places have a high share of older and sicker people
- Large and growing rural/urban disparities in health and life expectancy
- Depopulation due to youth out-migration, natural decrease
- Increasing diversity (race/ethnic)
- Economic challenge
  
- But, heterogeneity
- Some places thriving, resilient

The Interdisciplinary Network  
on  
Rural Population Health  
and Aging



NIH



Southern Rural Development Center

National Institute on Aging

# INRPHA Team

## Principal Investigators

- Leif Jensen, Penn State
- Shannon Monnat, Syracuse University
- John Green, Mississippi State
- Lori Hunter, University of Colorado
- Marty Sliwinski, Penn State

## Advisory Board

- Ty Borders, University of Kentucky
- Orfeu Buxton, Penn State
- John Cromartie, Economic Research Service, USDA
- Irma Elo, University of Pennsylvania
- Pam Herd, Georgetown University
- Ken Johnson, University of New Hampshire
- Dan Lichter, Cornell University
- Ben Shaw, University of Illinois Chicago



## Four project aims

1. Establish an interdisciplinary network
2. Design and coordinate network operations and activities
3. Conduct research
4. Disseminate data, analytical resources, research findings



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Origin in a USDA multistate project on rural demography

Network has grown to 250+ scholars and practitioners from a wide variety of disciplines



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Pilot grants: 82 proposals submitted and 20 funded over five years

Grant mentoring (R01s, R03s, R21, U01, diversity supplement)

Virtual annual meetings (40+ attend)

Working group on Rural Health and Built and Social Environments



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35 journal articles benefitting directly from INRPHA

Journal special issues



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Research and policy briefs  
Congressional briefing  
Library of existing survey data for research on RPHA

## Five Focal Areas

- Identify disparities in middle-age and older adult health and well-being across different types of rural areas and among different vulnerable populations within rural areas and identify the mechanisms driving these disparities.
- Identify the implications (e.g., social, economic, political, and infrastructural) of population health and aging trends in rural areas.
- Identify relationships between economic livelihood strategies, economic well-being, and health among middle- and older-age adults in rural America.
- Identify the contributions of physical and social isolation (including access to healthcare and other necessary service infrastructure) on physical, mental, and cognitive health and healthy aging in different rural areas.
- Identify where and how exposures to environmental change and/or climate hazards have affected rural middle-age and older populations.





# Year 1 Pilot Grants

- **Rebecca Glauber**, University of New Hampshire

Cognitive Functioning, Structural Disadvantage, and Social Integration among Older Adults: Rural-Urban Inequalities

**Glauber analyzed Health and Retirement Study (HRS) data to examine differences across the rural-urban continuum in older adults' cognitive functioning, and document the implications of county-level structural disadvantages and of social integration for observed residential differences.**

**One key finding: Older adults living in rural counties had lower cognitive functioning than urban adults; rural penalty greater in counties that lost population**



# Year 1 Pilot Grants

- **Adam Roth and colleagues**, Indiana University / Oklahoma State University  
Social Networks and Rural-Urban Cognitive Health Disparities

**Roth and colleagues analyzed data from the Indiana Person-to-Person Health Interview Study (P2P) to identify the associations between geography and social network characteristics and evaluate alternative models of geography and social networks in trajectories of cognitive decline.**

**One key finding: Connections to larger, loosely-connected networks consisting of a wide range of social relationship types matters for cognitive health in rural counties**



# Year 2 Pilot Grants

- **David Russell and Erin D. Bouldin, Appalachian State University**  
Home and Community Dementia Supports (HANDS): Rural Appalachian Caregiver Experiences

**Russell and Bouldin conducted qualitative interviews in the Appalachian region of western North Carolina to identify barriers and needs of caregivers of people with Alzheimer's disease and related dementias living in rural areas.**

**One key finding: Families struggled to provide and manage home-based care.**



# Year 3 Pilot Grants

- **Meghan Zacher and Susan E. Short**, Brown University  
Rural Residence and Alzheimer's Disease and Alzheimer's Disease-Related Dementias in the United States

**This project leverages nationally representative data from the Health and Retirement Study (HRS) to examine whether, where, and why risk for Alzheimer's disease and Alzheimer's disease-related dementias (AD/ADRD) varies between and across rural and urban places in the United States.**

**One key finding: National estimates of rural-urban disparities in the prevalence of AD/ADRD mask differences across regions, as dementia prevalence is elevated for residents of rural areas primarily in the South.**



# Year 5 Pilot Grants

- **Olivia E. Atherton**, University of Houston

Leveraging Data from a Large Longitudinal Study of Aging to Identify Associations between Behavior-Opportunity Gaps and Dementia Risk

**Atherton uses HRS data to identify the role of behavior-opportunity gaps on risk for poor cognitive health whether the associations between behavior-opportunity gaps and cognitive health vary by key sociodemographic factors (notably, rural versus urban residence).**

**One interesting question: Do rural residents have less environmental opportunity to engage in healthy behaviors that have a protective effect on risk of Alzheimer's Disease and related dementias (AD/ADRD)?**

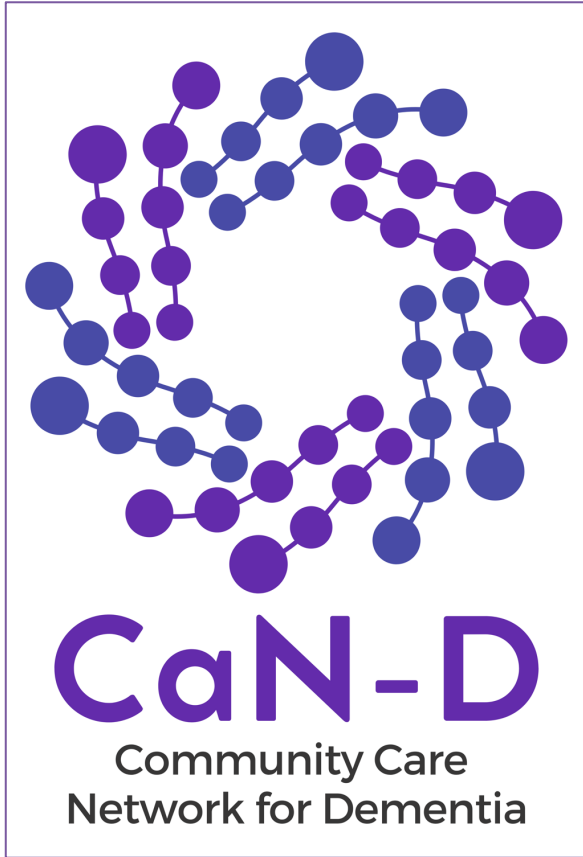


# Looking ahead: Key elements of INRPHA's renewal proposal

Please reach out !!  
lij1@psu.edu

**In the next five years our aims will be to....**

- Broaden the network bringing in public health and health services scholars who have not yet heavily participated in INRPHA
- Focus on heterogeneity across different types of rural places and populations, including resilient and thriving rural areas
- Focus on multilevel and multidimensional pathways driving rural population health and aging trends and disparities across the life course
- Promote the analysis of promising new or underutilized data
- Provide intensive (one-on-one) NIH grant proposal mentorship



02

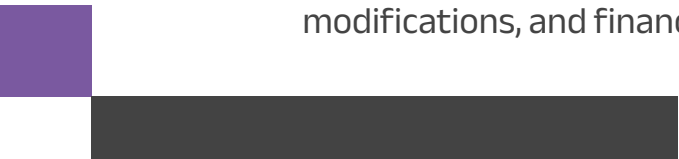
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# Community Care Network for Dementia



# What are Home and Community-Based Services (HCBS)?

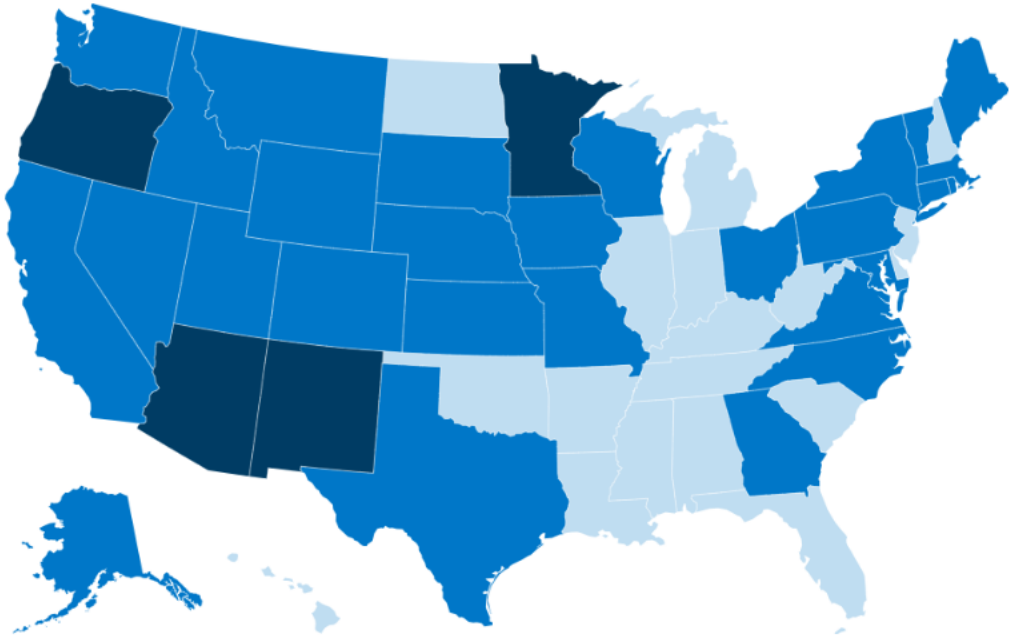
- Person-centered care in the home and community
- Address functional limitations and assistance with activities
- Enable aging in place rather than moving to a facility
- Medicaid is the largest single payer of HCBS
- Types:
  - Home health and personal care
  - Transportation
  - Homemaker services
  - Caregiver and client training
  - Hospice care
  - Case management
  - Human services supports (e.g., center-based care, meal delivery, home repairs and modifications, and financial and legal services)





# More than Half of LTSS Spending is on HCBS

<50% 50-75% >75%

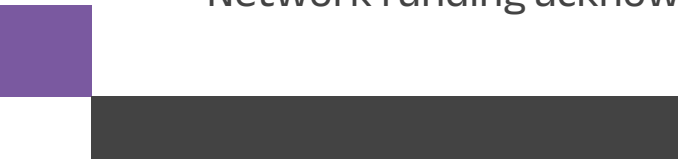


NOTE: Map shows HCBS expenditures as a share of total Medicaid LTSS spending in FY 2019. Data for CA are from 2014; Virginia and Illinois's data are from 2016; Delaware's data are from 2018.

SOURCE: Caitlin Murray et al., "Medicaid Long Term Services and Supports Annual Expenditures Report: Federal Fiscal Year 2019" (Mathematica, Dec. 9, 2021). • PNG

# Motivation for Network

- Relative to the rapid movement towards more HCBS, research on the affordability, access, delivery, quality, and outcomes of dementia HCBS is behind
- Measures of HCBS do not always consider the unique needs of persons with dementia or their caregivers, and measures are fragmented by setting, service, and payer
- Dementia HCBS measures can be better aligned to improve detection of changes in outcomes
- NIA Research Networks provide infrastructure to advance high-priority areas relevant to Alzheimer's disease and Alzheimer's disease-related dementias (AD/ADRD)
- Network funding acknowledgement: NIA U24AG077110



# Goals of Community Care Network for Dementia (CaN-D)

01

Foster formal communications and **knowledge sharing** to quickly advance innovative dementia HCBS research;

02

**Grow and diversify the bench** of dementia HCBS researchers;

03

**Generate data tools** to facilitate examination of structure, process, and outcome measures of dementia HCBS;

04

Facilitate **policy-relevant dementia HCBS research** and rigorous dissemination approaches; and

05

Develop a Network infrastructure and products through a **diversity, equity, and inclusion (DEI)** lens.

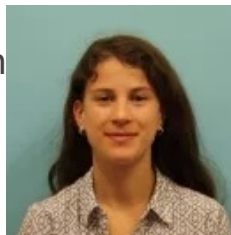


# Network Team

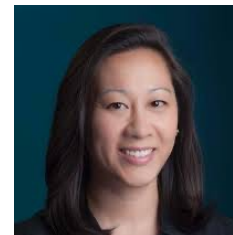
Andrew Dick  
*(RAND)*



Jordan Harrison  
*(RAND)*



Regina Shih  
*(Emory, RAND)*



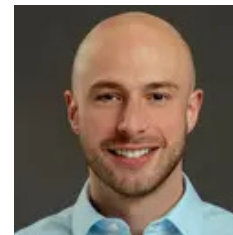
Elena Fazio  
*(NIA)*



Priscilla Novak  
*(NIA)*



Dan Siconolfi  
*(RAND)*



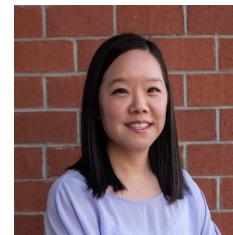
Esther Friedman  
*(University of Michigan)*



Teague Ruder  
*(RAND)*



Katherine Sun  
*(Emory)*



# Network Activities



## Meetings

- Quarterly Network Meetings
- Monthly Working Group Meetings
- Ad Hoc Learning and Development Sessions



## Training

- Annual Data Workshops
- Writing Retreats
- Translation/ dissemination Seminars
- Proposal development/ feedback



## Dissemination

- Dementia HCBS Data Hub
- Share data resources
- Collaborate with other NIA BSR networks



# Data Hub Advisors

- **Yue Li**, PhD. Professor, Department of Public Health Sciences, University of Rochester Medical Center
- **Tetyana Shippee**, PhD. Professor, Division of Health Policy and Management, University of Minnesota School of Public Health
- **Verena Cimarolli**, PhD. Director, Health Services Research and Partnerships, Leading Age LTSSCenter @ UMass
- **Jeffrey Klein**, FACHE. President/CEO, Nevada Senior Services
- **Cara Stepanczuk**, MPA. Researcher, Health Unit. Mathematica



# Working Group Co-Leads

## Access and Unmet Needs



**Aleiah Mann, MS**  
Senior Program Associate  
USAgings



**Jennifer Reckrey, MD**  
Associate Professor,  
Icahn School of Medicine at Mt Sinai

## Interventions



**Heather Menne, PhD**  
Associate Professor,  
Miami University



**Kalisha Bonds Johnson,  
PhD, RN, PMHNP-BC**  
Assistant Professor,  
Emory University

## State Policies



**Alice Prendergast, MPH**  
Senior Research Associate,  
Georgia State University



**Clara Park, MPA**  
Director of Strategy  
UC San Francisco



# CaN-D hosted writing camp

We need your feedback to inform our planning process. Travel costs and meals will be taken care of by the network!

Fill out the survey at [this link](#)





# To Join CaN-D...

Please scan the QR code or click [this link](#) to join the CaN-D network; you will be added to our email list serve and receive announcements on upcoming network events.





**03**

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**Discussion**



# Rural Dementia HCBS Themes

- **Workforce.** Training/education for rural or community providers, rural direct care workforce shortage, nursing education for dementia care
- **Service delivery.** Health education, telehealth to address lack of service availability, caregiver support, expanding services in rural areas, continuity of care in rural areas, use of self-directed services
- **Unmet needs and near-risk populations.** Affordability of/access to LTSS; increasing awareness of rural LTSS, barriers to HCBS and equity, access for people w and w/o formal dementia diagnoses, rural-based Tribal communities
- **Quality measurement.** Breadth of dementia-specific HCBS services in rural settings



# Discussion

1

**Rural HCBS formal  
workforce, training,  
education**


2

**Rural HCBS service  
delivery, caregiver  
supports**

3

**Rural HCBS access,  
availability,  
accessibility,  
awareness, quality**





**Thanks for  
joining us!**

