Aging in Place in Rural America: Challenges, Opportunities, and Policy Initiatives

January 18, 2022

✓ All attendees are muted
✓ Today’s session will be recorded
✓ Submit questions using the chat function
✓ Q&A will follow the presentation
About Per Ostmo

Per Ostmo is the Program Director of the Rural Health Research Gateway (Gateway), housed at the Center for Rural Health at the University of North Dakota School of Medicine & Health Sciences. Gateway is funded by the Federal Office of Rural Health Policy (FORHP) to disseminate research conducted by the FORHP funded Rural Health Research Centers. Per earned his Master of Public Administration degree from the University of North Dakota with focus areas in grant writing and health care administration. He is originally from rural North Dakota.

**Likes:** equitable healthcare, bicycling, punk rock

**Dislikes:** Health Professional Shortage Areas
Rural Health Research Gateway

Provide access to publications and projects funded through the Federal Office of Rural Health Policy, Health Resources and Services Administration.

Gateway is a resource for:
• Policy makers
• Students
• Rural health researchers
• Health care providers
• Rural health organizations, professionals, associations, and more

ruralhealthresearch.org
Aging in Place in Rural America: Challenges, Opportunities, and Policy Initiatives

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Division of Health Policy and Management
University of Minnesota School of Public Health

Rural Health Research Gateway Webinar
January 18, 2022
Acknowledgements

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Rural Aging in Context

• Rural residents are: “older, poorer, and sicker”
• Rural areas differ from urban in terms of infrastructure, environment, socio-demographic characteristics, access to resources, etc.
• Important to consider the unique impact of rural context on the health of rural older adults
Increasing Diversity in Rural Areas

- Diversity in age structure, risk factors, race, ethnicity, and community resources across rural places

Source: Zahnd et al. (2021)
Infrastructure and Physical Environment

- Older adults’ ability to age in place is impacted by their environment.
- Rural areas differ from urban in terms of:
  - Natural and built environments
  - Population density
  - Access to resources and amenities, such as:
    - Health care
    - Transportation
    - Housing
    - Broadband Internet and cellular connectivity
    - Water and air quality
Access to Health Care – Hospital Closures

Source: University of North Carolina Sheps Center [https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/]
Nursing Home Desert Counties

Source: RURPI Center for Rural Health Policy Analysis
https://www.ruralhealthresearch.org/alerts/394
Broadband Access

Source: Federal Communications Commission: [https://www.fcc.gov/reports-research/maps/connect2health/#ll=30.826781,-78.658447&z=7&t=broadband&bbm=fixed_access&dmi=none&zlt=county](https://www.fcc.gov/reports-research/maps/connect2health/#ll=30.826781,-78.658447&z=7&t=broadband&bbm=fixed_access&dmi=none&zlt=county)
Social Connectedness

• Compared to urban older adults, rural older adults:
  – Are more likely to live alone
  – Have larger social networks
  – Are more likely to report feeling lonely
What is Aging in Place?

- The ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income, or ability level.
  
  – Centers for Disease Control and Prevention

Source: https://www.cdc.gov/healthyplaces/terminology.htm
Why Does Aging in Place Matter?

• Quality of life
• Maintain independence
• Social cohesion, community, and relationships
• Minimize disruptions
• Cost savings (to individuals and public)
Do Older Adults Want to Age in Place?

- Policy brief on preferences for long-term care settings
- Using data from National Health and Aging Trends Survey of Medicare beneficiaries
- Asked about optimal setting for receiving long-term care
Most – but not all – Want to Age in Place

First choice for care arrangement among Medicare beneficiaries

- Receive help in own home from family/friend or paid help (60)
- Live with an adult child (10)
- Live in assisted living or nursing home (30)
- Don't know (7)

University of Minnesota Rural Health Research Center
## No Significant Differences by Rurality

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive care in own home</td>
<td>62.5</td>
<td>60.4</td>
<td>0.336</td>
</tr>
<tr>
<td>Receive help in own home from family/friend</td>
<td>33.0</td>
<td>29.9</td>
<td>0.195</td>
</tr>
<tr>
<td>Receive help in own home from paid worker</td>
<td>29.5</td>
<td>30.5</td>
<td>0.634</td>
</tr>
<tr>
<td>Live with an adult child</td>
<td>4.3</td>
<td>5.4</td>
<td>0.331</td>
</tr>
<tr>
<td>Live in assisted living or nursing home</td>
<td>31.6</td>
<td>32.1</td>
<td>0.797</td>
</tr>
<tr>
<td>Don't know</td>
<td>1.6</td>
<td>2.2</td>
<td>0.471</td>
</tr>
</tbody>
</table>

N=4,333; p-value indicates difference between rural and urban; frequencies estimated with survey weights
But... Uneven Outcomes of Aging in Place

- Risk of increased disability is higher for lower-income older adults aging in place, compared with higher-income older adults.

Source: Henning-Smith et al. (2018) *The Gerontologist*
Rural/Urban Differences Among Older Adults Aging in Place

• Data from Round 9 of the National Health and Aging Trends Survey of Medicare beneficiaries
• Sample limited to respondents who had not moved since baseline (average of 27 years in the same home)
• 3,343 respondents
• Population weights used in analyses
Lower Education Attainment for Rural Older Adults

![Bar chart showing education attainment for rural and urban older adults.](chart_image)
Lower Household Income for Rural Older Adults

![Bar chart showing lower household income for rural older adults compared to urban older adults.](Image)
Fall History and Fall Worry

- Worried about a fall
- Had fall

Comparing urban and rural populations.
Housing Type

- Single home: 0.90 (Rural)
- Duplex: 0.10 (Urban)
- Mobile home: 0.10 (Rural)
- Multi-unit: 0.10 (Urban)
- Other: 0.00

(RURAL HEALTH RESEARCH CENTER)
Home Ownership

Own their home/apt

Finished paying off mortgage

Urban

Rural

0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
Entry Stairs and Ramp Access

- Rural: 0.75
- Urban: 0.70

- Stairs at entry
- Stairs and no ramp at entry
Unmet Mobility Needs

- **Unmet outdoor mobility need**
- **Unmet indoor mobility need**
- **Any unmet mobility need**

Rural vs. Urban

*Image credit: University of Minnesota RURAL HEALTH RESEARCH CENTER*
## Unmet Mobility Needs, Adjusted

<table>
<thead>
<tr>
<th></th>
<th>AOR</th>
<th>AOR</th>
<th>AOR</th>
<th>AOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.64*</td>
<td>1.68**</td>
<td>1.82**</td>
<td>1.63**</td>
</tr>
<tr>
<td><strong>Rural</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live alone</td>
<td>0.81</td>
<td>0.74</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Age group (Ref: 69-74)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-79</td>
<td>0.78</td>
<td>0.79</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>80-84</td>
<td>1.35</td>
<td>1.29</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>85-89</td>
<td>1.60*</td>
<td>1.56*</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>90+</td>
<td>2.15**</td>
<td>1.98**</td>
<td>1.52</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.23</td>
<td>1.22</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>Race (Ref: White)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1.69*</td>
<td>1.58*</td>
<td>1.67*</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1.66</td>
<td>1.58</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>Education (Ref: &lt;High School)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>0.68</td>
<td>0.70</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>Some college/ trade school</td>
<td>0.62</td>
<td>0.65</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>0.58</td>
<td>0.58</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Graduate/ professional</td>
<td>0.85</td>
<td>0.82</td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td>Mean household income</td>
<td>0.99**</td>
<td>0.99**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Housing type (Ref: Single-family home)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplex</td>
<td>1.93</td>
<td>2.03*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile home</td>
<td>0.94</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-unit</td>
<td>1.76</td>
<td>1.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stairs at entry, no ramp</td>
<td>0.85</td>
<td>0.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Months lived in home</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good, very good, excellent self-rated health</td>
<td></td>
<td></td>
<td>0.24***</td>
<td></td>
</tr>
<tr>
<td>Worry about fall</td>
<td>2.44***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count of chronic conditions</td>
<td>1.30***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Social Cohesion

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>People know each other well</td>
<td>0.89</td>
<td>0.83</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>People willing to help each</td>
<td>0.94</td>
<td>0.93</td>
<td>0.566</td>
</tr>
<tr>
<td>People can be trusted</td>
<td>0.93</td>
<td>0.92</td>
<td>0.650</td>
</tr>
</tbody>
</table>
Social Participation

- Performed their self-reported favorite activity in the last year
- Performed vigorous exercise in the last month
- Walked for exercise in the last month
- Was a caregiver for someone else in the last month
- Did volunteer work in the last month
- Worked for pay in the last month
- Go out for enjoyment in the last month
- Attended club, class, or other religious service in the last month
- Attended religious service in the last month
- Visited family or friend in the last month

Urban vs. Rural Participation
Supporting Rural Aging in Place

• Survey of all 50 state offices of rural health (SORH; responses from 49)

• Asked about challenges to supporting rural aging in place, state-level initiatives, and policy levers
## Barriers to Aging in Place in Rural Areas

<table>
<thead>
<tr>
<th>Category</th>
<th>Strongly Disagree/Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of Informal Caregivers</td>
<td>11%</td>
<td>64%</td>
<td>24%</td>
</tr>
<tr>
<td>Access to Home Care Services</td>
<td>4%</td>
<td>52%</td>
<td>43%</td>
</tr>
<tr>
<td>Access to Home Health Care</td>
<td>6%</td>
<td>64%</td>
<td>30%</td>
</tr>
<tr>
<td>Access to Health Care</td>
<td>6%</td>
<td>58%</td>
<td>35%</td>
</tr>
<tr>
<td>Social Isolation</td>
<td>6%</td>
<td>42%</td>
<td>52%</td>
</tr>
<tr>
<td>Food Insecurity</td>
<td>2%</td>
<td>57%</td>
<td>40%</td>
</tr>
<tr>
<td>Transportation</td>
<td>0%</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>Housing</td>
<td>11%</td>
<td>48%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Indices: 0% - 10% - 20% - 30% - 40% - 50% - 60% - 70% - 80% - 90% - 100%
## Biggest Barrier by Region

<table>
<thead>
<tr>
<th>Top Barrier</th>
<th>Midwest</th>
<th>Northeast</th>
<th>South</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>64%</td>
<td>100%</td>
<td>88%</td>
<td>77%</td>
</tr>
<tr>
<td>Social isolation</td>
<td>64%</td>
<td>75%</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Food insecurity</td>
<td></td>
<td></td>
<td></td>
<td>46%</td>
</tr>
</tbody>
</table>

| Second Barrier    |          |           |        |        |
| Social isolation  |          |           |        |        |
Descriptions of Barriers

• “Rural communities lack public transportation out to remote homes and for all services, especially services other than health care appointments.”

• “In rural areas the great distance to needed services (healthcare providers, grocery stores, etc.) is a challenge.”

• “Weather and geography make it difficult to access resources for long periods of the year.”
SORH Policy Recommendations

• Increase funding
• Expand transportation services
• Improve access to health care
Statewide Age-Friendly Initiatives

- Environmental scan of all 50 states to identify statewide aging in place or age-friendly initiatives
- Identified 33 initiatives across 22 states
- Six focused explicitly on rural communities or included rural as a priority area
# Focus Areas of Statewide Initiatives

## Table 1. Focus Areas of Statewide Initiatives without an Explicit Rural Focus

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiatives without Explicit Rural Foci</td>
<td>27</td>
</tr>
<tr>
<td>General Aging and Health</td>
<td>6</td>
</tr>
<tr>
<td>Education/Resource Development</td>
<td>6</td>
</tr>
<tr>
<td>Transportation</td>
<td>4</td>
</tr>
<tr>
<td>Housing</td>
<td>4</td>
</tr>
<tr>
<td>Caregiving</td>
<td>3</td>
</tr>
<tr>
<td>Dementia-Friendly</td>
<td>3</td>
</tr>
<tr>
<td>Health and Social Services</td>
<td>3</td>
</tr>
<tr>
<td>Inclusion and Equity</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note: Initiatives included multiple focus areas so total to more than 27.*
### Table 2. Statewide Initiatives with Explicit Rural Foci

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiatives with Explicit Rural Foci</td>
<td>6</td>
</tr>
<tr>
<td>Transportation</td>
<td>3</td>
</tr>
<tr>
<td>Provider Training and Education</td>
<td>2</td>
</tr>
<tr>
<td>Workforce Development</td>
<td>1</td>
</tr>
<tr>
<td>Dementia-Friendly</td>
<td>1</td>
</tr>
<tr>
<td>Underserved Community</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: Initiatives included multiple focus areas so total is more than 6.*
Examples of Statewide Age-Friendly Initiatives

<table>
<thead>
<tr>
<th>Initiative Name (State)</th>
<th>Description</th>
<th>Rural Focus Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Friendly AZ (Arizona)</td>
<td>Fostering collaboration between local governments, nonprofit agencies, academic institutions, and community groups, Age Friendly AZ promotes strategies that enable older adults to live their best lives, provide leadership and support, and serve as a source of information, education, resources, innovation, and solutions. • <a href="https://www.agefriendlyaz.org/">https://www.agefriendlyaz.org/</a></td>
<td>• Transportation</td>
</tr>
<tr>
<td>Age-Friendly Care, PA (Pennsylvania)</td>
<td>Age-Friendly Care, PA develops and designs partnerships and programming among geriatric centers, healthcare organizations, primary care providers, healthcare students, community organizations, and older adults to improve the care of older adults and persons living with Alzheimer’s Disease and Related Dementias in rural and underserved areas of PA. • <a href="https://agefriendlycarepa.psu.edu/">https://agefriendlycarepa.psu.edu/</a></td>
<td>• Workforce Development; Provider Training and Education; Dementia-Friendly</td>
</tr>
</tbody>
</table>
Key Findings

• Most older adults in rural areas would prefer to age in place
• Rural older adults aging in place have fewer financial resources, greater housing burden, and more unmet needs for mobility
• Solutions could include increasing rural-specific funding, expanding transportation, and reducing barriers to care
Rural Aging in Place Toolkit

• Housed on Rural Health Information Hub website
• Includes background on rural aging in place, promising and evidenced-based models, examples of success, and guidance for funding, implementation, and evaluation
• Access at: https://www.ruralhealthinfo.org/toolkits/aging
Rural Aging in Place Toolkit

Welcome to the Rural Aging in Place Toolkit. The toolkit compiles evidence-based and promising models and resources to support organizations implementing aging in place in rural communities across the United States.

The modules in the toolkit contain resources and information focused on developing, implementing, evaluating, and sustaining rural aging in place programs. There are more resources on general community health strategies available in the Rural Community Health Toolkit.
Carrie Henning-Smith | henn0329@umn.edu | @Carrie_H_S
Megan Lahr | larx074@umn.edu
Rural Health Research Gateway

The Rural Health Research Alert email provides periodic updates when new publications become available. Alerts are available by email and posted on our Facebook and Twitter accounts.

Recent Updates

- **January 5, 2022**
  
  An Enhanced Method for Identifying Hospital-Based Obstetric Unit Status
  
  New Research Product

- **January 3, 2022**
  
  Upcoming Webinar: Aging in Place In Rural America - Challenges, Opportunities, and Policy Initiatives
  
  Upcoming Webinar

- **December 3, 2021**
  
  Rural Urban Variation in Travel Burdens for Care: Findings from the 2017 National Household Travel Survey (executive summary)
  
  New Research Product

- **November 30, 2021**
  
  New Articles Published on Telehealth, Tobacco, Suicide, and Cancer Screening and Treatment
  
  Published Journal Articles

- **November 17, 2021**
  
  Using CPT Charges as an Economic Proxy for Telehealth and Non-telehealth Emergency Department Utilization
  
  New Research Product

ruralhealthresearch.org/alerts

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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.

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Funded by the Federal Office of Rural Health Policy, Health Resources & Services Administration