

# Ensuring Age-Friendly Public Health in Rural Communities: Challenges, Opportunities, and Model Programs

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## Background

The Age-Friendly Ecosystem originated from the World Health Organization's (WHO) efforts to develop Age-Friendly Communities. The WHO identified eight "Domains of Livability" that enhance the experience of individuals across the life course. These domains span the built, social, and service-related factors that influence the health of all ages, including 1) housing; 2) transportation; 3) outdoor spaces and buildings; 4) civic participation and employment; 5) social participation; 6) respect and social inclusion; 7) communication and information; and 8) community supports and health services.

Based on the concepts of universal design, i.e., that our environment and systems should be accessible and used by individuals regardless of age or ability, age-friendly programs focus on creating better environments and systems for all.<sup>1</sup> While concentrating on older adulthood, age-friendly works to create a better world for everyone.

Age-Friendly Communities were the first of the components of what is now the Age-Friendly Ecosystem which also includes Age-Friendly Universities, Age-Friendly Health Systems, and Age-Friendly Public Health Systems.<sup>2</sup> This issue brief identifies opportunities for public health professionals to engage, collaborate, and lead age-friendly efforts in rural communities.

Since 2017, with partnership and funding from The John A. Hartford Foundation, Trust for America's Health (TFAH) has been working with state and local health departments to expand their roles in improving the health and well-being of older adults. The Age-Friendly Public Health System (AFPHS) framework identifies public health professionals' core roles in promoting older adult health and well-being. This 6Cs framework organizes these roles as follows:

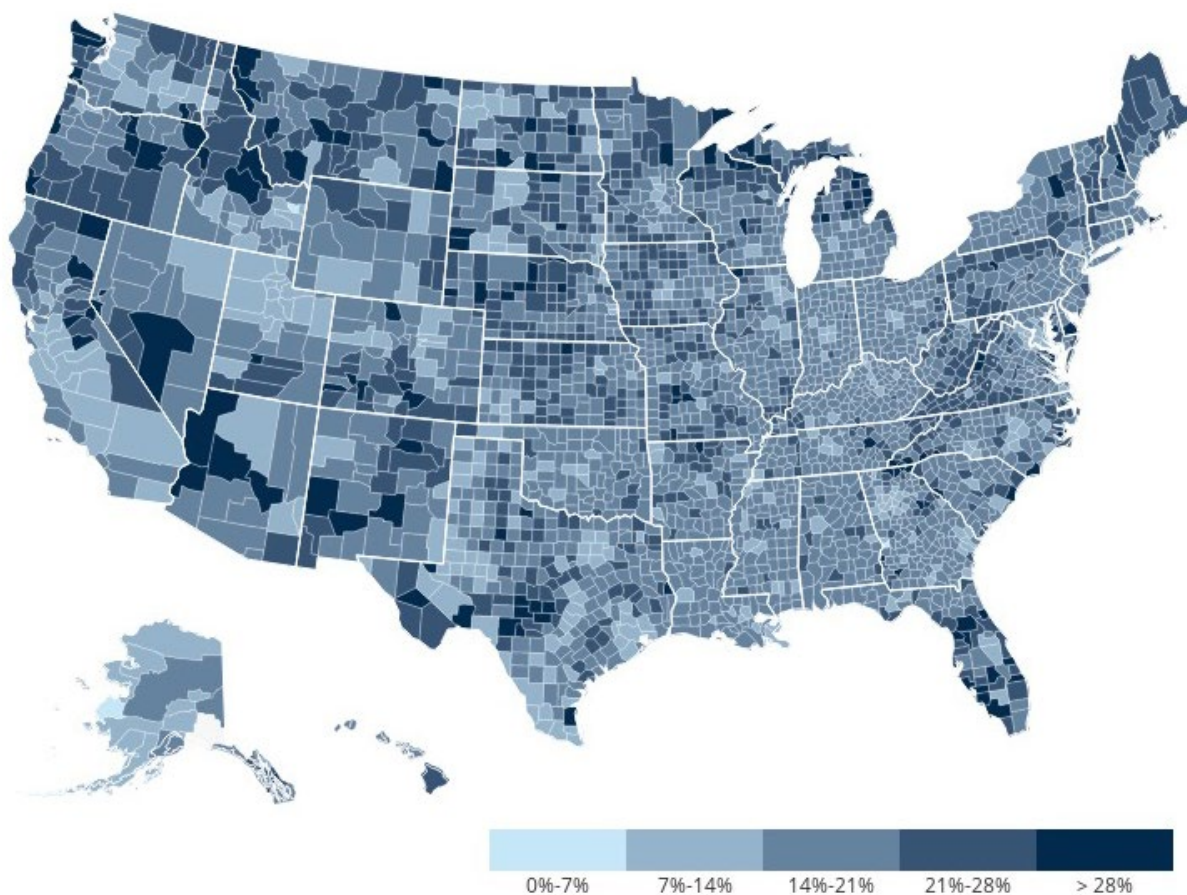
**Trust For America's Health (TFAH)**, a non-profit, nonpartisan policy, research, and advocacy organization, leads the national age-friendly public health systems (AFPHS) movement with support from The John A. Hartford Foundation to promote the health and well-being of the nation's older adults as a public health priority. This paper is part of a series of briefs on the intersection between public health, aging, and the age-friendly ecosystem.

- 1. Creating** and leading policy, systems, and environmental changes to improve older adult health and well-being.
- 2. Connecting and convening** multi-sector stakeholders to address the health and social needs of older adults through collective impact approaches focused on the social determinants of health.
- 3. Coordinating** existing supports and services to help older adults, families, and caregivers navigate and access services and supports, avoid duplication, and promote an integrated system of care.
- 4. Collecting**, analyzing, and translating relevant and robust data on older adults to identify the needs and assets of a community and inform the development of interventions through community-wide assessment.
- 5. Communicating** important public health information to promote and support older adult health and well-being, including conducting and disseminating research findings, and emerging and best practices to support healthy aging.
- 6. Complementing** existing health promoting programs to ensure they are adequately meeting the needs of older adults.

The John A. Hartford Foundation also awarded a planning grant to the National Rural Health Association in December 2022 to develop a National Rural Age-Friendly Initiative. The initiative utilizes convenings, communications, educational activities, and community health worker trainings to improve the health of older adults living in rural areas and presents additional opportunities to promote the Age-Friendly Public Health Systems movement in rural communities.

This brief, the second in a series of publications dealing with the health and wellness of older adults, outlines the status of older adults living in rural environments and opportunities for public health to support them. It highlights existing innovations that engage rural older adults and offers recommendations to ensure all older persons, regardless of geographic location, have access to age-friendly public health systems.

**Figure 1: Population Aged 65 and Older**



Source: U.S. Census Bureau American Community Survey, 2011, 2016, 2021.

## Older Adults Want to Age in Place

Nearly 88 percent of Americans over the age of 50 want to age in place.<sup>3</sup> Yet, to age in place successfully requires appropriate supports and programs. The significance of place in health cannot be overstated, owing in no small part to how location can influence the type and accessibility of healthcare, educational opportunities, employment prospects, housing conditions, and nutrition.<sup>4</sup> Additionally, environmental exposures experienced across the lifespan may either facilitate or impede physical activity, nutrition, and help-seeking behavior.<sup>5</sup> Understanding the diversity and intersectionality of individuals and their communities is critical for developing optimal strategies aimed at promoting healthy aging.

Rural communities constitute one such place that warrants focused attention from public health professionals.

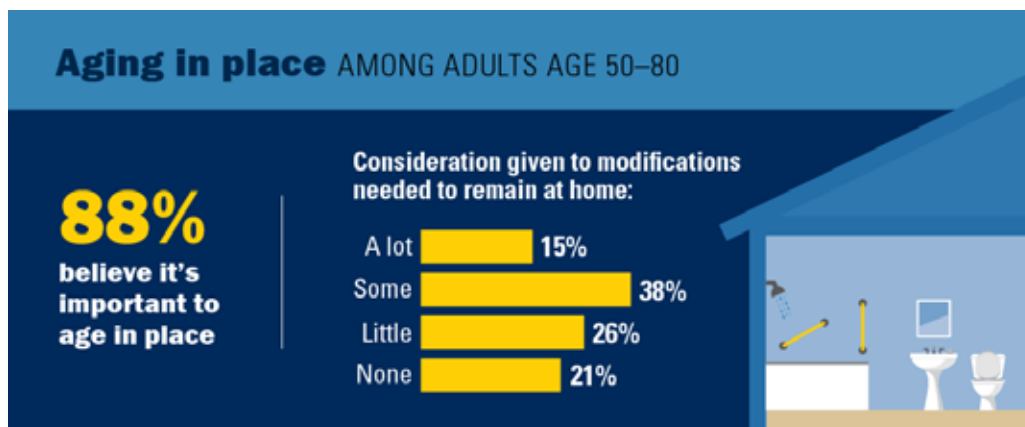
According to the U.S. Census Bureau, nearly one in five older adults (age 65 and older) live in a rural community, many in states where more than half of the older population live in rural environments.<sup>6</sup> Rural communities tend to be older than their urban counterparts, with 17.5 percent of the rural population aged 65 and older compared to 13.8 percent in urban areas. Additionally, rural counties represent 85 percent of the 1,104 “older-age counties” in the United States—those counties with more than 20 percent of their population over age 65.<sup>7</sup> These communities are predominantly female (56 percent) and white (92.7 percent). Most older adults in these communities are 65 to 74 years old (61.2 percent), with those 75 to 84 comprising 29 percent of the population and those 85 and older 8.8 percent.<sup>8</sup>

Older adults living in rural communities experience higher rates of health disparities when compared to their urban counterparts, often related to disparities which are



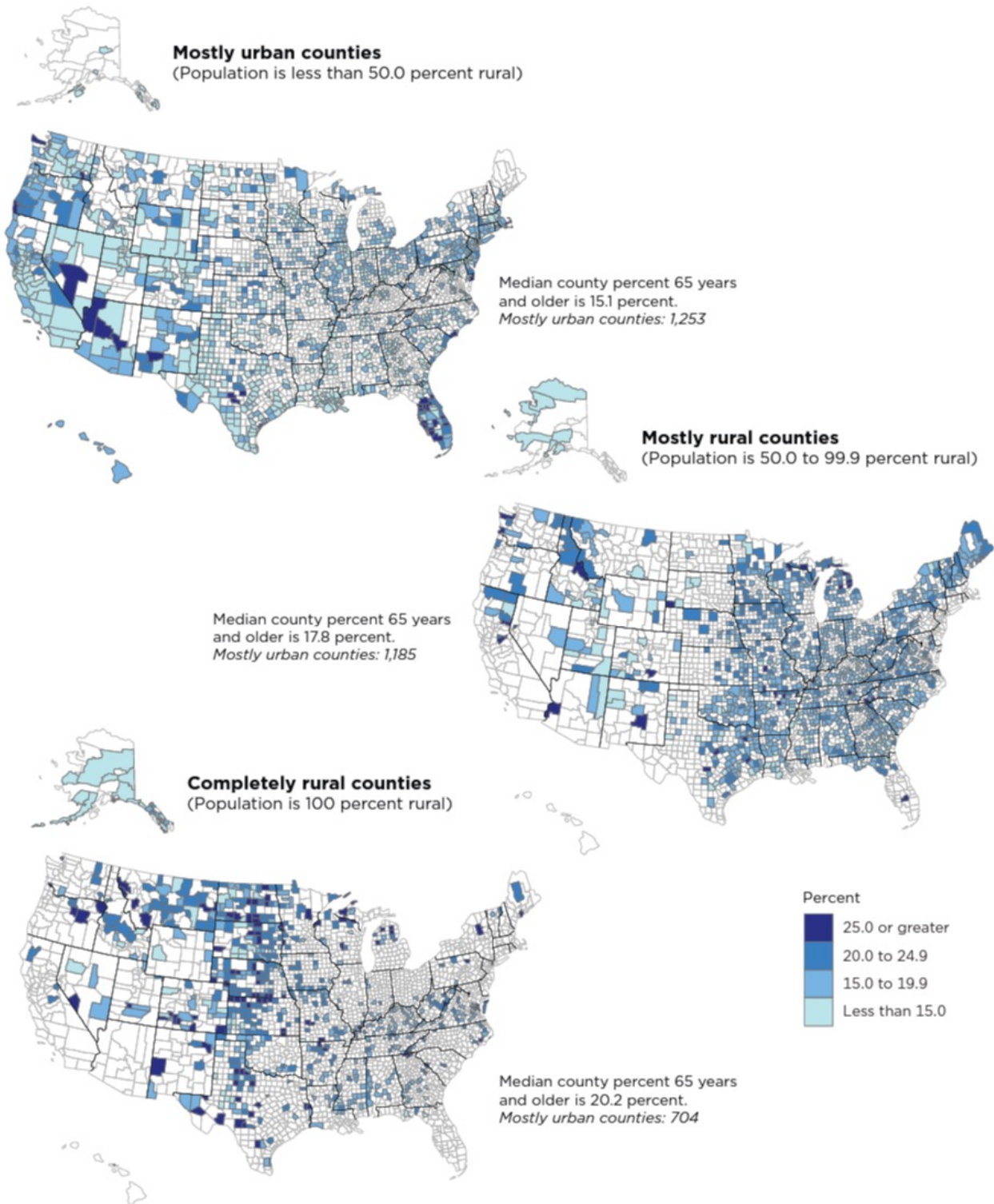
rooted in geography and the availability of services. These disparities include a higher prevalence of chronic diseases, including heart disease and diabetes, particularly higher rates of mortality, depression, suicidality, and lower rates of physical activity, educational attainment, healthcare access, and fewer opportunities for social connections.<sup>9, 10, 11, 12, 13, 14</sup> Furthermore, rural residents have a shorter life expectancy than their urban peers – 76.8 years compared to 78.8 years.<sup>15</sup> Still, rural communities often provide a source of enjoyment and life satisfaction for those who live there. They have the potential to offer more green space for residents and less light pollution. Rural residents report greater connection to their environment, higher rates of community cohesion, and stronger social connections.

Figure 2: Aging in Place Among Adults Age 50-80



Source: University of Michigan National Poll on Healthy Aging.

**Figure 3: Percent population 65 years and older by level of rurality: 2012 - 2016**



Source: U.S. Census Bureau, American Community Survey, 2012 – 2016

## WHAT DEFINES A RURAL COMMUNITY?

Roughly one in five — 60 million - Americans live in a rural community.<sup>16</sup> What do we mean by rural? While the word ‘rural’ often results in images of green pastures, farming, and nature, defining the term can be challenging. Multiple definitions of rurality exist — including numerous ones from federal and state governments. These definitions are based on a variety of factors, including geographic units of measurement and population. Numerous federal agencies rely on different definitions of rural:

The Census Bureau does not specifically define rural. Instead, rural includes all people, housing, and territory not within an urban area. The 2020 Census defines urban as a densely settled core of census blocks encompassing at least 2,000 housing units or a population of at least 5,000.

The Office of Management and Budget categorizes counties as:

- Metro area (urban core of 50,000 or more people)
- Micro area (urban core of 10,000-49,999 people)
- Counties outside of Metro or Micro Areas are considered rural.

Other federal definitions exist, including the U.S. Department of Agriculture’s Economic Research Services:

- Rural-Urban Commuting Area (RUCA) codes classify census tracts using population density, urbanization, and daily commuting to generate a 1-10 code system, with secondary codes providing additional detail.
- Rural-Urban Continuum Codes (RUCC) classify counties based on their population size and geographic proximity to metro areas.

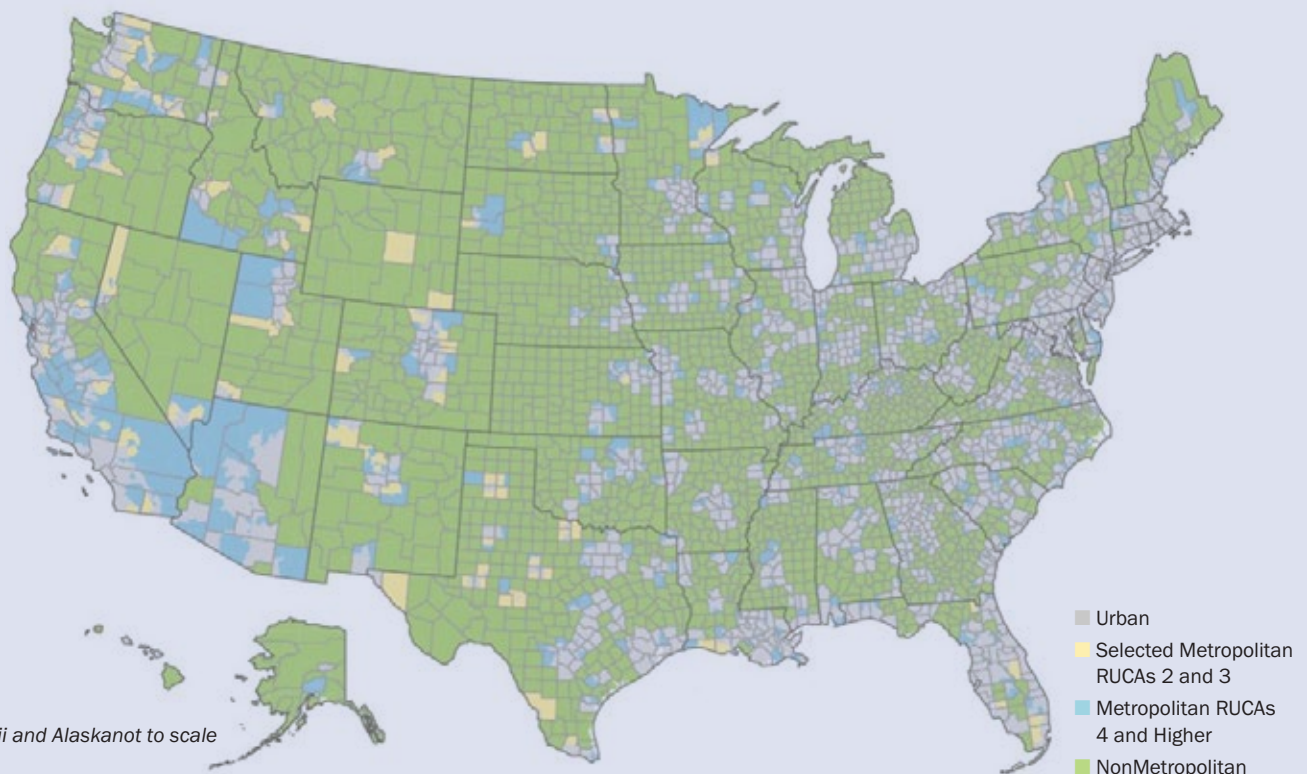
Recognizing the limitations of these measures, the Federal Office of Rural Health Policy (FORHP) employs a combined method of defining rural areas as:

- All non-metro counties
- All metro census tracts with RUCA codes 4-10 and
- Large area Metro census tracts of at least 400 square miles in area with a population density of 35 or less per square mile with RUCA codes 2-3.
- All outlying metro counties without an Urbanized Area.

For this brief, we will use the FORHP definition of rural as outlined above. It includes nearly one in five people in the United States and 86 percent of the land area in the country.

Sources: U.S. Census Bureau, HRSA, Economic Research Service

**Figure 4: Metropolitan, NonMetropolitan and Rural Urban Commuting/Continuing Areas**



Source: U.S. Census Bureau

# Challenges and Areas for Potential Public Health Intervention

## Workforce

Rural communities tend to have older populations resulting from people aging in place and the out-migration of younger groups which can lead to or exacerbate workforce shortages. In addition, because many older adults experience complex medical challenges, healthcare services in rural communities are in demand and often too few.<sup>17</sup> Rural communities also face workforce shortages across multiple industries, with skilled sectors, such as healthcare, being disproportionately affected.<sup>18</sup> The lack of healthcare workers in rural areas is multifaceted, with several underlying causes, including demographics, education, and economics. Moreover, many healthcare workers in rural areas are reaching retirement age, further exacerbating the worker shortage problem.<sup>19</sup>

Education is also a significant factor in the healthcare workforce shortage. Rural areas tend to have fewer educational opportunities and a lower percentage of individuals with advanced degrees.<sup>20</sup> Attracting and retaining healthcare professionals in these communities is challenging. Providers trained in urban areas often need more knowledge to practice in rural communities, which is complicated by fewer clinical training facilities in rural areas.<sup>21</sup>

Economics is another factor in the healthcare workforce shortage in rural areas. Healthcare providers in rural areas often face economic challenges given the lower reimbursement rates for medical services they receive compared to rates in urban areas.<sup>22</sup> People in rural communities with lower socio-economic status may also delay or completely forgo care due to the expense, resulting in fewer patients overall.<sup>23</sup> As a result, healthcare providers struggle to offer competitive salaries and benefits to attract and retain workers and their spouses.<sup>24</sup>

As noted by the National Rural Health Association, seventy-seven percent of rural counties are Health Professional Shortage Areas – geographic areas, populations, or facilities with a lack of primary, dental, or mental healthcare providers. Nearly one in ten rural counties have no physicians at all.<sup>25, 26</sup> Overall, rural communities report fewer health professionals per capita than urban communities (Table 1)

## Healthcare Delivery & Access

People living in rural communities face additional challenges to accessing healthcare beyond the lack of healthcare professionals.

Rural residents often must drive further to receive care than their urban counterparts. A study from the University of

**TABLE 1: RURAL AND URBAN HEALTH PROFESSIONALS WORKFORCE**  
Per Capita Rates of Health Professionals – Selected Occupations

Occupation	Health professionals per 10K, Rural	Health professionals per 10K, Urban
Dentists	3.1	4.8
Registered Nurses	64.5	93.9
Licensed Practical Nurses/ Licensed Vocational Nurses	24.2	20.0
Physician Assistants	9.4	11.9
Physicians (MDs)	11.0	31.5
Physicians (DOs)	1.8	2.4
Primary Care Physicians	5.2	8.0
Total Physicians	12.7	33.9
Nurse Practitioners	7.8	9.6
Total Advanced Practice Registered Nurses	9.4	11.9
Nurse Anesthetists	1.2	1.7

Source: HRSA Area Health Resources Files, 2020-2021. Recreated from the RHlhub. Physician data, 2019. Data for all other professions, 2020.

Washington found that median travel for rural Medicare beneficiaries in small rural communities was more than urban beneficiaries, 22.5 miles/31 minutes compared to 9.2 miles/18 minutes.<sup>27</sup> The study also found that Hispanic people (28 miles/37 minutes) and American Indians and Alaska Native people (30.7 miles/42 minutes) face more significant distance barriers to care. Visits to specialists may require driving more than one hour or staying overnight due to distance and appointment times. A 2017 survey found that rural residents of all ages often travel twice the distance (17.8 miles) to receive care than urban residents (8.1 miles).<sup>28</sup> Rural residents must travel further to receive emergency department care and report traveling longer distances to seek care after midnight.<sup>29</sup>

Limited public transportation options in rural communities, such as busing, also limits the ability of older residents to access care that requires a reliable means of transportation to and from appointments.<sup>30</sup> If available, taxis and rideshares can require waiting for availability, and thus time spent waiting for pick-ups. For many, the cost of the rideshare or taxi is outside of their budget, resulting in missed medical appointments when family or friends cannot take them to their appointments. Additional financial costs like gasoline can be difficult for older rural residents on a fixed budget. Missed appointments due to insufficient transportation can result in adverse health conditions, particularly among those with chronic conditions. It can also influence decision-making about healthcare, such as whether to make an appointment out of town or to see a specialist.

In addition, rural healthcare facilities face financial difficulties due to lack of use and lower reimbursement rates.<sup>31,32</sup> These facilities tend to be less profitable than urban facilities and thus at greater risk of consolidation and closure.<sup>33</sup> Between 2010 and 2022, 136 rural hospitals closed, with 19 closures occurring in 2020 alone.<sup>34</sup> The closure of these facilities, and the associated exodus of healthcare professionals, result in individuals being forced to drive further to seek care, as the closures rarely result in additional providers locating to the community.<sup>35</sup> Insurance coverage can also influence access to healthcare. While rates of people with health insurance remain high among rural older adults, because of Medicare, overall rates of insurance coverage in rural areas lag urban environments.<sup>36</sup> Rural individuals aged 50 to 64 are also more likely to be uninsured than those in urban environments, potentially resulting in greater unmanaged complex health problems among rural populations and rural residents entering the Medicare system with unmet healthcare needs.<sup>37</sup>

### Telehealth & Broadband

The onset of the COVID-19 pandemic in March 2020 caused a re-examination of how public health and healthcare services are delivered. The ensuing stay-at-home orders and physical distancing resulted in innovation in health delivery. Telehealth, the delivery of healthcare by providers without an in-person visit, became one hallmark of healthcare delivery during COVID-19.<sup>38</sup> Although dating to the 1950s and 1960s, the use of telehealth skyrocketed during the COVID-19 pandemic.<sup>39</sup> Researchers found that among Medicare B beneficiaries, telehealth visits increased from 840,000 in 2019 to 52.7 million in 2020.<sup>40</sup>

While hailed as transformative means of delivering care, the limitations of telehealth must be noted, particularly as it relates to rural communities and older persons. Although 43.2 percent of adults over age 65 reported using telehealth in the last year, disparities related to use exist based on education level and degree of urbanization. These disparities include challenges related to digital literacy, individuals' ability to use technologies to find, evaluate, create, and communicate information,<sup>41</sup> and the digital divide, which, as discussed below, includes the ability to connect to infrastructure that supports these technologies. Overall, the use of telehealth decreases based on increasing

levels of rurality, from 40.3 percent of all adults in large metropolitan areas to only 27.5 percent of all adults outside an urban core or in rural communities.<sup>42</sup>

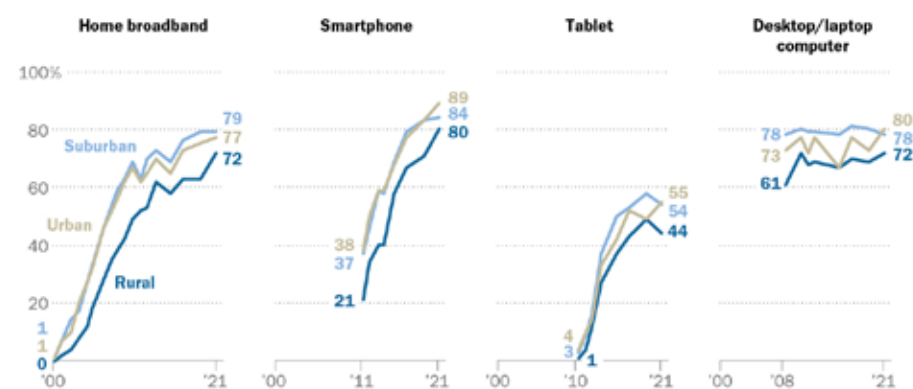
These disparities are not surprising. Telehealth delivery generally requires an individual to have access to regular providers, a challenge in rural communities. Telehealth often assumes the individual has the at-home technology, including cell phones, tablets, and computers, to initiate and host the appointments. Although smartphone ownership among those 65+ has increased from 46 percent in 2018 to 61 percent in 2021, these phones are often older versions, and disparities exist based on income.<sup>43</sup>

Even if individuals have access to a regular provider who engages in telehealth and the appropriate technology to participate in telehealth appointments, one more immense challenge remains the accessibility of high-speed internet connections. The Federal Communications Commission (FCC) notes that 22.3 percent of rural residents, along with 27.7 percent of tribal land residents, lack a broadband internet connection, compared to 1.5 percent of urban residents. These disparities vary by region and county, with less than 70 percent of residents having access in over 270 rural counties and in the most under resourced counties, less than 40 percent having access.<sup>44</sup> Overall, rural residents have less access to high-speed and stable internet connections that allow for the regular use of telehealth.<sup>45</sup> Even in counties that report the availability of appropriate broadband speeds, these speeds may not be available to all residents, may not be affordable, and may not maintain sufficient speeds to support telehealth appointments. The FCC is working to address these challenges through the 2022 Rural Broadband Accountability Plan.<sup>46</sup>

**Figure 5: Technology adoption: rural vs. urban vs. suburban communities**

**Despite growth, rural Americans have consistently lower levels of technology ownership than urbanites and lower broadband adoption than suburbanites**

*% of U.S. adults who say they have or own the following*

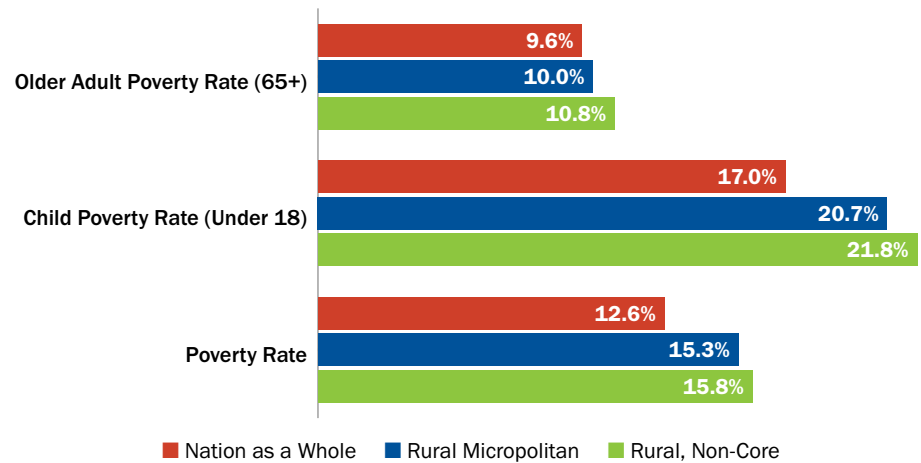


Source: Pew Research Center

## Financial Insecurity

Rural residents experience higher poverty rates (15.4 percent) than those living in urban environments (11.9 percent).<sup>47</sup> Eighty-seven percent of counties classified as having persistent poverty – defined as 20 percent or more of an area’s population living in poverty for 30 years or more – are rural counties and make up 53 percent of all census tracts.<sup>48</sup> The average income in rural areas is also lower at \$53,750 compared to \$70,784 for the nation. In rural communities, older adults, particularly older women, report a higher poverty rate than the national data. Whereas 9.2 percent of older adults are identified as impoverished in mostly urban areas, this jumps to 11.4 in primarily rural areas.<sup>49,50</sup> Individuals in rural communities also have higher health insurance premiums, medical costs, transport, and food cost.<sup>51</sup> Individuals, including older adults age 60+, in these communities also face higher rates of food insecurity.<sup>52</sup> Rural older adults are also more likely to live in states that did not expand Medicaid than are urban adults, thus further limiting healthcare access and increasing healthcare costs when care is sought.

**Figure 6: Rural Poverty Rates**



Source: Table S1701, 2017-2021 American Community Survey 5 Year Estimates

## Access to Data

Informed decisions require up-to-date, reliable data. Unfortunately, decision makers in rural communities face challenges accessing necessary data, due to a lack of availability.<sup>53,54</sup> Surveys and assessments may not include rural respondents as a classification criterion. Even national and statewide assessments may not collect enough data on rural populations to make available or include in population profiles. In some cases, the data may be suppressed due to

limited response rates or the possibility of participant identification. Specific city, state, or county-level collection approaches may not yield responses as participants fear being identified. Collected data may use a sampling frame for rural areas that does not align with the rural classification used by the organization requiring data. Thus, healthcare systems, community coalitions, and public health professionals often lack data needed to make informed decisions for their community.



## Existing Rural Healthcare Delivery

There are a number of pressure points on the delivery of healthcare in rural communities including distance to care and financial pressures on existing facilities.

### Rural Hospitals

Hospitals in rural communities comprise just over a third (35 percent) of United States hospitals (1,796 out of a total of 6,093).<sup>55</sup> While these facilities are vital to the health of those in rural communities, their number has been consistently declining since the 1980s. Four hundred hospital closures were recorded in 1980-1990. In a four-year period preceding the COVID-19 pandemic (2015-2019), there was a further decrease in counts of rural facilities from 1,887 to a total of 1,805<sup>56</sup> and closure rates accelerated during the pandemic, with a record 19 facility closures in 2020.<sup>57,58</sup> An additional 453 facilities have been identified as at risk of closure due to financial instability.<sup>59</sup> The existing and increasing lack of access to healthcare in rural communities compounds known rural healthcare disparities and the risk of morbidities, mortalities, and further shortening of rural population longevity rates.<sup>60</sup>

Additional rural healthcare facilities are categorized by their number of beds, proximity to larger hospitals, and source of funding:

### Critical Access Hospitals

Critical Access Hospitals (CAH) are facilities in rural communities that have 25 acute beds or less, are more than 35 miles from another hospital (exceptions may apply) and have emergency department services. Cost-based funding is available through Medicare for CAH. The Rural Information Hub lists the current number of CAHs as of 1,358 in January 2023.<sup>61</sup>

### Rural Emergency Hospitals

Rural Emergency Hospitals (REH) is a new designation for free-standing emergency departments with outpatient but not inpatient services. In addition to 24-hour emergency department availability, and laboratory and pharmacy services, discharge planning must be provided or supervised by a registered nurse or a social worker.<sup>62</sup> This classification became available in January 2023. Facilities designated as REH have expanded Medicare coverage, allowing CAH and larger rural hospitals (up to 50 beds) to reopen with greater funding access, helping to re-establish rural community health facilities.<sup>63</sup> Additionally, facilities currently vulnerable to closure in a different category may be re-designated to REH Models. Researchers at the North Carolina Rural Health Research Program (2022) have predicted the

potential conversion of 68 facilities primarily located in Texas, Kansas, Oklahoma, and Nebraska based on metrics derived from a daily census of patients averaging three or fewer patients per day, three years of lost revenues, and net revenues below \$20 million dollars.<sup>64</sup>

### Rural Health Clinics

Rural Health Clinics (RHC) are facilities that can provide primary care to the underserved in designated rural zip codes. They are required to use a team approach, such as physicians teaming with nurse practitioners, certified midwives, and physician assistants. The goal of federal support of RHC is to augment the delivery of primary care in rural communities. Each RHC is expected to have basic laboratory capabilities. Non-physician providers are expected to constitute 50 percent of the staffing to qualify. RHCs receive expanded payments from Medicare and Medicaid.<sup>65</sup> There are currently 4,413 RHCs in the U.S.<sup>66</sup>

### Rural Long-Term Care Facilities

Rural Long-Term Care Facilities (Rural LTC) are institutions that provide rehabilitation (including physical and occupational therapy) and activities of daily living assistance, nutritional support, and/or skilled nursing care.<sup>67</sup> Rural LTC may include nursing homes, assisted living, residential treatment centers, and other models of long-term care centers. Long-term care costs may be subsidized by Medicaid or Medicare (which only reimburses short-term care in a long-term care facility). Otherwise, long-term care costs are private pay. An estimated 500 rural LTC facilities either shuttered or merged with other entities in the decade before 2018, with an expected increase in closures in the coming decades.<sup>68</sup>

### Rural Public Health Agencies

Rural Public Health Agencies' prime initiatives are to prevent injury, disease, and illness while performing disaster response and reviewing the quality of local services.<sup>69</sup> Of the 3,000 local health departments in the United States, almost half are in rural environments. Those in rural areas have less staff while having the burden of a larger geographic area to manage.<sup>70</sup>

### Federally Qualified Health Centers

Federally Qualified Health Centers or FQHCs, as they are known, refer to facilities that provide services targeting underserved families supported by Medicare and Medicaid and accept sliding scale payments. In 2021, approximately 1,400 FQHCs treated 30 million persons.<sup>71</sup> FQHCs provide care to 20 percent of rural residents.<sup>72</sup>

## New Approaches to Rural Service Delivery

Ensuring access to public health programming and services in rural communities includes sustaining existing programs and introducing new sustainable services as needed. The challenges threatening existing programs (i.e., funding, workforce, declining population size, etc.) often prohibit introducing new, necessary services. Overcoming these challenges to ensure that older adults have access to evidence-based health-promoting programs requires the development of new and unique partnerships and approaches.

The Washington Rural Palliative Care Initiative (WRPCI) is one program bridging the divide in rural health service delivery. The WRPCI is a public-private partnership that engages non-traditional partners to ensure rural residents with serious illnesses can access palliative care. The WRPCI takes a multi-organizational team approach to deliver palliative care in multiple settings. As such, palliative care team members may represent various agencies, health centers, and non-profits. The division of labor among the various agencies also means that individuals in particularly large rural and isolated communities can access palliative care through providers in their part of the county. Telehealth allows for coverage of large geographic areas, consultation with specialty or palliative

care, and blended visits with partial telehealth combined with in-person clinician visits. The WRPCI approach helps navigate the complex workforce shortages in communities by matching groups with partners who complement their capacity.

Pat Justis, Executive Director of the Washington State Office of Rural Health who leads the WRPCI, states, “The goal [of WRPCI] is to move upstream and see that people receive palliative care earlier in their serious-illness experience. To provide more people with the opportunity to select palliative care as part of their treatment.” Now in its third cohort, 19 counties have signed up to participate. According to Justis, a critical component of the program’s success is local ownership of the issue and the local champions who spearhead efforts for the health of their community. “You need a convenor. We always try to find a local champion. You need someone in the community to provide structure for others to step into. You want people to be accountable to one another. It is gradual change, but people are receptive once they become involved.”

To learn more about the WRPCI, visit: [www.doh.wa.gov/ruralhealth](http://www.doh.wa.gov/ruralhealth)

## Innovative Approaches to Addressing Health Education

In Mississippi, over 54 percent of the population is rural, with a greater percentage of older adults living in rural communities than urban ones. State residents living in rural areas have lower rates of educational attainment and per capita income and higher rates of poverty and unemployment than their urban counterparts. It can be difficult for those living in rural communities to access healthcare and health information. And these challenges are likely to be exacerbated given the reality that 54 percent of Mississippi’s 38 rural hospitals face the threat of closure.<sup>73</sup>

Recognizing that more needed to be done to support individuals aging in rural communities, Mississippi age-friendly leaders organized a novel solution. Partner organizations developed a lay health messenger program in which older adults in the community share information with their peers. In this Healthy Aging Champion Program, older adults receive training on common health and chronic health conditions faced by older adults aging in rural communities. They are then given a toolkit they can use to disseminate public health messaging and

resources. According to Kaye Bender, Ph.D., Executive Director of the Mississippi Public Health Association, many participants to date have been retired healthcare or public health providers who are already fielding questions for their friends and community. “They often get called about things around health and well-being. What we are trying to do is to give them the up-to-date information they need and can use. We aren’t trying to reinvent the wheel. They can take this information and go into their Bible studies classes, luncheons, dinners, or whatever and share the information.” Although former healthcare and public health providers often naturally fill this role, the program is open to anyone wanting to serve as a Healthy Aging Champion. The aim is to ensure that accurate information is available and disseminated throughout the state, particularly in those communities where access to health information may be limited. Using a peer-led lay health worker model, the Mississippi Healthy Aging Champion Program can empower local champions to meet people where they are — in their communities.

## How the Public Health Sector Can Promote Healthy Aging in Rural Communities

Fostering the health and well-being of older adults in rural areas demands a collaborative, multi-sector approach. The goal is to ensure that older persons can age-in-community in the locale of their choosing. Doing so requires the development of novel methods of program delivery that consider the unique geographies, population distributions, and cultural norms in rural communities. Although rural communities may share common features, each is distinct, and what may prove effective in one may not be applicable in another. Nonetheless, public health can leverage best practices and adapt them to rural communities to assist in creating healthier, supportive environments for aging.

The Age-Friendly Public Health Systems (AFPHS) 6Cs Framework provides one such approach that can be used to develop healthier, supportive environments for aging in rural communities. In addition, the 6Cs provide a framework for public health departments to create a more equitable community for all. Below, we provide recommendations on how public health departments in rural communities can better support older residents through efforts aligned with the AFPHS 6Cs Framework.

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### Recommendations Based on the 6Cs of Supporting Healthy Aging:

#### **6Cs: Creating and leading policy, systems, and environmental changes to improve older adult health and well-being.**

*Public Health officials should build and maintain a strong organizational infrastructure and should work to create, champion, and implement policies, plans and laws that support the public's health including that of older adults.*

#### **Champion engagement and ownership of initiatives.**

Successfully implementing change initiatives requires ownership and commitment from individuals and organizations. However, in rural communities, organizations' limited resources and capacity can be a barrier to implementing effective change initiatives. Public health can play an active role in creating age-inclusive rural environments for aging by encouraging engagement in older persons health and well-being, spearheading older adult health programming, and identifying key stakeholders and partners. This might take the form of proactively engaging rural older adults in the community health assessment process, as well as working to align health assessments with other age-friendly initiatives.



**6Cs: Connecting and convening multi-sector stakeholders to address the health and social needs of older adults through collective impact approaches focused on the social determinants of health.**

*Public health practitioners should strengthen, support, and mobilize communities and partnerships.*

**Connect with state rural health associations, state offices of rural health, and state public health associations.** The 44 state rural health associations, 50 state offices of rural health, and more than 50 state and territorial public health associations are critical partners in improving rural health. State rural health associations focus on service delivery, dissemination of resources, and continuing education and professional development opportunities focused on rural health. State public health associations serve a similar role but focus more broadly on public health. The state offices of rural health, typically operated under the state Health Resources and Services Administration, work to keep providers aware of new activities, collect and disseminate data and resources, offer technical assistance, and address workforce issues. Public health should work to engage these partners in efforts to increase capacity in their local state and communities for rural health issues. Doing so will also provide the opportunity for greater knowledge-exchange and awareness building about the challenges facing rural communities.

**Convene local, state, and federal rural health partners.** One of public health's great strengths is the ability to convene multi-sectoral partners to address emerging and existing threats to health. The complexity of the rural health landscape can limit the ability to collaborate successfully to ensure opportunities for healthy aging. Public health can work to connect these disparate components of rural health in the United States through regular communication, sharing of resources, and coordination of efforts. This can lead to the development of novel projects to assist older persons in rural communities. With nearly 43 percent of the 613 Area Agencies on Aging classified as operating in a rural community, there are opportunities for new collaborations and partnerships.<sup>74</sup> Public health officials can take the lead in convening a rural health network. Other rural health network members would include the Federal Office on Rural Health Policy, state offices of rural health, the CDC Office of Rural Health, Area Agencies on Aging, state departments of health, local public health departments, Tribal health organizations, rural hospitals, federally qualified health centers, and service providers in rural communities. Through regular

communication, sharing of resources and best practices, and coordinating efforts, novel projects can develop to assist older persons in rural environments.

**Engage new and non-traditional stakeholders.** Developing and providing services that reach the breadth of rural older adults – from those in plains regions to those in mountainous areas – requires working with community stakeholders and groups. Given the disparate nature of rural life, many communities lack access to their own public health department or healthcare facilities. Thus, it is necessary to engage new and non-traditional partners to ensure access to support for healthy aging. For example, working together, public health can deliver health messaging through local faith-based organizations. Critical information may be provided to the mail-delivery providers – or they may be engaged in completing check-ins on older persons. A local store may be a secure site to provide locked cabinets for medical supplies that older people can access. Restaurants can provide places for meetings and gatherings. Even when these services do not exist in the community, partnering with those closest to the community could reduce the distance to access care and services.

**6Cs: Coordinating existing supports and services to help older adults, families, and caregivers navigate and access services and supports, avoid duplication, and promote an integrated system of care.**

*Public health practitioners should strengthen, support, and mobilize communities and partnerships. They should build a diverse and skilled workforce, enable equitable access to services and assess and monitor population health.*

**Bridge service delivery silos.** The fractured nature of rural healthcare delivery and the reliance on urban centers for healthcare serve as significant barriers to individuals accessing the care they need. Older people may not follow up with recommended visits due to a lack of specialists in their community or because they are unable to drive long distances. Public health can improve access to care by identifying and communicating with service-delivery partners within the local community, county, and adjacent regions. Health centers and social service providers should work together to ensure access to needed services. In bridging service-delivery silos, public health practitioners can develop and publicize a listing of services and aid in developing standardized referral processes. Public health can work with healthcare providers to connect nutrition-deficit older persons to a local farmers market where they could access fresh fruits and vegetables with funding

from the Area Agency on Aging. Older adults who report financial distress could be recommended to access services provided by non-profits.

**Develop ‘no-wrong’ door approaches to service delivery.**

In bridging silos and developing standardized referral processes, public health can coordinate and develop a no-wrong-door approach to service delivery among rural agencies. Rural older adults may be less likely to seek services due to unfamiliarity with the offerings or social stigma. They may be unsure where to go. When they seek assistance, being told they are in the wrong location may hinder future efforts to obtain support. A no-wrong-door approach in rural communities would further coordinate service delivery through referrals and direct handoffs between agencies and groups. Local health departments should consider offering service fairs that gather all service providers in one location once a month. Doing so simplifies the steps needed to access services for those they are meant to help.

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**A No Wrong Door Approach (NWD), also sometimes referred to as Person-Centered Approach, focuses on ensuring individuals have access to benefits and services they are eligible for, regardless of how they first contact the support system.**

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**Coordinate Joint Delivery of Services.** Given the economic and workforce challenges in many rural communities, it may not be viable to deliver social support and health services at different locations within a community. In these circumstances, public health can work with partners to develop the joint delivery of services through novel partnerships, agreements, and coordination. For instance, rural healthcare providers could offer space on their premises to facilitate social service coordinators. A healthcare professional, such as a nurse, may travel to locations, collect specimens for testing, and aid in the setup of telehealth appointments with specialists. Organizations and agencies can also coordinate service delivery by sharing their expertise and expanding their geographic services. For instance, a home care agency that only works in one part of a county could partner with a service agency in another part of the county to help their patients complete paperwork and access services. One example of such a partnership is the Washington Rural Palliative Care Initiative (WRPCI) (*see page 10*).

**6Cs: Collecting, analyzing, and translating relevant and robust data on older adults to identify the needs and assets of a community and inform the development of interventions through community-wide assessment.**

*Public health officials should work to improve and innovate programs and service delivery through evaluation, research, and quality improvement. Robust data collection is critical to assess and monitor population health and to investigate, diagnose, and address health hazards and root causes.*

**Ensure rural residents are represented in data collection.**

The inadequate representation of rural communities is a significant shortcoming of many datasets. Addressing the adverse social determinants of health and complementary supports for health experienced by rural older adults requires detailed data. Public health officials can advocate for including rural populations in data collection efforts. They can also work to ensure that rural people are identified as such in data collection and reporting. This can be accomplished by collecting zip codes or survey questions (e.g., How would you describe your neighborhood? Rural, Urban, or Suburban). These methods preserve respondent anonymity but provide critical information about those living in rural areas and the communities themselves.



**Share relevant public health data and insights.** Public health agencies are a vital source of information for rural areas, as they collect, curate, analyze, and disseminate data on health and well-being. Local health departments can analyze and interpret data that others cannot. Public health should increase its work to make available, and interpret, relevant public health data for rural partners. Local and state public health departments should consider developing rural health information briefs delivered at regular intervals. Rural partners can use this information to make informed program and service delivery decisions, as well as advocate for additional resources for older adult programs and services.

**Partner to determine program successes and opportunities.** As program delivery and evaluation experts, public health can partner with rural organizations to provide evaluation and assessment services. These services may include the development of assessment criteria, identifying programmatic goals, and program successes and opportunities.

**6Cs: Communicating important public health information to promote and support older adult health and well-being, including conducting and disseminating research findings, and emerging and best practices to support healthy aging.**

*Public health practitioners need to communicate effectively to inform and educate.*

**Communicate about available programs and services.** An integrated multi-channel approach is necessary to reach rural older adult populations. Through expertise in health communication and health literacy, public health can work with partners to develop tailored communication strategies that promote services and programs and encourage their use. Public health practitioners can also work within their communities to establish standards and templates that can be easily adapted by community partners to advance efforts to support healthy aging. They can work with these partners to ensure these activities are appropriate for the community's health literacy level. Where needed, they can assist in communicating complex information in more accessible ways. Public health can also improve the health literacy of rural older adults by providing them with information and resources in a way they can understand and use.

**Educate about rural aging.** Public health practitioners can help to educate diverse stakeholders and groups about rural aging by:

- Working with service providers and others to educate those living in rural communities about the availability of services, health promotion strategies, and health recommendations.
- Conducting research on the unique challenges and opportunities of rural aging.
- Developing and implementing programs and initiatives that address the needs of older adults in rural areas.
- Advocating for policies that support rural aging.

**Disseminate research and findings to relevant stakeholders.** Service providing organizations in rural communities are often smaller than their urban counterparts and may be understaffed. They may have limited to no time to focus on research and best practices that apply only to older populations. Public health can help to fill this gap by translating and disseminating relevant findings to rural partners. This can be done through regular newsletters, webinars, or meetings.

**Disseminate best practices to organizations and agencies.** Limitations of staff and resources in rural public health agencies often force them to choose between providing services and administrative tasks. Public health practitioners can help by disseminating best practices related to program delivery, development, and administration to rural partners. Using this approach, rural agencies can identify best practices and coordination in managing and delivering services, seek recommendations, and avoid implementing costly and ineffective activities. By taking these steps, public health can help ensure that rural agencies have the resources to provide quality services to their communities.

**6Cs: Complementing existing health promoting programs to ensure they are adequately meeting the needs of older adults.**

*Public health officials should evaluate existing programs to determine if they are meeting the needs for older adults.*

**Advance community health worker programs.** Community health workers (CHWs) can fulfill a critical role in rural communities. The American Public Health Association



defines a community health worker as “...a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served.”<sup>75</sup> Their familiarity with the local community allows them to facilitate access to healthcare services and foster health promotion activities. Additionally, they serve as advocates for older adults and assist with monitoring progress, medication adherence, and management of chronic diseases. As a result of their community-based approach, CHWs build strong relationships with community members. Public health should work to engage and train more community health workers within rural communities. Furthermore, public health officials should ensure that CHWs receive comprehensive training on age-related health differences and have a thorough understanding of the aging services ecosystem.

#### **Develop Rural Public Health Aging Fellowships.**

As a primary health coordinating body in states and communities, public health professionals are uniquely positioned to offer technical assistance and guidance to rural communities seeking to implement new and sustain existing programs and services. Building upon established models, such as the CDC Public Health Associate (PHAP) Program, public health should develop state-specific rural aging fellowships that embed public health professionals

in rural communities to improve the experiences of aging individuals. By engaging in this initiative, rural organizations stand to gain valuable insights from the fellow’s expertise while the fellow earns invaluable experience working with and exposure to rural communities.

#### **Supplement Existing Health and Social Care Services.**

Working across the life course, public health can recognize unique care models that have proven successful with diverse populations and life stages. Such models may hold promise for improving the health of rural older adults. Public health officials can adapt and pilot these models in rural communities and disseminate findings for broader implementation. By collaborating with partners, public health can utilize the Centers for Medicare and Medicaid Services waiver processes to develop programs that overcome health barriers faced by rural older adults to fully use home and community-based services. Through strategic partnerships, public health can provide joint services and funding to support programs promoting lifelong access to care in rural communities. Of special note is the fact that nearly 24 percent of all veterans in the United States live in rural communities – and they are disproportionately older with over 55 percent being aged 65 and older<sup>76</sup> – providing opportunities for developing efforts to ensure rural older veterans can access care.

# Conclusion

Rural communities embody a unique way of life that appeals to many, and many have inherent strengths. However, the challenges confronting rural communities, including workforce shortages, healthcare inequities, and support system inadequacies, cannot be ignored. To create healthy environments that support aging in the present and future, innovative, multi-sector solutions must be developed to address these and emerging challenges.

Effective policies and programs must recognize the vast uniqueness of rural communities. Despite sharing common features, differences in geography, demographics, and culture will always result in needs, strengths, and challenges unique to each community. Programs, activities, and policies will require adaptation based on the community. Public health is well-positioned to serve a critical role in creating age-inclusive rural communities that offer the ideal combination of services to support individuals as they age. Through the engagement of and coordination by public health, it is possible to allow individuals to age-in-community while creating a healthier community for all.

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## Resources

### Age-Friendly Public Health Systems

<https://afphs.org>

### National Rural Health Association

<https://www.ruralhealth.us/>

### State Offices of Rural Health

<https://www.hrsa.gov/rural-health/grants/rural-hospitals/sorh>

### National Organization of State Offices of Rural Health

<https://nosorh.org/>

### Rural Health Information Hub

<https://www.ruralhealthinfo.org/>

### Rural Health Research Gateway

<https://www.ruralhealthresearch.org/>

### CDC Rural Health

<https://www.cdc.gov/ruralhealth/index.html>

**About Trust for America's Health (TFAH):** TFAH is a non-profit, non-partisan organization that promotes optimal health for every person and community and makes the prevention of illness and injury a national priority. Our goal is a modernized public health system that advances health equity for all and is prepared to respond to a wide-variety of health threats with policies and programs that are inclusive, community appropriate, and evidence-based. Learn more at [www.tfah.org](http://www.tfah.org).

**About The John A. Hartford Foundation:** TFAH's Age-Friendly Public Health Systems initiative is proudly supported by The John A. Hartford Foundation, a private, nonpartisan, national philanthropy dedicated to improving the care of older adults. The leader in aging and health, the Foundation has three priority areas: creating age-friendly health systems, supporting family caregivers, and improving serious illness and end-of-life care. Learn more at [www.JohnAHartford.org](http://www.JohnAHartford.org).



## Endnotes

- 1 Steinfeld E, Maisel J. Universal design: Creating inclusive environments. John Wiley & Sons; 2012.
- 2 Fulmer T, Patel P, Levy N, et al. Moving Toward a Global Age-Friendly Ecosystem. *J Am Geriatr Soc.* 2020;68(9):1936-1940.
- 3 Malani P, Kullgren J, Solway E, et al. *National Poll on Healthy Aging: Older Adults' Preparedness to Age in Place.* 2023.
- 4 Crimmins EM, Ailshire JA. Aging and Place: The Importance of Place in Aging. *Public Policy Aging Rep.* 2021;31(1):1-2.
- 5 Scharlach AE. Aging in Context: Individual and Environmental Pathways to Aging-Friendly Communities-The 2015 Matthew A. Pollack Award Lecture. *Gerontologist.* 2017.
- 6 The Older Population in Rural America: 2012-2016 (2019).
- 7 Cromartie J. Rural Aging Occurs in Different Places for Very Different Reasons. *Research and Science blog.* 2018.
- 8 Ibid.
- 9 Elson LE, Luke AA, Barker AR, McBride TD, Joynt Maddox KE. Trends in Hospital Mortality for Uninsured Rural and Urban Populations, 2012-2016. <https://doi.org/10.1111/jrh.12425>. *The Journal of Rural Health.* 2021/03/01 2021;37(2):318-327. doi:<https://doi.org/10.1111/jrh.12425>
- 10 Probst JCP, Zahnd WEP, Hung PP, Eberth JMP, Crouch ELP, Merrell MAP. Rural-Urban Mortality Disparities: Variations Across Causes of Death and Race/Ethnicity, 2013–2017. *American Journal of Public Health.* Sep 2020 2020-09-02 2020;110(9):1325-1327. doi:<http://dx.doi.org/10.2105/AJPH.2020.305703>
- 11 Wang H, Qiu F, Boilesen E, et al. Rural-Urban Differences in Costs of End-of-Life Care for Elderly Cancer Patients in the United States. *J Rural Health.* Sep 2016;32(4):353-362. doi:10.1111/jrh.12160
- 12 Curtin S, C, Spencer MR. *Trends in death rates in urban and rural areas : United States, 1999–2019.* Journal Issue. 2019. <https://stacks.cdc.gov/view/cdc/109049>
- 13 Ho JY, Franco Y. The rising burden of Alzheimer's disease mortality in rural America. *SSM - Population Health.* 2022/03/01/ 2022;17:101052. doi:<https://doi.org/10.1016/j.ssmph.2022.101052>
- 14 Abrams LR, Myrskylä M, Mehta NK. The growing rural-urban divide in US life expectancy: contribution of cardiovascular disease and other major causes of death. *Int J Epidemiol.* Jan 6 2022;50(6):1970-1978. doi:10.1093/ije/dyab158.
- 15 2020 Census Qualifying Urban Areas and Final Criteria Clarifications, 87 FR 80114 221130-0255 (2022).
- 16 U.S. Census Bureau. One in Five Americans Live in Rural Areas. August 9, 2017. What is Rural America? (census.gov)
- 17 HRSA. Defining Rural Population. <https://www.hrsa.gov/rural-health/about-us/what-is-rural>. Published 2023.
- 18 Slack T, Jensen L. The Changing Demography of Rural and Small-Town America. *Population Research and Policy Review.* 2020;39(5):775-783.
- 19 RHInhub. Rural Healthcare Workforce. <https://www.ruralhealthinfo.org/topics/health-care-workforce>. Published 2023.
- 20 Jensen LP, Monnat SMP, Green JJP, Hunter LMP, Sliwinski MJP. Rural Population Health and Aging: Toward a Multilevel and Multidimensional Research Agenda for the 2020s. *American Journal of Public Health.* 2020;110(9):1328-1331.
- 21 Education CoGM. *Strengthening the Rural Health Workforce to Improve Health Outcomes in Rural Communities.* Washington, DC 2022.
- 22 Shipman S, Wendling A, Jones K, Kovar-Gough I, Orlowski J, Phillips J. The Decline In Rural Medical Students: A Growing Gap In Geographic Diversity Threatens The Rural Physician Workforce. *Health Affairs.* 2019;38(12):2011-2018.
- 23 Noya F, Freeman K, Carr S, Thompson S, Clifford R, Playford D. Approaches to Facilitate Improved Recruitment, Development, and Retention of the Rural and Remote Medical Workforce: A Scoping Review Protocol. *Int J Health Policy Manag.* 2021;10(1):22-28.
- 24 Probst J, Eberth J, Crouch E. Structural Urbanism Contributes To Poorer Health Outcomes For Rural America. *Health Affairs.* 2019;38(12):1976-1984.
- 25 HRSA. Explore HPSAs. In: HRSA, ed. Washington, DC2023.
- 26 Workforce BoH. Designated Health Professional Shortage Areas Statistics: Designated HPSA Quarterly Summary, as of September 30, 2022. In: Services USDoHH, ed2022.
- 27 Akinlotan M, Primm K, Khodakarami N, Bolin J, Ferdinand A. *Rural-Urban Variations in Travel Burdens for Care: Findings from the 2017 National Household Travel Survey.* 2021.
- 28 Ibid
- 29 Ibid
- 30 Henning-Smith C, Evenson A, Corbett A, Kozhimannil K, Moscovice I. Rural transportation: Challenges and opportunities. *Policy Brief University of Minnesota Rural Health Research Center* [http://rhrcc.umn.edu/wp-content/files\\_mf/1518734252UMRHRCTransportationChallenges.pdf](http://rhrcc.umn.edu/wp-content/files_mf/1518734252UMRHRCTransportationChallenges.pdf). 2017.
- 31 Hegland TA, Owens PL, Selden TM. New evidence on geographic disparities in United States hospital capacity. *Health Services Research.* 2022;57(5):1006-1019.
- 32 Williams Jr. D, Holmes GM, Song PH, Reiter KL, Pink GH. For Rural Hospitals That Merged, Inpatient Charges Decreased and Outpatient Charges Increased: A Pre-/Post-Comparison of Rural Hospitals That Merged and Rural Hospitals That Did Not Merge Between 2005 and 2015. *The Journal of Rural Health.* 2021;37(2):308-317.
- 33 Malone TL, Pink GH, Holmes GM. Decline in Inpatient Volume at Rural Hospitals. *The Journal of Rural Health.* 2021;37(2):347-352.
- 34 Association AH. *Rural Hospital Closures Threaten Access.* Washington, DC2022.
- 35 Germack HD, Kandrack R, Martsof GR. When Rural Hospitals Close, The Physician Workforce Goes. *Health Affairs.* 2019;38(12):2086-2094.
- 36 Day JC. Rates of Uninsured Fall in Rural Counties, Remain Higher Than Urban Counties. In. *America Counts: Stories.* Washington, DC: U.S. Census Bureau; 2019.

- 37 Carter B, Dean O. *Rural-Urban Health Disparities among US Adults Ages 50 and Older*. Washington, DC: AARP; 2021.
- 38 Telehealth. <https://telehealth.hhs.gov/patients/understanding-telehealth>. Published 2023.
- 39 Gogia S. Chapter 2 - Rationale, history, and basics of telehealth. In: Gogia S, ed. *Fundamentals of Telemedicine and Telehealth*. Academic Press; 2020:11-34.
- 40 Totten A, Womack DM, McDonagh MS, et al. Improving Rural Health Through Telehealth-Guided Provider-to-Provider Communication. In: AHRQ, ed. Washington, DC: Agency for Healthcare Research and Quality; 2022.
- 41 Force ADLT. Digital Literacy. <https://literacy.ala.org/digital-literacy/>. Published 2022.
- 42 Ibid
- 43 Faverio M. Share of those 65 and older who are tech users has grown in the past decade. PEW Research. PEW Reports Web site. <https://www.pewresearch.org/fact-tank/2022/01/13/share-of-those-65-and-older-who-are-tech-users-has-grown-in-the-past-decade/>. Published 2022.
- 44 Broadband. <https://www.usda.gov/broadband>. Published 2023.
- 45 Drake C, Zhang Y, Chaiyachati KH, Polsky D. The Limitations of Poor Broadband Internet Access for Telemedicine Use in Rural America: An Observational Study. *Annals of Internal Medicine*. 2019;171(5):382-384.
- 46 FCC. Rural Broadband Accountability Plan. <https://www.fcc.gov/rbap>. Published 2022.
- 47 Rural Poverty and Wellbeing. Washington, DC. Rural Economy & Population Web site. <https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/>. Published 2023.
- 48 Loethen L, Fabiana D. *PERSISTENT POVERTY AND THE PREVALENCE OF CDFIs*. Washington, DC: OpportunityFinanceNetwork;2021.
- 49 C T, J T, J LMS, C TMH-S. *Rural-Urban Differences among Older Adults*. University of Minnesota;2020.
- 50 Service ER. Data show U.S. poverty rates in 2019 higher in rural areas than in urban for racial/ethnic groups. In. *Washington, DC* 2021.
- 51 Benitez JA, Seiber EE. US Health Care Reform and Rural America: Results From the ACA's Medicaid Expansions. *J Rural Health*. 2018;34(2):213-222.
- 52 Ziller EC, Milkowski C, Burgess A. *Rural Working-Age Adults Report More Cost Barriers to Health Care*. Main Rural Health Research Center: University of Southern Maine; 2023.
- 53 Belanche D, Casaló LV, Rubio MÁ. Local place identity: A comparison between residents of rural and urban communities. *Journal of Rural Studies*. 2021;82:242-252.
- 54 Panel RH. *Considerations for Defining Rural Places in Health Policies and Programs*. Washington, DC: Rural Policy Research Institute 2020.
- 55 Association AH. *AHA Hospital Statistics 2022 Edition*. 2022.
- 56 Ibid
- 57 Malone TL, Pink GH, Holmes GM. Decline in Inpatient Volume at Rural Hospitals. *The Journal of Rural Health*. 2021;37(2):347-352.
- 58 Germack HD, Kandrack R, Martsof GR. When Rural Hospitals Close, The Physician Workforce Goes. *Health Affairs*. 2019;38(12):2086-2094.
- 59 Ellison A. *Staffing Crisis, payment cuts put 453 hospitals at risk of closure*. American Society of Registered Nurses. 2022.
- 60 RHIhub. Critical Access Hospitals (CAHS). <https://www.ruralhealthinfo.org/topics/critical-access-hospitals>. Published 2022.
- 61 RHIhub. Rural Emergency Hospitals. <https://www.ruralhealthinfo.org/topics/rural-emergency-hospitals>. Published 2023.
- 62 Schaefer SL, Mullens CL, Ibrahim AM. The Emergence of Rural Emergency Hospitals: Safely Implementing New Models of Care. *JAMA*. 2023;329(13):1059-1060.
- 63 Pink GH, Thompson K, Howard HA, Homes M. *How Many Hospitals Might Convert to a Rural Emergency Hospital (REH)* NC RHRP: UNC Sheps Center; 2021.
- 64 RHIhub. Rural Health Clinics (RHCs) Overview. 2022.
- 65 Clinics NAO RH. About Us. [https://www.narhc.org/narhc/ESX\\_About\\_Us\\_2.asp](https://www.narhc.org/narhc/ESX_About_Us_2.asp). Published 2022..
- 66 Ibid
- 67 RHIhub. Rural Long-Term Care Facilities Overview. 2022.
- 68 Sharma H, Bin Abdul Baten R, Ullrich F, Mackinney C, Mueller K. *Trends in Nursing Home Closures in Nonmetropolitan and Metropolitan Counties in the United States, 2008-2018*. 2021.
- 69 Erwin PC, Braund WE. A Public Health Lens on Rural Health. *American Journal of Public Health*. 2020;110(9):1275-1276.
- 70 Leider JP, Meit M, McCullough JM, et al. The State of Rural Public Health: Enduring Needs in a New Decade. *American journal of public health*. 2020;110(9):1283-1290.
- 71 HRSA. Health Center Program: Impact and Growth. <https://bphc.hrsa.gov/about-health-centers/health-center-program-impact-growth>. Published 2023.
- 72 RHIhub. Federally Qualified Health Centers (FQHCs) and the Health Center Program. <https://www.ruralhealthinfo.org/topics/federally-qualified-health-centers>. Published 2022.
- 73 *Associated Press*. “Over half of Mississippi’s rural hospitals risk closing”. November 23, 2022,
- 74 Rhubart DC, Monnat SM, Jensen L, Pendergrast C. The Unique Impacts of U.S. Social and Health Policies on Rural Population Health and Aging. *Public Policy & Aging Report*. 2020;31(1):24-29.
- 75 Association APH. Community Health Workers. <https://www.apha.org/apha-communities/member-sections/community-health-workers>. Published 2022.
- 76 n/d. Rural Veterans. <https://www.ruralhealth.va.gov/aboutus/ruralvets.asp>. Published 2022.



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