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Characteristics of Counties with the Highest Proportion of the Oldest Old

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Key Findings

- Across the U.S., 1.9% of the population is age 85 and older, referred to as the "oldest old." Across rural (non-metropolitan) counties, the prevalence is 2.4%, compared with 1.9% in metropolitan counties.
- Among the 56 counties with the highest proportion (5% or more) of the oldest old (people age 85 and older), all but two were rural, non-core counties (neither metropolitan nor micropolitan).
- On average, the 54 rural counties with the highest concentration of the oldest old had better health, and were advantaged compared with all other counties in terms of access to primary care, socio-economic status, health behaviors, and environmental measures.

Purpose

The "oldest old," or individuals age 85 and older, are one of the fastest-growing segments of the U.S. population, yet little is known about where those individuals tend to live and what their communities are like. This information is important for planning how to best respond to and support this growing population.

Background and Policy Context

Adults age 85 and older, sometimes referred to as the "oldest old," are one of the fastest-growing population groups across the country.[1] By 2050, an estimated 19 million Americans will be age 85 and older, comprising approximately 20% of the population of older adults (age 65 and older).[2] Additionally, the oldest old are more likely than younger age groups to have chronic conditions as well as financial and human resource-intensive health care needs.[3]

Although the growth of this population represents a welcome extension of lifespans, it is also likely to produce greater needs for health care and long-term care services.[4] To prepare for these needs, it is important to examine where the oldest old reside and what the characteristics of those communities are, especially given documented differences in rural-urban locations in long-term care availability and caregiver supports.[5–7] For example, rural adults age 85 and older are more likely than their urban counterparts to have functional limitations and to live in nursing homes, and less likely to live in assisted living or other housing with supportive services.[4] Greater understanding of what key characteristics make up communities where the oldest old live can help policymakers and public officials better tailor programs and services to best support them and ensure financial sustainability.

Approach

We used data from the 2013-2017 5-year file of the American Community Survey (ACS) to identify the total population and the percentage of the population age 85 and older in each county, along with data from the 2017 County Health Rankings for other county characteristics. We also used the

2013 Office of Management and Budget core-based statistical areas to designate rurality, defining metropolitan counties as urban and micropolitan and non-core counties as rural.

We used the ACS data to identify the counties across the country with the highest prevalence of residents age 85 and older. Of the 56 counties with a prevalence of 5% or higher, all but two were rural non-core counties (neither metropolitan nor micropolitan; the other two were metropolitan). We also conducted t-tests to determine differences in county-level characteristics among the 54 rural non-core counties with the highest percentage of the oldest old, compared with all U.S. counties, all rural counties (micropolitan and non-core), and all rural non-core counties.

County-level characteristics included the percentage of adults reporting fair/poor health; the average reported poor physical and mental health days (in the past 30 days); primary care physicians and dentists per capita; the percentage of adults with some college education (or more); the unemployment rate; median household income; the percentage of the population that is non-Hispanic White; social associations (social groups, clubs, organizations) per capita; adult smoking, obesity, and physical inactivity rates; presence of air particulate matter; presence of severe housing problems (overcrowding, high costs, lack of kitchen or plumbing); and the food insecurity rate (the percentage of the population without access to a reliable food source in the past year). County Health Rankings compiles these measures from a variety of sources, and each is described in more detail elsewhere.[8]

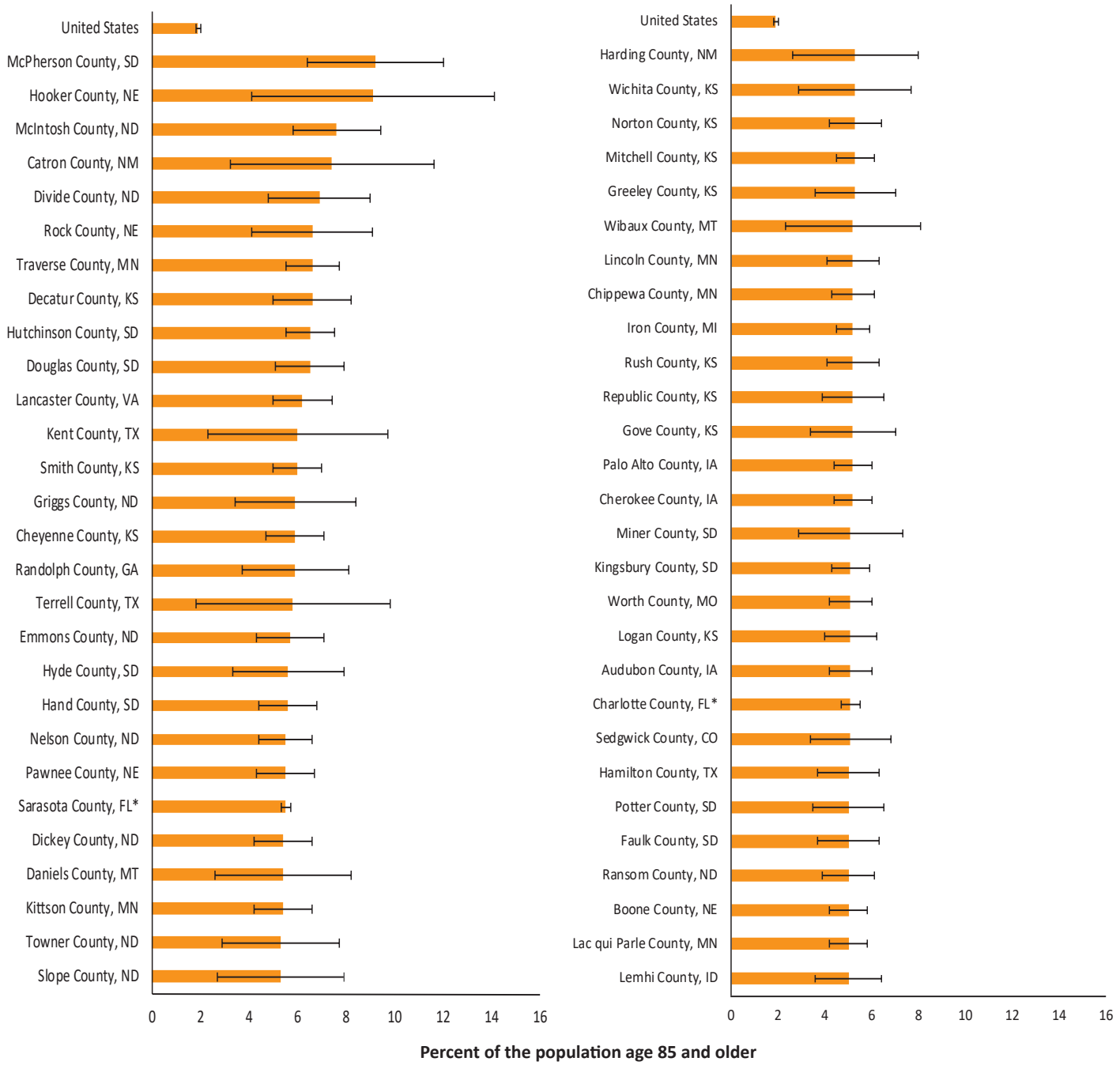
All of our analyses were based on county-level aggregate measures and our results show county-level means, not the national average, for each measure.

Results

There were 56 counties with 5.0% or more of their population age 85 and older (Figure 1). (Percentages were rounded to a single decimal digit to avoid relying too heavily on the precision of ACS estimates.) While many of the identified counties have relatively small populations, resulting in large margins of error, only one county, Terrell County, Texas, had a margin of error that reached as low as the national average (1.8%). The rest, even when considering the lower bound of the margin of error, were well above the national average, with some counties fully 2 to 3 times above the U.S. average regardless of the margin of error. All but two of those counties were rural, non-core. The other two were metropolitan (both located in Florida). The majority of these counties were located in the western Midwest (Figure 2).

Collectively, the 54 rural, non-core counties with the highest percentage of the oldest old differed in significant ways from other groups of counties, including all U.S. counties, all rural counties, and all rural, non-core counties. (See Table 1.) Their county population size was significantly smaller, with an average population of just over 4,000 (range: 546-12,040). The high-prevalence non-core counties were advantaged on most measures, with better health on average, higher rates of primary care providers, higher educational attainment, and lower unemployment. These counties also had lower smoking and obesity rates than all other counties, and lower rates of physical inactivity than their rural peers. The 54 counties also had nearly double the rate of social associations per capita, compared with all other county groups, and lower rates of housing problems, food insecurity, and air pollution. In sensitivity analyses, we found that the counties with the highest percentage of the oldest old also fared better than those counties with 3.0-4.9% of the population age 85 and older on several measures, including self-rated health, poor physical and mental health days, percentage with some college, unemployment rate, number of social associations, air pollution, housing problems, and food insecurity rate. (There was no significant difference for the other measures.)

Figure 1: Counties with the Highest Proportions of Population Age 85 and Older



Source: 2013-2017 5-Year American Community Survey

*Notes: *Denotes metropolitan counties; bars show margin of error calculated by U.S. Census Bureau.*

Figure 2: Proportion of the Population Age 85 and Older by County

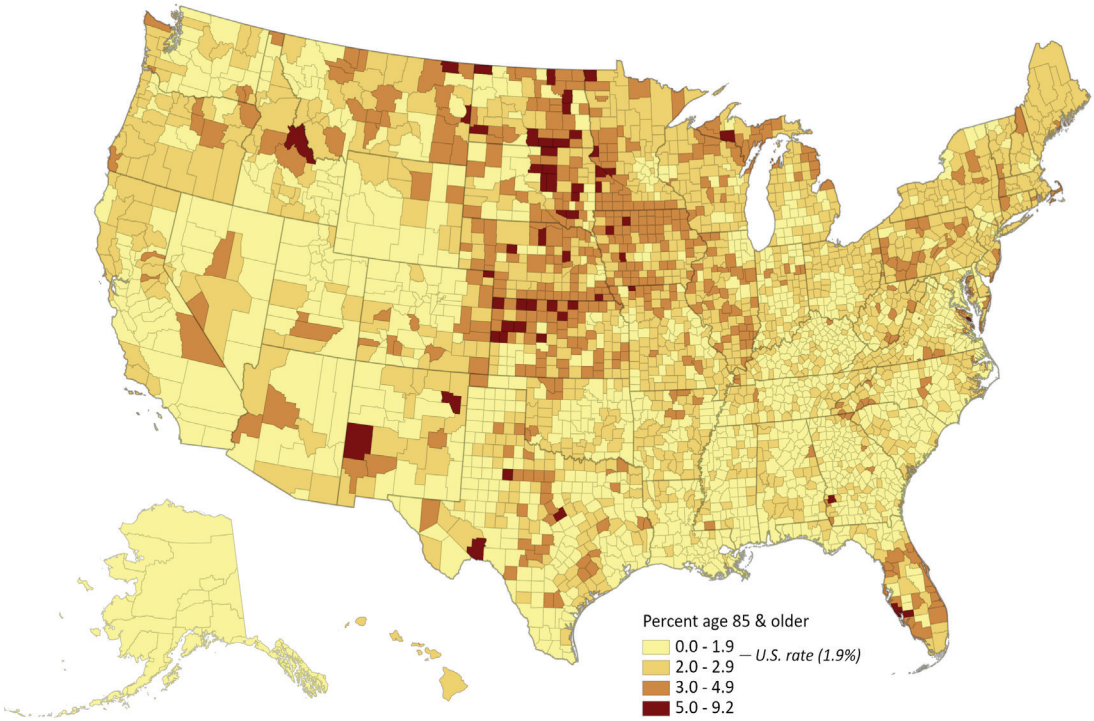


Table 1: Differences in County-Level Characteristics by Prevalence of Residents Age 85 and Older

	Highest Prevalence Counties - Rural Only	All Counties	Rural Counties	Non-core Rural Counties
Fair/poor health	0.13	0.17	0.18	0.18
Poor physical health days	3.2	3.9	4.0	3.9
Poor mental health days	3.0	3.8	3.8	3.8
Average population size	4,090	102,166***	23,390***	14,146***
Primary care physicians per 100,000 people	65	55*	51**	47.3***
Dentists per 100,000 people	39	43	39	35.2
Some college or more	0.66	0.57***	0.54***	0.53***
Unemployment rate	0.04	0.06***	0.06***	0.06***
Median household income	47,812	48,593	44,790*	44,095**
Non-Hispanic White	0.89	0.77***	0.79***	0.79***
Social associations per capita	28.6	13.8***	15.5***	16.7***
Adult smoking rate	0.15	0.18***	0.18***	0.18***
Adult obesity rate	0.30	0.31*	0.32**	0.32**
Adult physical inactivity rate	0.26	0.26	0.27	0.27
Air particulate matter	7.7	9.0***	8.6***	8.4***
Severe housing problems	0.09	0.14***	0.14***	0.13***
Food insecurity	0.11	0.15***	0.15***	0.15***

*Note: "Highest prevalence counties" are those counties with 5% or more of the population age 85 and older. Differences significant from highest-prevalence counties at *p<0.05, **p<0.01, ***p<0.001.*

Discussion and Implications

Across the country, 56 counties have 5% or more of their population age 85 and older. Nearly all (54) of those 56 counties are rural, non-core counties. While rural areas have an older age distribution than their urban counterparts in general, they have a lower total percentage age 85 and older than metro areas.[4] This is likely due to poorer health, higher mortality rates, and declining life expectancy in many rural places.[9] It may also be due to outmigration of older adults to metropolitan areas as they retire or as their health status and functional needs change.[10] In this study, however, we find pockets of places across the country where a disproportionate share of the population has reached the status of oldest old, and where lessons may be gleaned for how best to support individuals' in aging well as they approach their older years. Those counties with the greatest concentration of the oldest old were primarily rural and appear to have several advantages that support good health and longevity.

These data should be reviewed with consideration for the size of the populations residing in the counties with a higher proportion of the oldest old. The population size of these counties was considerably less than even their non-core counterparts, and several of these counties are among the least populated counties in the U.S., with 10 of them having county populations smaller than 2,000. In particular, when analyzing measures like providers per 100,000 people, it is important to consider the implications for the very few providers responsible for patients within those non-core rural counties with a larger proportion of the oldest old. In places where very few providers serve small populations, there is a particular onus on the provider to be accessible and able to serve people of all ages, including those in the later stages of life.

County-level differences indicated that the rural counties with the highest prevalence of the oldest old fare better on many measures, including socio-economic status, environmental quality, access to primary care, health, and health behaviors. These were measured across the entire population, so indicate better health and more structural supports for people of all ages in these counties. We also found dramatically higher rates of social associations per capita in these places. We cannot tell from these analyses what causes what, and it is very possible that having all of those pieces in place is the reason that people have lived well into older ages. It is also possible that having a preponderance of the oldest old is impacting county-level statistics. (E.g., they may be more likely than their younger counterparts to have time to form or join social associations; and there is likely a selection effect in that the healthiest people are the most likely to live past age 85.) Likely, both mechanisms are true simultaneously.

Regardless of the direction of cause and effect, more research is needed to understand how these counties benefit from having a relatively large population of the oldest old, and how they align their services to support individuals with potential health problems as they age. Furthermore, policymakers should seek to better understand how to replicate the social and health benefits seen in these counties to other places, so that all individuals have the opportunity to live well into older ages. This may include addressing environmental hazards, increasing economic opportunities, fostering social connection and networks, addressing structural racism, and improving access to primary care. Given the growing population of the oldest old, especially in rural places, more policy, programming, and research attention is needed to address the unique needs and build on the established strengths of these places.

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