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Rural Health Network Development Planning Grants: Geographic Distribution and Change over Time

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Key Findings

- In a review of proposals from the HRSA-funded Rural Health Network Development Planning Grant program, 430 funded grant proposals from 2003-2020 were examined to determine geographic distribution.
- Across 47 U.S. states and three U.S. territories in which the grantees were located, Michigan is home to the most (n=28), more than three times than the average of eight grantees per state.
- Of the 10 states to receive the most grants, two are within the top 10 states with the largest share of rural population (Kentucky [n=18] and Arkansas [n=14]).
- Wyoming, Vermont, and West Virginia received some of the fewest grants of any states (two, four, and two grants, respectively), yet have the highest shares of rural population across all states.
- The three states that have not received grants (New Jersey, Connecticut, and Rhode Island) have among the lowest or no share of rural population.

Purpose

The purpose of this policy brief is to examine the geographic distribution of Rural Health Network Development Planning Grant recipients across the United States. The information presented here complements two other policy briefs about this specific grant program; one of these looks at the distribution of grants among majority BIPOC (Black, Indigenous, and People of Color) counties, and the other examines network focus areas for each funded proposal.

Background

Access to basic health services, including primary care, emergency services, and public health services, are essential in preventing disease and promoting physical and mental health, yet are frequently lacking in rural communities.[1] Those who live in rural areas face several challenges in accessing these services in a timely manner due to, among other factors, workforce shortages, facility closures, and inadequate transportation.[1] This, coupled with the fact that residents of rural areas tend to be older and sicker than those living in urban areas, makes identifying strategies to improve access to health care and services especially important.[2,3] Rural health networks, defined as a group of three or more providers or stakeholders, have been identified as one way to strengthen rural health systems and improve the health of rural communities in light of these challenges.[4]

In particular, the Rural Health Network Development Planning Grant ("Network Planning Grant") program supports the activities needed to plan, develop, and form these networks.[5] Located within the Federal Office of Rural Health Policy's (FORHP) Community-Based Division and funded by the federal Health Resources and Services Administration (HRSA), the Network Planning Grant

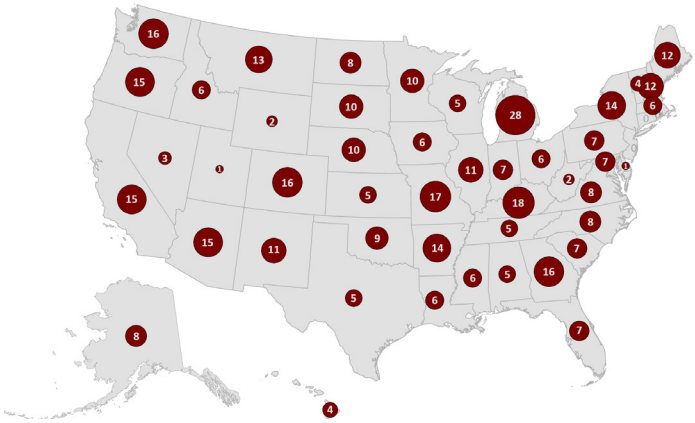
program awards up to $100,000 per grantee for a one-year project period to organizations serving rural underserved communities.[5] Ultimately, the Network Planning Grant program is intended to strengthen rural health care systems by improving access to, coordination of, and the overall quality of basic services.[5]

In this policy brief, we examine the location and network geographic size of applicants funded by the Networking Planning Grant. Understanding where these grants have previously been awarded can help policymakers and program administrators recognize how effectively and broadly they are serving rural communities, as well as illuminate potential funding gaps.

Methods

A team of four researchers examined 430 funded grant applications from 2003-2020. Grant applications from the year 2004 were unavailable for review and therefore not included in this analysis. The researchers first documented the lead applicant, their location by county ("primary county") and state, service area, network members, and focus area and approach. Two researchers then used Microsoft Excel to code and align with the primary county, state, and service area for each grantee. Grantees whose primary county was not located in the service area were noted. One researcher then used county FIPS codes from the U.S. Department of Agriculture to map and analyze the data in Tableau Desktop.[6] Additional 2018 county-level population data was compiled from the Surveillance, Epidemiology, and End Results program to compare the share of states' rural population to distribution of grants.[7] Rural is defined at the county level, with non-metropolitan counties defined as rural.

Figure 1: State Distribution of Network Development Planning Grantees



Note: Not shown are American Samoa, Guam, and the Northern Mariana Islands. Each territory received one grant.

Results

From 2003 to 2020, a total of 430 grants were awarded across 47 states and three U.S. territories, depicted in Figure 1. By far, the most grant awards went to Michigan (n=28), compared to the average of eight grant recipients per state. Worth noting, there was one lead applicant located in Michigan, but the service area was in Texas. In this instance, the lead applicant was a nonprofit that operates Community Health Worker programs around the country. The states with the second and third highest amount of grant recipients were Kentucky (n=18) and Missouri (n=17), respectively.

Figure 2: Total Grantees by Number of Unique States, per Year

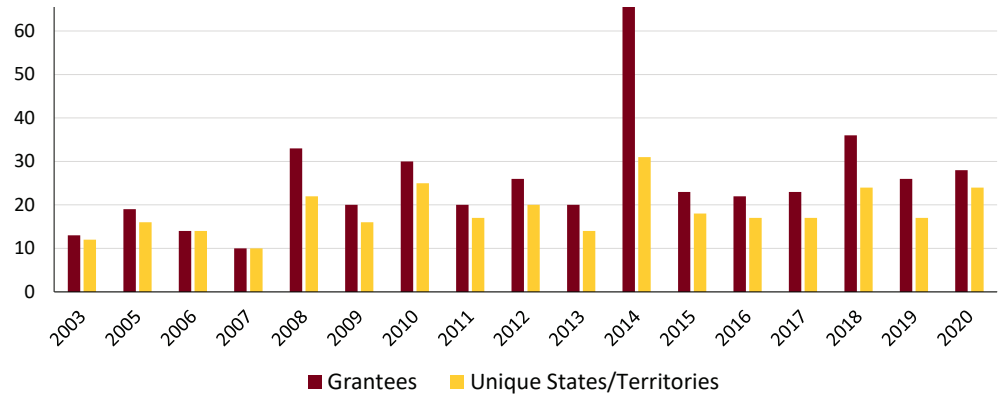


Figure 2 shows that over time, with the exception of 2006 and 2007, there was at least one state that was awarded two or more grants each year. Notably, 67 grants were awarded in 2014, distributed across 31 states or territories.

Additionally, it appears that there is little correlation between the rural share of a state's total population and its likelihood of receiving a grant. Table 1 shows that the 10 states in which the

most grant recipients reside comprise 39.5% of all funded grants. Altogether, these states are home to less than one quarter of the U.S. rural population. However, two of these states, Kentucky and Arkansas, rank in the top 10 of states with the highest share of rural population across the entire U.S. The three states that have not received grants (New Jersey, Connecticut, and Rhode Island) either have one of the lowest or no shares of rural population.

Table 1: States with the most Grantees compared to Rural Population, by State and U.S.

State	Number of Grantees (% of Total)	Rural Population (% of State)	Rural Population (% of Rural U.S.)
Michigan	28 (6.5)	18.0%	3.9%
Kentucky	18 (4.2)	41.1%	4.0%
Missouri	17 (3.9)	24.8%	3.3%
Georgia	16 (3.7)	17.1%	3.9%
Colorado	16 (3.7)	12.6%	1.5%
Washington	16 (3.7)	10.0%	1.6%
Oregon	15 (3.5)	16.1%	1.5%
Arizona	15 (3.5)	4.9%	0.8%
California	15 (3.5)	2.1%	1.8%
Arkansas	14 (3.3)	37.7%	2.5%
Total	170 (39.5)		24.8%

Note: States are listed in order of number of grants received.

In contrast, Table 2 compares the 10 states with the highest shares of rural population to the grants they have received. Wyoming, Vermont, and West Virginia have received some of the fewest grants of any states, yet have the highest shares of rural population. This may indicate an opportunity to conduct targeted outreach in highly rural states in order to ensure that grant opportunities are well publicized. In addition, this may indicate a need

Table 2. States with the Highest Share of Rural Population compared to Grants Received

State	Rural Population (% of State)	Population (% of Rural U.S.)	Number of Grants Received (% of Total)
Wyoming	69.3	0.9	2 (.5)
Vermont	65.0	0.9	4 (.9)
Montana	64.9	1.5	13 (3.0)
Mississippi	53.6	3.5	6 (1.4)
South Dakota	51.6	1.0	10 (2.3)
North Dakota	49.6	0.8	8 (1.9)
Kentucky	41.1	4.0	18 (4.2)
Maine	40.8	1.2	12 (2.8)
Iowa	40.4	2.8	6 (1.4)
West Virginia	38.2	1.5	2 (.5)
Total		18.1	81 (18.9)

Note: States are listed in order of highest percentage of rural residents.

to increase capacity for organizations in highly rural states to identify and respond to grant opportunities, including increased staffing and access to broadband Internet.

At a county level, the lead applicants for awarded grants were located across 296 counties or county-equivalents from years 2003-2020; shown in Figure 3. On average, there were 1.5 grant recipients per county or territory, but the total number of recipients per county ranged from one to six.

The service area of nearly all grant recipients was limited to their own state. However, four percent of grant recipients (n=18) served multiple states, one of which listed the entire U.S. in its service area (see Figure 4). Similarly, the service area for most grantees focused on surrounding rural counties with the average network size consisting of eight counties. A small share of grant recipients (n=13) served their entire state. Of note, 20 of the primary counties were not included in the service area. In these cases, the organization had sites and/or partners located within the network's service area.

Figure 3. County Distribution of Network Development Planning Grantees

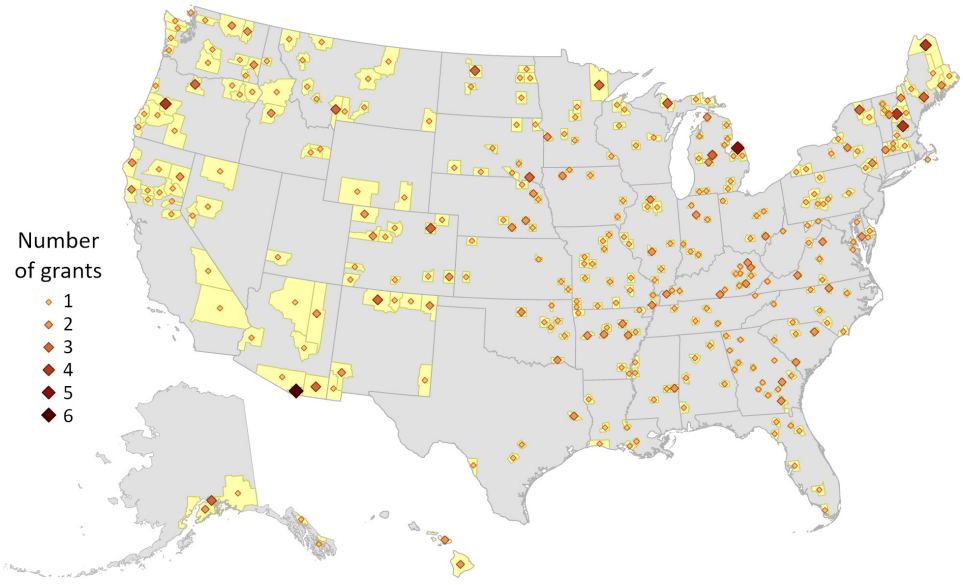
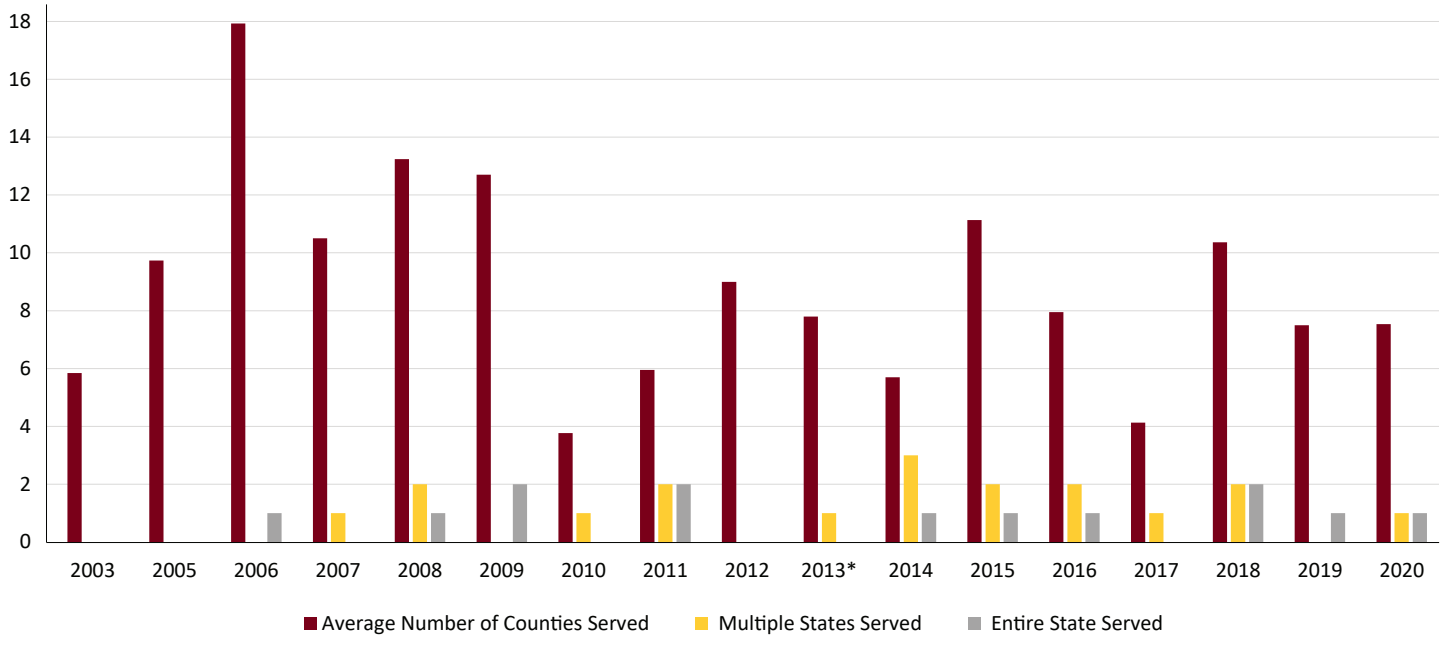


Figure 4. Number of Counties and States in Service Area for Network Planning Grantees



*"Multiple States Served" includes grantees with service areas covering entire rural U.S.

Discussion

From 2003 to 2020, 430 grants were awarded across 47 states and three U.S. territories. All but three states have been home to at least one of these grants over the study period, with variation across states in the number of grants received. The three states that have not received any grants have the lowest shares of rural population. Two of the 10 states that received the most grants also rank among the ten highest shares of rural residents. Yet, the 10 states to receive the most grants amounted to nearly 40% of all grants received, while being home to less than one quarter of all rural residents.

Most grants were focused on multi-county services areas, although there was a very slight decline in service area over the study period (2003-2020). In the majority of years, there were also a few grantees servicing entire states or multi-state areas, with such arrangements becoming slightly more common over time. These results illustrate the importance of collaboration across county and state boundaries, although grantee organizations may require support in facilitating those relationships, especially if they require navigating different policy, public health, and health care environments.

Generally, rural areas receive a disproportionately lower share of grants than urban areas, based on population.[8] Thus, rural-specific grant programs like the one evaluated in this brief meet a critical need. However, it is important to recognize that these distributions may indicate challenges in applying for and receiving grants that are more heavily rural. For instance, rural can be defined as on a continuum and the factors that affect one's access to health care may depend on the definition of rural used.[9] For these reasons, it may be worth considering the degree of applicants' rurality and weighing those that are more rural more heavily. Further, additional work may be needed to bolster the capacity of organizations in highly rural communities and states to identify and apply for grants.

Some states have received a disproportionate share of grants, especially considering the size of their rural population. The 10 states with the highest share of rural residents received less than 20 percent of all grants, indicating a potential for targeted outreach and capacity building in highly rural states. However, grants at the local or county level appear to be more equally distributed. With 430 grants spread across 296 counties, it was relatively rare for counties to receive multiple grants. Furthermore, funded networks focused on a relatively small geographic area (average network size = eight counties). This allows grantees to be able to work collaboratively with others in their community and service area to address their unique health care challenges, as intended by this grant program.[10] These results show that, overall, funding that is intended to address local issues and improve local access to health care has indeed stayed local.

Conclusion

Rural communities face numerous challenges in accessing health care, including among others, facility closures, workforce shortages, and transportation challenges. Additionally, rural health care facilities and organizations are often required to fulfill a wide range of needs and services, serve a large geographic area, and are frequently underfunded.[1] Thus, rural health networks provide an opportunity for health care, public health, and other relevant stakeholders to join together to better serve their communities with efficient use of resources. The Rural Health Network Development Planning Grant program is critical to providing funding and support in the planning and development stages of these networks. From 2003-2020 this grant program has funded 430 networks, in 296 distinct counties, across 47 states and three territories. This program plays an important role in improving access to, coordination of, and quality of health services in underserved rural communities across the country. Further, understanding the distribution of grants across rural communities can illuminate potential funding gaps, as well as efficiently and effectively target efforts for future grant allocation.

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