The Rural Health Workforce

Data and Issues for Policymakers in:
Washington
Wyoming
Alaska
Montana
Idaho

Susan M. Skillman, Davis G. Patterson, Denise M. Lishner, Mark P. Doescher, Meredith A. Fordyce
WWAMI Rural Health Research Center
University of Washington
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INTRODUCTION
This series of policy briefs describes characteristics of the rural health care workforce and factors affecting the delivery of health care in rural areas. The five briefs provide data on the numbers of health care professionals in Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI states) from available data sources, discuss the impacts of using differing definitions of rural, list state-level resources for WWAMI health workforce data, describe the foundations of health workforce assessment, and provide examples of national and regional resources to help ameliorate provider shortages in rural areas. The information included in this series will help guide policymakers and others in their efforts to strengthen the health workforce to better serve rural populations.
What Is Rural in the WWAMI States? Why Definitions Matter

Rural areas differ greatly from one another across the nation in terms of their physical environments, the populations that inhabit them, race/ethnicity, distance to urban areas and services, occupations, demography, culture, economy, and other features.\(^1,2\) Large rural areas that are close to urban centers are markedly different from small, remote rural areas. Using simple definitions of rural that lump together rural areas of differing sizes and levels of remoteness can obscure emerging issues at the local level.

Importantly, rural areas can also vary dramatically in terms of the level of health services offered locally, with larger rural areas having greater access to nearby or local providers and specialists than small and remote rural areas. The failure to distinguish different types of rural areas can have major repercussions when, for example, making government decisions on which rural areas should receive scarce federal and state resources. How one defines rural affects determination of the adequacy of the rural health care workforce in meeting local health needs and demands, and targeting appropriate programs to achieve this goal.

More than 50 million persons in the United States live in areas that are considered rural or non-metropolitan by various definitions.\(^3\) Approximately 20% of the U.S. population resides in rural areas (depending on the definition of “rural” used), and about three fourths of the nation’s counties are rural.\(^4\)

The U.S. population in non-metropolitan areas grew 2.2%, or by 1.1 million residents, between 2000 and 2005.\(^5\) Renewed rural population growth leads to the need for expanded infrastructure and more health care services, further exacerbating the challenges posed by a limited supply of rural providers.

**MANY DEFINITIONS OF “RURAL”**

There are many different definitions of “rural” that are used for policy and research. Which rural definition is best depends on the user’s purpose. While common definitions of rural are needed for decisions such as allocating state and federal resources, no single definition fits all purposes. “Rural,” “Non-metro,” and “Frontier” are all terms resulting from the variety of taxonomies to distinguish urban areas from those areas that are not urban. Table 1 compares characteristics of some of the more commonly used rural definitions.

**Table 1: Comparison of Common Definitions* of “Rural” and Applications**

<table>
<thead>
<tr>
<th>Title</th>
<th>Responsible Agency/Developer</th>
<th>Geographic Units Used</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro/Non-Metro</td>
<td>U.S. Office of Management &amp; Budget (OMB)</td>
<td>County</td>
<td>Counties are assigned as “Metro” (core of 50,000 or more) and “Non-Metro”. Non-Metro is further designated as “Micropolitan” and “Non Core” based on whether the county has an urban cluster of 10,000 or more</td>
</tr>
<tr>
<td>Urban Influence Codes (UICs)</td>
<td>U.S. Economic Research Service (ERS)</td>
<td>County</td>
<td>Metro counties are partitioned into 2 groups based on size of urban population. Non-Metro counties are grouped into 10 categories based on the size of the largest urban cluster in the county and adjacency/non-adjacency to a Metro county</td>
</tr>
<tr>
<td>Urban/Rural</td>
<td>U.S. Census</td>
<td>Census tract</td>
<td>Rural census tracts are those outside of urban clusters with &gt;2,500 population and lying outside of “urbanized areas” and without substantial commuting</td>
</tr>
<tr>
<td>Rural-Urban Commuting Areas (RUCAs)</td>
<td>U.S. Economic Research Service and University of Washington</td>
<td>Census tract, with ZIP-code version</td>
<td>Classifies census tracts based on geography and work commuting flows between places. Based on census tracts, but a version is available at the ZIP-code level</td>
</tr>
</tbody>
</table>

*Additional rural/urban definitions that are not listed above include 1) ERS’s Rural-Urban Continuum Codes, 2) ERS’s economic Typology of Non Metropolitan Counties, and 3) Frontier.
HOW WE DEFINE “RURAL” MATTERS

The U.S. rural population can vary from 10% to 28% of the total population depending on which definitions and categories are used. Because varying definitions of rural are used by the federal government, such as the Office of Management and Budget’s (OMB) county-based definition of Metropolitan/Non-metropolitan (Metro/Non-metro) populations and the Census Bureau’s Census tract-based definitions using rural/urban typologies, they often do not concur on which population groups are rural. The use of incongruent definitions of rural by policymakers and researchers can result in dramatically different conclusions and associated policy decisions.

About one quarter of WWAMI states’ combined populations live in rural areas, whether one uses a county or sub-county definition of “rural.” However, applying different definitions of rural has varying effects in individual states, depending on each state’s population distribution. Comparing state maps that use county-level or sub-county level rural definitions reveals substantial differences in some states (Figures 1 through 5). As shown in Table 2, for a very rural state such as Wyoming, there is little difference when either a county-level or a sub-county level definition is applied to the population. In Washington, by contrast, using a county-level definition classifies more than 80,000 persons as urban compared to the sub-county Rural-Urban Commuting Area (RUCA) definition that would consider them to be rural.

### Table 2: Comparison of 2011 Rural Populations for WWAMI States Using a County Definition vs. a Sub-county Definition (RUCAs) of “Rural”

<table>
<thead>
<tr>
<th>State</th>
<th>County-Level</th>
<th>Rural-Urban Commuting Areas (RUCAs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Rural Residents</td>
<td>Percent Rural</td>
</tr>
<tr>
<td>Washington</td>
<td>828,924</td>
<td>12.2%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>398,489</td>
<td>70.1%</td>
</tr>
<tr>
<td>Alaska</td>
<td>228,457</td>
<td>31.9%</td>
</tr>
<tr>
<td>Montana</td>
<td>643,384</td>
<td>64.6%</td>
</tr>
<tr>
<td>Idaho</td>
<td>536,702</td>
<td>33.8%</td>
</tr>
</tbody>
</table>

Data source: Nielsen/Claritas. 2011 selected population facts data for all ZIP codes nationwide; custom-prepared data CD. San Diego, CA: Claritas; 2011.
What Is Rural in the WWAMI States? Why Definitions Matter

**Figure 1: Washington Areas Designated Rural by County vs. Sub-County Definitions**

Areas Designated Rural by Non-Metropolitan County Status

Areas Designated Rural by RUCAs (Rural-Urban Commuting Areas)

**Figure 2: Montana Areas Designated Rural by County vs. Sub-County Definitions**

Areas Designated Rural by Non-Metropolitan County Status

Areas Designated Rural by RUCAs (Rural-Urban Commuting Areas)

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What Is Rural in the WWAMI States?  Why Definitions Matter

Figure 3: Alaska Areas Designated Rural by County vs. Sub-County Definitions

Areas Designated Rural by Non-Metropolitan County Status

Areas Designated Rural by RUCAs (Rural-Urban Commuting Areas)

Figure 4: Wyoming Areas Designated Rural by County vs. Sub-County Definitions

Areas Designated Rural by Non-Metropolitan County Status

Areas Designated Rural by RUCAs (Rural-Urban Commuting Areas)

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Figure 5: Idaho Areas Designated Rural by County vs. Sub-County Definitions

Table 3: Resources for Definitions of “Rural”

<table>
<thead>
<tr>
<th>Rural Definition Type:</th>
<th>Website for more information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>USDA - Rural-Urban Continuum Codes (RUCCs)</td>
<td><a href="http://www.ers.usda.gov/Briefing/Rurality/RuralUrbCon/">http://www.ers.usda.gov/Briefing/Rurality/RuralUrbCon/</a></td>
</tr>
<tr>
<td>USDA - Urban Influence Codes (UICs)</td>
<td><a href="http://www.ers.usda.gov/Briefing/Rurality/UrbanInf/">http://www.ers.usda.gov/Briefing/Rurality/UrbanInf/</a></td>
</tr>
<tr>
<td>US Census - Rural vs. Urbanized Census Tracts</td>
<td><a href="http://www.census.gov/geo/www/ua/ua_2k.html">http://www.census.gov/geo/www/ua/ua_2k.html</a></td>
</tr>
<tr>
<td>Rural-Urban Commuting Areas (RUCAs)</td>
<td><a href="http://www.ers.usda.gov/briefing/Rurality/RuralUrbanCommutingAreas/">http://www.ers.usda.gov/briefing/Rurality/RuralUrbanCommutingAreas/</a></td>
</tr>
<tr>
<td>census tract version</td>
<td></td>
</tr>
<tr>
<td>Rural-Urban Commuting Areas (RUCAs)</td>
<td></td>
</tr>
<tr>
<td>ZIP code version</td>
<td><a href="http://depts.washington.edu/uwruca/approx.html">http://depts.washington.edu/uwruca/approx.html</a></td>
</tr>
</tbody>
</table>

POLICY IMPLICATIONS

The consequences of basing policy on one definition of “rural” or another will have quite different impacts at the local level. Rural health policymakers thus need to consider which definition of “rural” is most appropriate for the legislative, programmatic, or other purpose being addressed. Table 3 provides a list of resources for understanding the technical and practical implications of rural definitions.
LITERATURE CITED


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