Defining “rural” for the physician workforce

Issue:

The AMA is committed to improving health in rural areas, and in medical education, one major strategy toward this goal is training physicians to serve rural communities. A current challenge in meeting this goal is that definitions of rural can be variable and ambiguous. This issue brief raises awareness about how rural communities are defined in the United States—an important first step to offering solutions to rural health needs via improved medical education.

Background:

Historian Steven Conn, PhD, notes that concepts of rurality in the United States often evoke affect-based understandings rather than concrete definitions, and these senses and occasionally stereotypes of what “feels” rural or remote are not necessarily aligned to empirical data. Definitions used to gather data are also not necessarily consistent or easily constructed. Despite variations in definitions, there is robust evidence of health inequities in rural communities, and therefore, attention to these issues is necessary. Appropriate methods for determining rurality depend upon the desired focus areas and outcomes, and even small changes to how rural is defined may have a large impact on services and funding to many individuals.

Examples of varying sources used to designate rurality include, but are not limited to, the following:

- The **U.S. Census Bureau** does not define rural but considers any area that is not urban to be rural. Factors for designating urban core areas include 2,000+ housing units and/or 5,000+ population, alongside several other factors as of updates in 2020.
- The **Office of Management and Budget (OMB)** defines counties as metropolitan (50,000+ people), micropolitan (10,000-49,999 people), or neither. The latter two tend to be considered rural, and OMB may undercount rurality. OMB emphasizes that distinguishing urban versus rural is not the intended purpose of their data and may lead to confusion: “Counties included in metropolitan and micropolitan statistical areas may contain both urban and rural territory and population.”
- The **Centers for Medicare and Medicaid Services (CMS)** have used OMB designations for past rural health research, though multiple definitions of rurality have been applied to Medicare. For instance, hospitals are designated as rural when they are outside of a Metropolitan Statistical Area (MSA) or New England County Metropolitan Area (NECMA), but certain counties are excepted and deemed urban, while some hospitals have been reclassified as rural based on other criteria.
- The **National Center for Health Statistics (NCHS)** Urban-Rural Classification Scheme for Counties is another model based on OMB data paired with Census data and was designed specifically for studying health differences, such as by differentiating between residents of inner cities versus suburbs of large metropolitan areas.
- The **U.S. Department of Agriculture Economic Research Service (USDA ERS)** and the **Health Resources and Services Administration (HRSA)** use Rural-Urban Commuting Area Codes (RUCA), which delineate metropolitan, micropolitan, small town, or rural areas based on size and direction of

their largest commuting flows. However, HRSA modifies definitions of rural for larger census tracts, since "codes do not factor in distance to services and low numbers of people." The **Federal Office of Rural Health Policy (FORHP)** aligns with HRSA in these modifications.
- **Other data options** housed within USDA ERS include codes such as Rural-Urban Continuum Codes (RUCC), designed to "view county-level data by finer residential groups—beyond metro and nonmetro—when analyzing trends related to population density and metro influence," and "far and remote" area codes (FAR) which describe "territory characterized by some combination of low population size and high geographic remoteness."

Examples of how rurality is defined within medical education include, but are not limited to, the following:

- The **Accreditation Council for Graduate Medical Education (ACGME)** uses CMS guidelines when determining "Rural Track" program designation.
- The **Rural Training Track (RTT) Collaborative** emphasizes the importance of defining rurality not just for accreditation or funding, but to prepare a quality rural physician workforce, and proposes designating rural as "a nonmetropolitan county or any census tract or zip code identified as rural by any 2 federally accepted definitions."
- **Medical education researchers** vary on what designations are used. For instance, Shipman et al. (2019) studied the decline in rural medical students and used RUCC in conjunction with applicants' birth and high school graduation counties to determine this designation. Russell et al. (2022) used RUCA instead, to explore GME rural training exposure. Arredondo et al. (2023) did not seek to reconcile rural definitions across a review of programs and incentives to overcome physician shortages and instead focused on geographically designated Health Professional Shortage Areas (HPSAs).

There are many other possible definitions. When one definition of rural does not entirely overlap with other definitions, challenges may occur—for instance, due to lack of eligibility for necessary resources or alternatively by classifying well-resourced suburban areas as rural. Even if certain areas are consistently defined as rural by all designation systems, rurality is still not a monolith, and each community must still be understood in its own context.

In the context of medical education and physician workforce, workforce challenges specific to rural areas include insufficient patient density required to sustain access to basic medical services—such as primary care practices, emergency departments, and obstetric services including labor and delivery—in the community under the current system. There is also a lack of availability of local professional and peer support for physicians practicing in the area.

Potential Strategies:

- Raise awareness about the complex, varying nature of how rurality is defined or designated.
- Customize rural designations to be appropriate to the goals of any given program or population, staying attentive to the multifaceted nature of rural communities.
- Consider rural specific physician workforce challenges, such as practice sustainability and physician professional support, when defining rurality within medical education.
- Where appropriate, utilize data on Medically Underserved Areas (MUAs) and Health Professional Shortage Areas (HPSAs) to supplement work in rural health.

Moving Forward:

The AMA has policies that address rural health within medical education and sensitivity to definitions of rurality. For example, the AMA:

- encourages medical schools and residency programs to develop educationally sound rural clinical preceptorships and rotations consistent with educational and training requirements and to provide early and continuing exposure to those programs for medical students and residents (H-465.988)
- encourages medical schools to develop educationally sound primary care residencies in smaller communities with the goal of educating and recruiting more rural physicians (H-465.988)
- encourages state and county medical societies to support state legislative efforts toward developing scholarship and loan programs for future rural physicians (H-465.988)
- encourages state and county medical societies and local medical schools to develop outreach and recruitment programs in rural counties to attract promising high school and college students to medicine and the other health professions (H-465.988)
- opposes any changes to rural referral center designations that may adversely affect the access to or quality of medical services provided by rural referral centers (H-465.996)
- strongly encourages CMS and appropriate state departments of health to review the Rural Health Clinic Program eligibility and certification requirements to ensure that independent (e.g., physician) and provider-based (e.g., hospital) facilities are certified as Rural Health Clinics only in those areas that truly do not have appropriate access to physician services (H-465.984)
- advocates for the availability of accessible, affordable, high-quality continuing medical education for small rural and community hospitals (H-300.983)

AMA Resources:

- Council on Medical Education Report 3-I-18, Developing Physician-Led Public Health/Population Health Capacity in Rural Communities
- Council on Medical Education Report 3-N-21, Rural Health Physician Workforce Disparities
- Council on Medical Education
- AMA Rural Population Care
- Policy Finder
- Health Care Advocacy
- Center for Health Equity