Definition of Frontier

Frontier America consists of sparsely populated areas that are geographically isolated from population centers and services.

Definitions of frontier for specific state and federal programs vary depending on the purpose of the project being funded. Some of the variables that may be considered in classifying an area as frontier include population density, distance from a population center or specific service, travel time to reach a population center or service, functional association with other places, service or market area, availability of paved roads, travel inhibiting weather, and seasonal changes in access to services. These conditions may cause significant problems in access to health services, create poor economic opportunities and other conditions causing health and social disparities. In order to meet the health and economic goals of the country, Frontier areas require specific recognition.

Frontier has been defined at the county level, by ZIP code and/or ZIP Code Tabulation Areas (ZCTAs), by census tract or by other federal or state-based criteria such as the Medical Service Study Area (MSSA) with population densities equal to or less than 11 persons per square mile, used in California. Frontier, like rural, suburban, or urban, is a term intended to categorize a portion of the population continuum. Frontier refers to the most remote end of that continuum (in some states the wilderness designation is considered most remote). For the purpose of defining frontier for state and federal programs, the National Rural Health Association recommends that a variety of methodologies be available from which to choose. This will ensure that a program selects the most appropriate designation to suit its purpose, while reducing the likelihood that a program be forced into a definition that does not fit. The following methodologies or designations are indicative of the diversity of frontier definitions employed at the federal level.

Frontier and Remote (FAR) Methodology

The FAR methodology was developed by the United States Department of Agriculture Economic Research Service (ERS) in partnership with the Federal Office of Rural Health Policy to provide geographically detailed and adjustable delineations to describe conditions in sparsely settled and remote areas. Based on data from the 2010 decennial census, the frontier and remote area (FAR) codes provide four definition levels ranging from one that is relatively inclusive (12.2 million FAR Level One residents) to one that is more restrictive (2.3 million FAR Level Four residents). The four levels are based on distance/travel time between rural areas and the edge of urbanized areas. The methodology used in FAR captures the degree of remoteness experienced at higher or lower population levels that affect access to different types of goods and services. FAR areas can be defined at various geographical designations, down to .5 kilometer square grid level. Grids can be aggregated, based on the FAR formula, at a multi-grid levels, including Census...
Tracts, ZIP Codes, ZCTAs and counties. The FAR methodology was released publically by ERS in 2014.

The Affordable Care Act (ACA)

The ACA is the first major policy document that recognizes “frontier” places for special population considerations. It includes eight specific frontier provisions, including a definition related to Health Professional Shortage Areas (Frontier HPSAs) and certain payment considerations under Medicare for “frontier state” providers (limited to MT, NV, ND, SD, WY with special provisions for AK). There are other aspects of ACA that pay little or no attention to the frontier and the obstacles that might present themselves for distribution of resources such as coverage or enrollment strategies, Patient Centered Medical Home certification, establishment of Accountable Care Organizations and meaningful use provisions. How Medicaid, State Exchanges or many federally funded grant making programs will impact “frontier” communities remains to be seen. Frontier considerations are necessary in order to avoid even greater disparities in resource distribution or access to services in the frontier settings.

The eight frontier provisions within ACA address the following areas: Medicare beneficiary access to services; data collection for minority groups including underserved rural and frontier populations; designation of a “frontier health professional shortage area”; representation on the National Health Care Workforce Commission; three specific protections for frontier states including floors on area wage index for frontier hospitals, wage adjustment factors for outpatient department services and a practice expense index for physician services; and a public health surveillance system grant requiring no less than 20 percent of funds be made available to rural and frontier areas. Details regarding the specific sections and pages of the ACA referencing these provisions can be found on-line at Frontier in the ACA.

In addition, key ACA provisions impacting American Indians, many who reside in frontier areas, include: the permanent reauthorization of the Indian Health Care Improvement Act; exemption from penalties for members of tribes who do not enroll in insurance; the ability to enroll in insurance at any time and change enrollment status once per month; the expansion of Indian Health Service (IHS) authorities, including behavioral health; and qualifying IHS facilities for the National Health Service Corps program.

Center for Medicaid/Medicare Services (CMS) “Super Rural”

CMS provides for a payment provision whereby the payment amount for the ground ambulance base rate was increased when the ambulance transport originated in a rural area comprising the lowest 25th percentile of all rural populations arrayed by population density. This increased payment is unofficially known as the “super rural bonus” and is equal to 22.6%. Section 203 of the Medicare Access and CHIP Reauthorization Act (MACRA) of 2015 extends the provision, however its authorization will expire on December 31, 2017. CMS identifies rural ZIP codes
with the lowest population density as Super Rural. CMS selects the bottom quartile of rural Zip Codes for this designation. Payment bonuses are contingent on this designation. The super rural bonus applies to ground ambulance services under Section 414 of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003, ACA Sections 3105(c) and 10311(c), MMEA Section 106(c), TPTCCA Section 306(c), and Section 3007 of the Job Creation Act.

**Telehealth Designation**

In 2006, with funding from the Health Resources and Services Administration’s Office for the Advancement of Telehealth, an expert panel developed a new frontier area definition applied to telehealth programs. The recommended frontier area definition from the panel is: “ZIP code areas whose calculated population centers are more than 60 minutes or 60 miles along the fastest paved road trip to a short-term non-federal general hospital of 75 beds or more, and are not part of a large rural town with a concentration of over 20,000 population.” Importantly, this designation contained a process for reconsideration; The chief executive of a state, in consultation with the state Office of Rural Health and other relevant agencies, or the highest elected official of a federally-recognized tribe should be provided the opportunity to recommend additions or deletions of designated frontier areas if they find that these areas should have been either included or excluded initially from the list of designated frontier areas as a result of inaccuracies in the analyses that produced the original list (e.g., mistakes in mapping programs, calculation of mileage or travel-time). Local, state or tribal exceptions to federal definitions of Frontier is an important concept considering the unique nature and conditions of fragile frontier populations which national standards may not often recognize.

**Frontier Extended Stay Clinic**

In 2005, with funding from the Federal Office of Rural Health Policy at the Department of Health and Human Services, the FESC program was created. Eligible facilities are defined as clinics located greater than 75 miles from a critical access hospital or hospital, or inaccessible via public road.

**Rural-Urban Commuting Areas (RUCA)**

RUCAs can be used to identify very remote areas, which could be considered frontier-like due to their isolation from population centers. Under the RUCA definition, areas are categorized based on measures of urbanization, population density, and daily work commuting. For instance, a RUCA code of “10” is assigned to isolated, small rural census tracts that may be considered frontier. RUCAs are available by census tract and by ZIP code area. RUCA Version 2 uses 2000 Census data and 2004 ZIP code areas. RUCAs were first introduced in a 1999 article by Richard Morrill, John Cromartie, and Gary Hart - “Metropolitan, Urban, and Rural Commuting Areas: Toward a Better Depiction of the United States Settlement System.” Urban Geography 20: 727-748.
National Center for Frontier Communities - Composite Designation of Frontier Counties

Frontier is unique among the various designations. The National Center for Frontier Communities understands the extreme variability among frontier communities and for this reason, the application of a matrix of Frontier communities done in partnership with states and/or frontier communities.

The National Center for Frontier Communities, in collaboration with the NRHA in 1997, brought together a multidisciplinary group of experts as a consensus group that developed a three-variable frontier matrix for determining frontier status. This methodology was based on population density, distance to the closest “market” for services, and travel time. The consensus group created a typology in which density of counties was coded <12, 12-16, 16-20 persons per square mile. Distance to a service/market was coded >90, 60-90, 30-60, <30 miles. Travel time to service/market was coded >90, 60-90, 30-60 and <30 minutes. The final version of this definition was developed to be inclusive of extremes of distance, isolation, and population density. The definition also reflected an underlying concern that the real frontier dilemma is how to create or maintain even a fragile infrastructure in a frontier community.

Bureau of Primary Health Care (BPHC) Criterion

In 1986, the predecessor to the Bureau of Primary Health Care established as policy a frontier service area definition. Still in use today a Frontier is identified as any service area with a population density less than or equal to six persons per square mile. The 1986 legislation also included the condition that in order for community health centers to receive a frontier preference in funding, they should also be located at considerable distance (greater than 60 minutes travel time) to a medical facility large enough to be able to perform a caesarian section delivery or handle a patient having a cardiac arrest. These additional criteria were dropped in later years, and health center programs began to define frontier services area with only the single criterion of population density less than six persons per square mile.

Conclusion

This list is intended to be indicative rather than exclusive. A variety of methodologies for describing frontier exists. The NRHA Rural Health Congress supports state and federal programs to select the most appropriate methodology to achieve their program goals rather than being constrained to any single methodology. Furthermore, it is recommended that a reconsideration process for determining legitimate exceptions to any particular Frontier definition be considered for applicable policy, funding or program purposes.

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