

SECTION ONE

RURAL FACTS AND HEALTH IMPLICATIONS

Initial statement - The Iowa Rural and Agricultural Health and Safety Plan (RAHSRP) focuses on the rural areas of Iowa. This section examines population data and geographic factors that influence health care and medical services. Depending on the federal source, the definition of rural is different when examining policy matters, or population, or culture, or land area. Due to this, areas determined rural for one reason are not necessarily rural for another. It can be revealing to understand how the definitions of rural result in designations that affect communities and the health of residents.

RURAL DEFINITIONS

What is Rural? - There are many definitions of ‘rural’ used within the context of health care programs and policies. Thus, any assessment of rural health should begin by defining what is meant by ‘rural.’ The two most common definitions are from: 1) the **Census Bureau’s** census tract based definition, and 2) the **Office of Management and Budget’s** (OMB) county-based definition.

According to official **U.S. Census Bureau** definitions, rural areas comprise open country and settlements with fewer than 2,500 residents. Urban areas comprise larger places and densely settled areas around them. Approximately 50 million Americans live in nonmetropolitan (nonmetro) areas. The nonmetro classification covers 2,000 counties outside the primary daily commuting range of urbanized areas with 50,000 or more people ³.

The U.S. Office of Management and Budget (OMB)—*not the Census Bureau*— demographics and designations are for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics.

Metropolitan, micropolitan and noncore statistical areas are geographic areas defined as:

- Metropolitan areas contains a core urban area of 50,000 or more population
- Micropolitan areas contains an urban core of at least 10,000 (but less than 50,000) population
- Noncore are all other areas

According to the OMB, **in Iowa** there are 20 counties that are part of metropolitan areas, 17 counties that are part of micropolitan areas and the remaining 62 counties are considered “noncore” counties.

Based on US Census and OMB definitions, Iowa is experiencing a reduction of geographically designated rural areas.

According to the recent U.S. Census Iowa's population is approximately 43 percent rural.

Source: USDA Economic Research Service <http://www.ers.usda.gov/StateFacts/>

| Iowa Population: | Rural * | Urban * | Total |
|-------------------------|-----------|-----------|-----------|
| Year | | | |
| 1980 | 1,485,545 | 1,428,263 | 2,913,808 |
| 1990 | 1,354,928 | 1,421,827 | 2,776,755 |
| 2000 | 1,362,732 | 1,563,592 | 2,926,324 |
| 2009 (latest estimates) | 1,301,129 | 1,706,727 | 3,007,856 |

Changing Rural Demographics

Suburbanization continues to extend the economic influence of large cities and to blur urban and rural landscapes along their periphery. An interesting rural health caveat in county demographics is the sudden growth of suburban areas. An example of suburbanization in Iowa is Dallas County. Between 2000 and 2010 Dallas County had a population change of 62.3 percent from rural to urban. The eastern section of Dallas County is well developed with businesses and high value homes. However for residents in the western portion of the county life is much the same as it was in 1990 including access to local health care. Thus, it is important to acknowledge that some Iowa counties, whether metropolitan or nonmetropolitan, contain a combination of urban and rural populations.

Dallas County Courthouse, 1902, Adel Iowa
Photo by Calvin Beale posted at ERS/USDA website



Lost rural population

Population wise 43.3 percent of the Iowa is rural with 20 percent of the rural population involved in production agriculture. In Iowa there are 92,856 farms (3rd in the USA). Seventy seven Iowa counties lost population between 2000 and 2009 ⁴. So-- while the number of counties geographically designated rural shrinks, also the number of persons living in rural areas is decreasing. There are several reasons for the decreasing population including the economy (lack of jobs), and lack of suitable housing.

States can further define population by density. Population density is number of person per square mile. As Iowa counties loose population it is possible, a few sparsely populated counties could be become classified as a frontier with a population density of 6 or fewer residents per square mile.

| Iowa Population Density Estimates 9/2010 | | | | |
|--|-------|--|---------------------|-----------------------|
| Population Density Peer Group | Count | Peer Group Definitions (Per Square mile) | Population Estimate | Percent of Population |
| Urban | 7 | 150 or more persons | 1,236,534 | 41.14% |
| Semi-Urban | 19 | 40-149 persons | 811,614 | 27% |
| Dense Rural | 48 | 20-39 persons | 748,053 | 24.89% |
| Rural | 25 | 6-19 persons | 209,270 | 6.96% |
| All Iowa Counties | 99 | State Average: 53.8 persons | 3,005,471 | 100% |

Use of geographic and population data

The U.S. Census demographics and population data are utilized by the federal government to determine funding to states and counties. Census data is also used for research. OMB data is primarily used for policy purposes. *What does all this mean to rural health?* To be eligible for

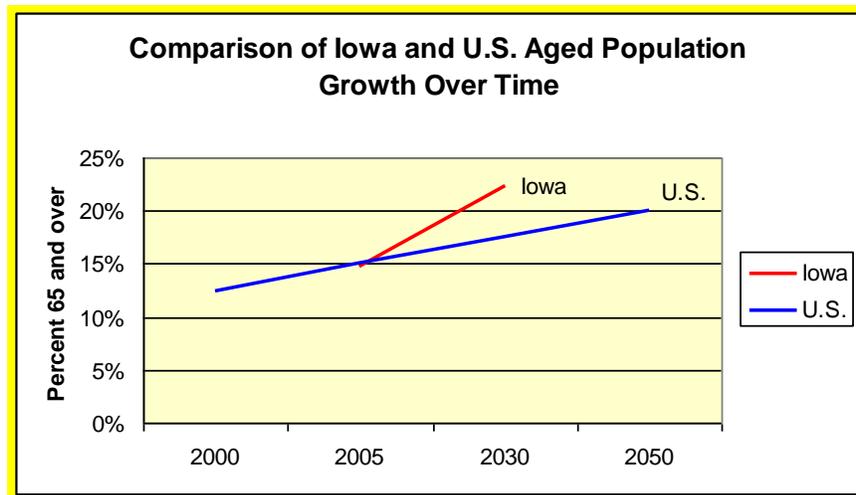
several rural federal health programs and funding opportunities, a health entity or an individual must reside or be located in an underserved, low income, rural area. Thus as counties are re-designated from rural to metro, there may be a loss of funds and resources

Examples of Iowa Rural Demographics (4)

Population characteristics such as age, occupation, gender, health status, and income level can determine factors which influence morbidity and mortality. These characteristics when factored in with lack of access to medical care contribute to health disparities in rural communities. Iowa's racial makeup is less diverse than the Nation. Iowa's largest minority group is the Hispanic population. Iowa's second largest minority group is the black population, which includes persons whose race was black alone or black in combination with any other race. Non-Hispanic white residents represent the majority population group in Iowa. Hispanic workforce is a major contributor to farm and agricultural related industries⁵.

Age - Iowa's population is among the oldest in the nation. In 2005, 14.7 percent of Iowans were age 65 and over. In 2009, 17 percent of those age 65 and over lived in rural counties. It is projected that persons age 65+ living in rural areas will grow to 22.4 percent of the state's total population by the year 2030.⁶ (See Table 1.) **Iowa's percentage increase in population age 65 and over will happen two decades faster than the rest of the nation⁶.**

Table 1



Source: The Future of Iowa's Health and Long-Term Care Workforce 2007

Income – Per capita income and earnings per job are often indicators of ability to acquire health insurance, access medical care, and participate in safety and disease prevention interventions. In Iowa per capita income and earnings are lower for rural than urban populations. Fortunately Iowa does not have high-poverty levels (20 percent of population) experienced in the southern regions of the nation. However, we do have counties that have persistent high poverty compared to the state rate which is 11.28 percent.

| Iowa Income Facts | | | |
|----------------------------------|----------------|----------------|--------------|
| | Rural * | Urban * | Total |
| Per-capita income (2008 dollars) | | | |
| 2007 | 33,179 | 37,782 | 35,755 |
| 2008 | 35,595 | 38,991 | 37,509 |
| Percent change | 3.3 | -0.6 | 1 |
| Earnings per job (2008 dollars) | | | |
| 2007 | 36,907 | 41,771 | 41,771 |
| 2008 | 37,708 | 41,850 | 41,850 |
| Percent change | 2.2 | 0.2 | 0.2 |

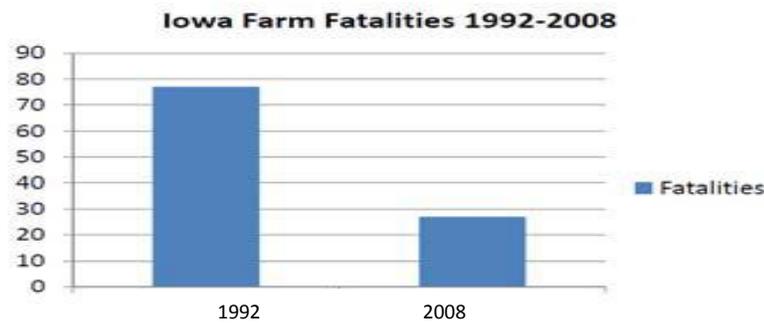
Source USDA Economic Research Service <http://www.ers.usda.gov/StateFacts/>

Health Status - Obesity and Overweight – The Iowans Fit for Life program released a notice of “Obesity in Iowa: A Statewide Epidemic”. According to data in 2006, 1.4 million Iowans were overweight or obese. The number of Iowa adults (≥ 18 years of age) who are overweight or obese has increased by 36 percent over the last ten years. The national median prevalence rate is 32 percent. Obesity and overweight is one of Centers for Disease Control and Prevention (CDC) 10 health indicators. Obesity is costly. It reduces productivity and increases risk for chronic disease and death, and it drives up medical expenses⁷. A comprehensive review of several studies that examine nutrition, physical activity and activity in rural area found rural residents generally fare worse than their urban counterparts in regards to obesity, which is the opposite of the situation that existed prior to 1980⁸.

Work Injury and Death – Agriculture is one of the most hazardous industries in the United States, with 2008 rate of 30.4 deaths per 100,000 workers⁹. That compares to a rate of 3.7 deaths per 100,000 workers in all industries. **In Iowa** over the past 5 years, an average of 87 workers died each year due to work-related injuries. Roughly 30 percent of those work-related deaths were related to agriculture, accounting for 27 of 90 deaths in 2008 and 24 of 89 deaths

in 2007. Iowa has seen a noticeable decrease in farm related fatalities. However, it still has higher rates than the other states in our mid-west region.

Fatalities on Iowa Farms (Current U.S. Agricultural Fatality Rates = 28/100,000)



1992 - 96,543 (77 fatalities, or 1 fatality per 1,254 farms)
2008 - 92,600 (27 fatalities, or 1 fatality per 3,430 farms)
Source: Iowa's Center for Agricultural Safety and Health
June 2010

Summary

Several demographic trends are reshaping economic and social conditions across nonmetro/rural counties. The trends serve as key indicators of rural health, and as generators of growth and economic expansion. The definition for rural depends on the topic and the issue it is related to, and the definition source. Geographic and census data are a tool to determine policy and funding. Although the word rural is commonly substituted for nonmetro in speech and writing, it is becoming increasingly misleading especially as related to health matters.

Comment

Residents living in non-metro areas and on farms and in the rural areas of metropolitan statistical areas have distinct health and safety needs related to their environment, vocation, culture and economic status. Decreased access to local medical care, preventive health services and rapid EMS transport are impeding factors to health and quality of life. Communities and residents of these rural areas will best benefit from policy, funding and health programs that recognize their unique status. Additionally, rural residents are in need of science-based interventions for solutions to increase their health and safety.

GEOGRAPHIC DESIGNATIONS

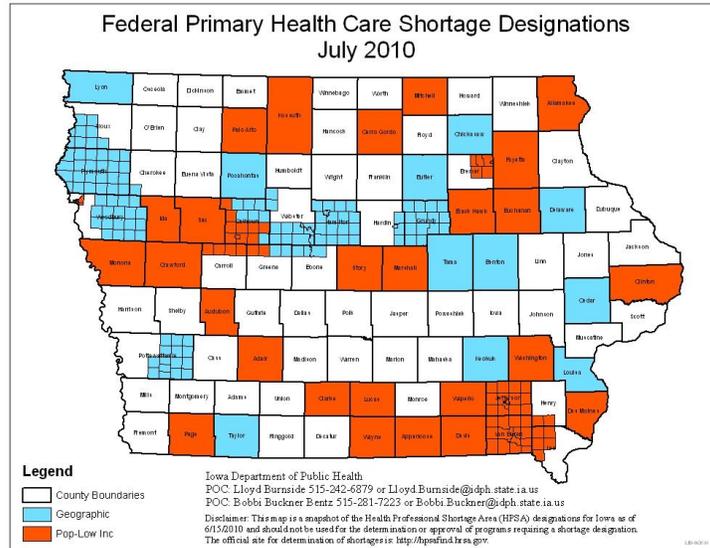
Initial Statement – This important section covers federal and state processes as they relate to designations that target resources to areas of need.

In addition to population data from the U.S. Census Bureau and the Office of Management and Budget, the Health Resources and Services Administration (HRSA) is responsible for ***a process to designate areas as having a shortage of health care professionals. This designation allows areas to be eligible for several federal programs tied to enhanced reimbursements, funding and loan repayment, among others.*** . The HRSA Shortage Designation Branch (SDB) develops shortage designation criteria and uses them to decide whether or not a geographic area, population group or facility is a Health Professional Shortage Area (HPSA), or Medically Underserved Area (MUA) or Population (MUP). HPSAs may be designated as having a shortage of: 1) primary medical care, 2) dental or, 3) mental health providers. The Health Professional Shortage Area (HPSA) designation is one factor used to determine eligibility for a number of programs that improve access to health care, such as the National Health Service Corps, Loan Repayment Program, and Conrad State 30 Program. Medicare also makes bonus payments to primary medical care physicians and psychiatrists working in certain types of HPSAs.

In Iowa the Primary Care Office (PCO) within the Iowa Department of Public is responsible for analyzing areas of the state for HPSA eligibility. Areas may be urban or rural, population groups or medical or other public facilities. If the area meets the designation criteria, the PCO submits a request to HRSA SDB to designate the area as a HPSA. The PCO is required to re-analyze that HPSA every four years. The two other types of shortage designations are Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs). These designations are maintained into perpetuity unless the PCO re-analyzes the area and requests de-designation.

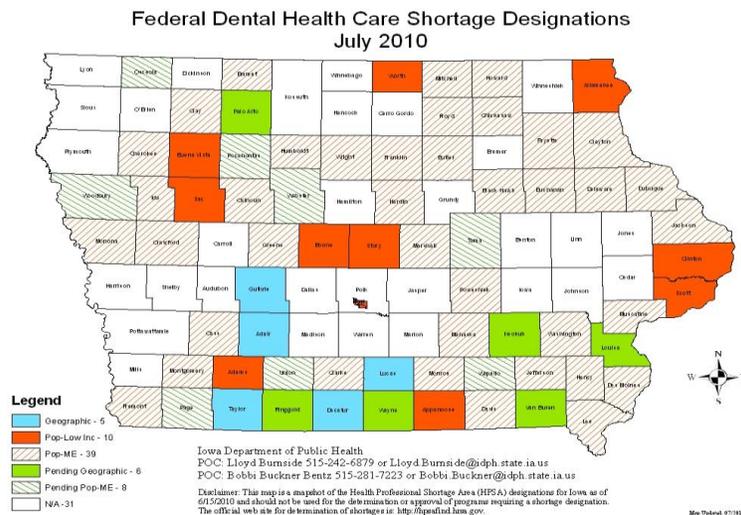
Primary Care Health Professional Shortage Areas

Iowa's primary care HPSAs consist of whole-county designations, groupings of townships or census tracts within a singular county, and groupings of townships or census tracts across counties. Currently, 54 counties in Iowa are fully or partially designated as primary care HPSAs. The PCO has a contract with the University of Iowa Office Statewide Clinical Educations Programs (OSCEP) which supplies reliable data on numbers and practice locations for primary care physician. Iowa primary care HPSA designations are as of July, 2010.

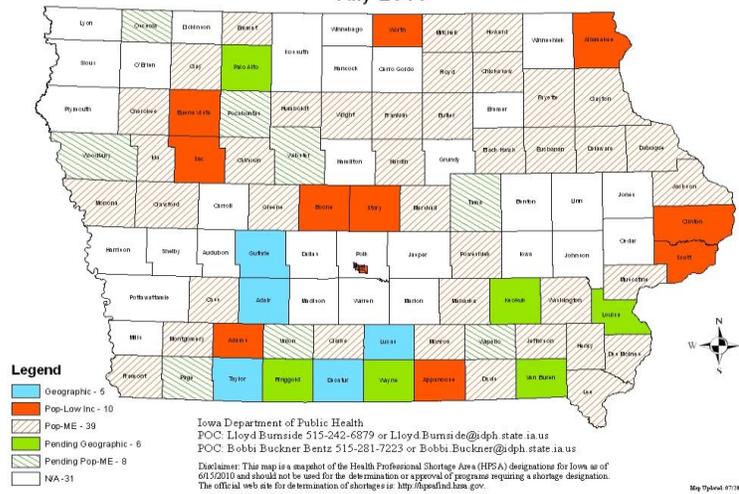


Dental Health Professional Shortage Areas

Iowa's dental health HPSAs, are all whole-county HPSAs except for one small HPSA in the Des Moines metropolitan area that is only a portion of Polk County. Currently, 62 counties in Iowa are entirely or partially designated as a dental HPSA. Once an area is designated as a dental health care HPSA, the PCO is required to reanalyze that area every four years. Iowa dental HPSA designations are as of July, 2010.



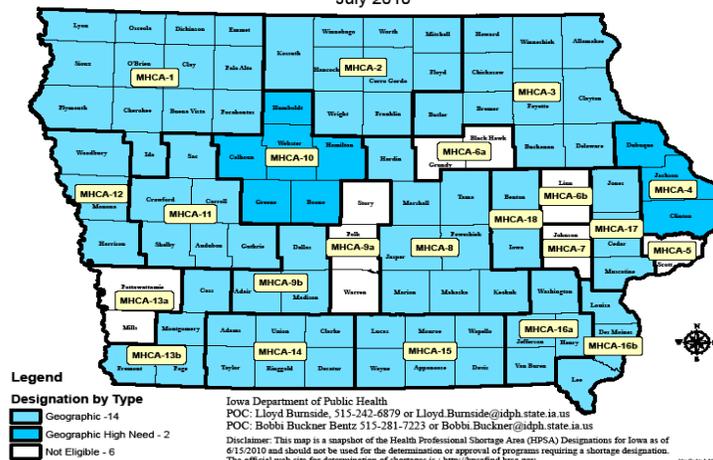
Federal Dental Health Care Shortage Designations July 2010



Mental Health HPSAs

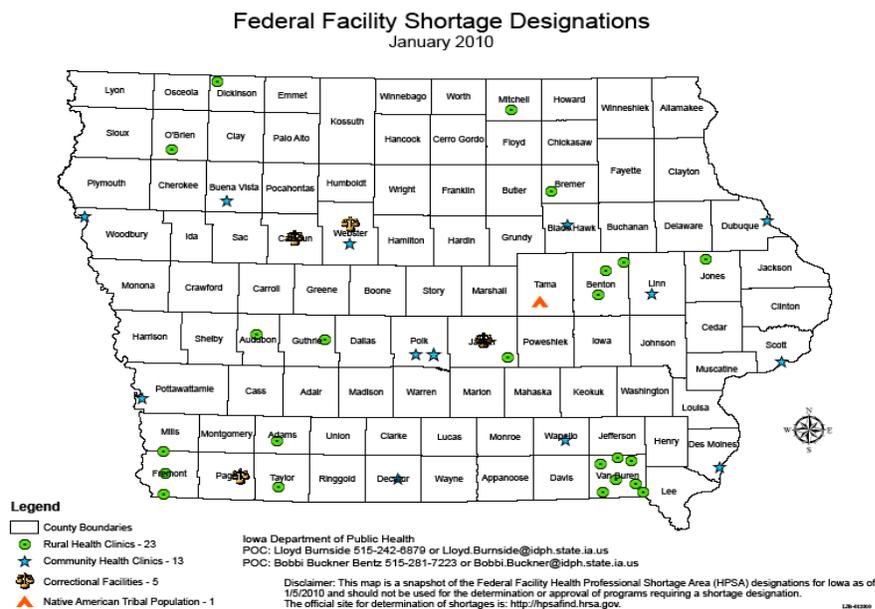
Iowa’s mental health HPSAs are comprised of groupings of counties referred to as “mental health catchment areas”. Currently, all but 9 counties in Iowa are designated as mental health HPSAs. The PCO submits a request to HRSA to designate an area as a mental health HPSA when a catchment area has a population-to-psychiatrist ratio greater than 30,000 residents to 1 psychiatrist. If the area has high needs, defined by having high poverty OR high youth ratio OR high elderly ratio OR high substance abuse prevalence, then the area may qualify at a 20:000:1 ratio. Once an area is designated as a mental health care HPSA, the PCO is required to reanalyze that area every four years. Iowa mental health care HPSA designations are as of July, 2010.

Federal Mental Health Care Shortage Designations July 2010



Facility HPSAs and Automatic HPSAs

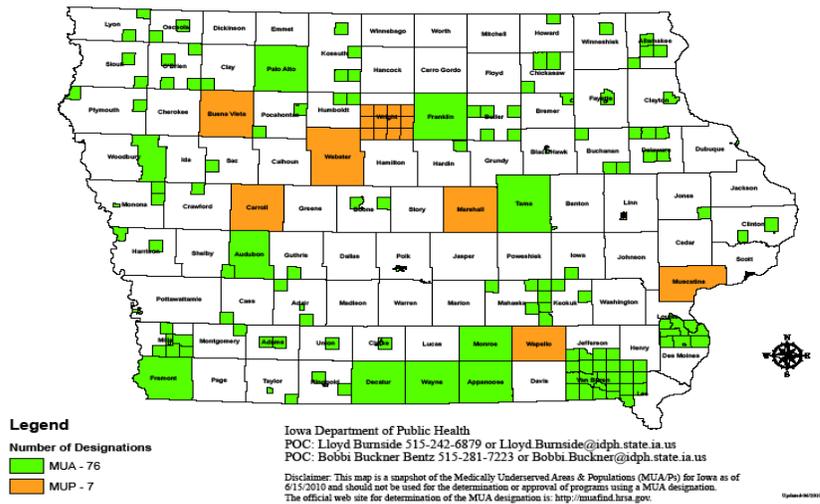
The PCO can analyze specific facilities for shortage designations. These include federal and state correctional institutions, some public or non-profit private facilities, and state and county mental hospitals. Additionally, HRSA has provisions to provide Federally Qualified Health Centers (FQHC) and certified Rural Health Clinics with “automatic” HPSA designations as facilities that provide care to a large number of underserved patients. Currently, five correctional facilities in Iowa have facility designations. Thirteen FQHCS and 23 Rural Health Clinics have automatic HPSAs. Iowa facility and automatic HPSA designations are as of January, 2010.



Medically Underserved Areas and Medically Underserved Populations

Iowa’s Medically Underserved Area and Medically Underserved Population designations are a mixture of whole-county and partial county designations. The PCO submits a request to HRSA to designate an area as an MUA or MUP when the area meets HRSA guidelines by using a specific mathematical formula that scores geographic areas on four criteria: 1) percentage of population below poverty, 2) percentage of population over age 65, 3) infant mortality rate, and 4) primary care physicians per 1,000 population. Iowa MUAs and MUPs are as of January, 2010.

Federal Medically Underserved Areas & Populations (MUA/Ps)
July 2010



Iowa Governor’s Designation for Rural Health Clinic Eligibility

In addition to the national eligibility criteria for Rural Health Clinic (RHC) designation, Iowa is one of thirteen states that utilize a Governor’s shortage designation process to identify counties for eligibility to allow for certification of Rural Health Clinics. **In Iowa** the Governor’s designation process was first approved in 1998 by the Health Resources and Services Administration (HRSA) Shortage Designation Branch. This process ensures RHC status for counties which would not otherwise be eligible or would lose their clinic eligibility status. The latest designation occurred in 2009 and will remain in effect for four years. Information about the process for IA Governor’s Designation for Rural Health Clinics can be located at the Iowa State Office of Rural Health website http://www.idph.state.ia.us/hpcdp/rural_health.asp.

TABLE 1: Federal and State Programs requiring shortage designation

| Shortage Designation | J-1 Visa Waiver | National Health Service Corps | State PRIMECARRE Loan Repayment Program | Federally Qualified Health Center | Rural Health Clinic | Medical Bonus Payment | State Mental Health Shortage Area Program |
|--|-----------------|-------------------------------|---|-----------------------------------|---------------------|-----------------------|---|
| Primary Care HPSA | | | | | | | |
| • Geographic HPSA | √ | √ | √ | | √ | √ | |
| • Population HPSA | √ | √ | | | | | |
| Dental HPSA | | | | | | | |
| • Geographic HPSA | | √ | √ | | | | |
| • Population HPSA | | √ | √ | | | | |
| • Mental Health HPSA | | | | | | | |
| • Geographic HPSA | √ | √ | √ | | | | √ |
| Medically Underserved Area | √ | | | √ | √ | | |
| Medically Underserved Population | √ | | | √ | | | |
| Governor's HPSA | | | | | √ | | |
| Automatic & Facility HPSA (RHC, FQHC, & Correctional Facilities) | √ | √ | √ | NA | NA | NA | NA |

Source: Iowa Dept of Public Health - Rural Health and Primary Care Annual Report 2010

The future of HPSAs – The Health Resources and Services Administration (HRSA) responded to Section 5602 of Public Law 111-14B of the Patient Protection and Affordable Care Act requiring a revised comprehensive methodology and criteria for designation of MUPs and Primary Care HPSAs. HRSA established a Negotiated Rulemaking Committee comprised of 28 members who are key stakeholders representing the programs most affected by the designations, including health centers, rural health clinics and other rural providers, special populations with unique health care needs, and technical experts in health care access and statistical methods. The committee convened in September of 2010 and is expected to have draft recommendations in the summer of 2011.

Federal and State Designation of Rural Hospitals

In addition to primary care, mental health, and dental care facilities, rural hospitals are subject to specific criteria based on geographic location and other factors. The criterion determines their designation as a “rural hospital” and affects funding and reimbursement levels.

One type of “rural hospital” is the Critical Access Hospital (CAH). The CAH classification was created by the Balanced Budget Act of 1997 and modified by Balanced Budget Refinement Act of 1999 and the Medicare Modernization Act of 2003. CAH designation allows the hospital to receive Medicare reimbursement on a cost-basis at 101percent of reasonable costs for inpatient and outpatient services (including lab and qualifying ambulance services). To be classified as a CAH, a rural hospital must meet the following requirements:

- The hospital must be located more than 35 miles from another hospital;
- The number of inpatient acute care beds cannot exceed 25; (Rehabilitation and psychiatric beds are excluded from this calculation.)
- The average length of stay for acute care patients must be less than 96 hours;
- 24-hour emergency care services must be provided; and
- The hospital must develop agreements with other hospitals related to credentialing and patient referral and transfer.

Prior to 2006, hospitals could avoid the 35 mile requirement if the hospital was deemed a necessary provider. Federal law permitted the states to establish their own criteria for the necessary provider requirement. **In Iowa**, this criterion required the hospital to have certain population, geographic and facility characteristics. The hospital was also required to demonstrate its importance to the community’s health status and its involvement within the community. The Iowa Department of Public Health Medicare Rural Hospital Flexibility (FLEX) program reviewed and assisted in evaluating the applications for hospitals seeking such classification. On January 1, 2006, the necessary provider exception was eliminated. All of Iowa’s 82 CAHs, however, received necessary provider classification prior to this time.

Summary

Geographic and population statistics are utilized to develop methods and process for health related designations. It is important to note some HPSAs may need more resources than others. The designations determine access to health care, federal and state funding and reimbursements levels. Congress understands the significance of these designations and thus the Patient Protection Affordable Care Act included a mandate for review and revision of the HPSA system.

Comment

Resources are needed to increase and sustain the number of rural primary care providers and other medical professionals in high-risk, underserved areas. One identified barrier to rural practice is provider lost income (compared to practicing in an urban area). By utilizing the upcoming revised HPSA designations federal and state funding can reduce financial barriers to care in all rural primary care HPSAs through increased eligibility for loan repayments, technical assistance and reimbursements. Increased Rural Health Clinic and Federally Qualified Health Clinic designations would promote primary care workforce in rural locations with greatest need¹⁰.