

Health Resources and Services Administration U.S. Department of Health and Human Services

### Facts about ...

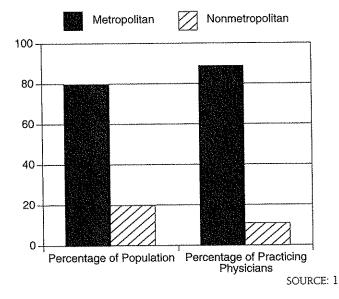
# **Rural Physicians**

# **Physician Supply**

Over 51 million Americans live in areas classified by the U.S. Office of Management and Budget (OMB) as nonmetropolitan. They comprise one-fifth of the US population. Yet less than 11% of the nation's physicians are practicing in nonmetro areas. Over 20 million of those nonmetro residents live in areas that have a shortage of physicians to meet their basic needs.

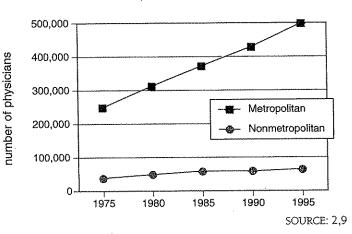
A majority of physicians (54%) in nonmetropolitan areas are in the primary care specialties of family or general practice, general internal medicine, pediatrics, and obstetrics/gynecology, compared with 38% of metropolitan physicians. In 1995, there were 56,635 office-based patient care MDs in nonmetropolitan areas compared with 370,000 office-based patient care MDs in metropolitan areas.<sup>2</sup>

Percentage of Metropolitan and Nonmetropolitan Population and Percentage of Practicing Physicians in Metropolitan and Nonmentropolitan Areas



According to the Council on Graduate Medical Education (COGME,1994), family physicians are three times more likely than general internists, and five times as likely as general internists or general pediatricians, to practice in nonmetropolitan areas. Further, family practitioners are the only physicians among all specialties who are as likely to settle in nonmetropolitan areas as is the general population.

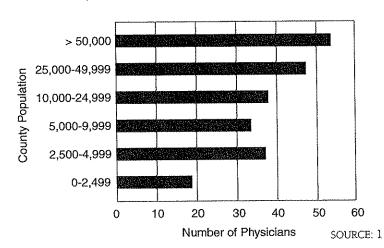
Total U.S. Patient Care Physicians in Metropolitan and Nonmetropolitan Areas, 1980-1995



Between 1975 and 1995 both metro and nonmetropolitan areas experienced an overall growth in the number of patient care physicians. Nonmetro experienced a growth of 31% while the metro supply grew by over 59%. However, the growth rate was less for smaller counties. The smallest counties (<2,500 population) experienced a drop in their physician-to-population ratio during this period.<sup>2</sup>

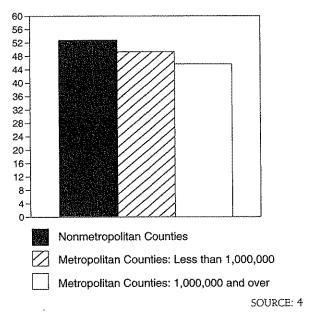
The availability of primary care physicians in nonmetropolitan counties increases as county population size increases. In 1995 nonmetropolitan counties with populations of 50,000 or more had nearly three times as many physicians per 100,000 residents as counties with populations of less than 2,500.

Primary Care Physicians per 100,000 Population in Nonmetropolitan Counties, by County Population Size, 1995



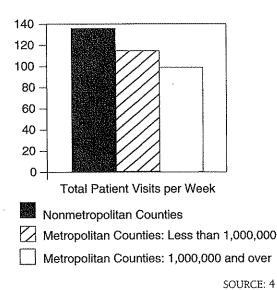
# **Characteristics of Nonmetropolitan Physician Practice**

#### Physicians: Hours Worked Per Week



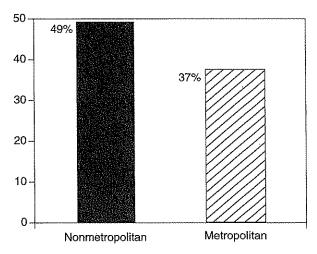
Two commonly used indicators of physician work load are the number of hours a physician spends in direct patient care each week and the total number of patient visits per week. 1995 data show that nonmetropolitan physicians worked longer hours and had more patient visits per week than their metropolitan colleagues. Nonmetropolitan physicians spent as much as 16 percent more time per week in direct patient care and had 38 percent more patient visits per week than physicians in the largest metropolitan areas.<sup>4</sup>

### Physicians: Total Number of Patient Visits Per Week



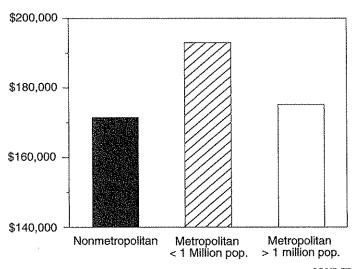
Nonmetropolitan physicians derived a larger share of their gross practice revenue from Medicare and Medicaid patients than metropolitan physicians. These public programs pay physicians at lower rates than private insurers.

Percentage of Physician Revenue from Medicare and Medicaid, 1994



SOURCE: 7

Physician Average Gross Practice Revenues/ Income Metropolitan vs. Nonmetropolitan, 1994



SOURCE: 4

Nonmetropolitan physicians, on average, work more and earn less than their metropolitan counterparts.

# **Primary Care Physician Shortage**

The Federal government designates areas with a shortage of practitioners as Health Professional Shortage Areas or HPSAs. Such designation qualifies these areas for federal grant dollars, National Health Service Corps placement of practitioners, and some enhancement of federal insurance reimbursements in order to bolster health care services in those localities. The Department of Health and Human Services uses a ratio of one primary care physician per 3,500 population or more (1:3,500) as the standard for a primary care HPSA designation. The Department's recommended ratio for an "adequately served" population is one primary care physician for 2,000 people. 5

More than 20 million Americans live in nonmetropolitan areas with a shortage of primary care physicians. Persons living in nonmetropolitan areas are nearly 4 times more likely to live in a HPSA than persons in metropolitan areas.

In 1997, more than 2,200 physicians are needed in nonmetropolitan areas to remove all nonmetropolitan HPSA designations for primary care. More than twice that number are needed to achieve a 2,000:1 ratio in those HPSAs.<sup>5</sup>

As of June 1997, of the 2,597 designated primary medical care HPSAs, 1,742 (67%) were in nonmetropoltian areas: $^5$ 

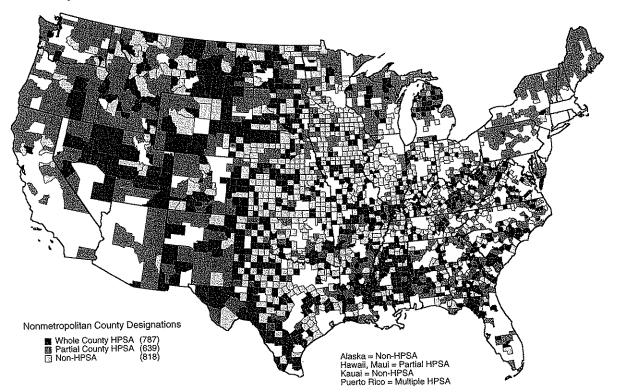
763 whole county nonmetropolitan HPSAs and 732 partial county nonmetropolitan HPSAs.

As an incentive to physicians to practice in HPSAs, both nonmetropolitan and metropolitan, Medicare adds a 10% bonus to its payments for services provided in HPSAs. Physicians in nonmetropolitan areas received a higher percentage of gross practice revenue (33%) from Medicare than metropolitan physicians (27%) in 1994.<sup>7</sup>

A greater proportion of bonus payments in nonmetropolitan areas is for primary care physicians' services than in metropolitan areas. Nearly two-thirds of payments in nonmetropolitan HPSAs were made to primary care physicians, compared to about one-third of payments in metropolitan HPSAs.

The nation's southern states (Public Health Service Region IV: AL, FL, GA, KY, MS, NC, SC, TN), which have substantial non-metropolitan populations, have the greatest need for primary care physicians. In order to remove all their Health Professional Shortage Area designations, they would require an additional 1,096 physicians. To be considered adequately served, there would need to be an additional 2,732 physicians practicing in shortage areas in these states.

# Primary Health Care Shortage Areas (HPSAs) in Nonmetropolitan Counties, 1997



Note: Metropolitan counties are aggregated into white areas on the map.

Source: Division of Shortage Designation, BPHC, DHHS, 1997; US Bureau of Census, 1997.
Produced by: North Carolina Rural Health Research and Policy Analysis Center, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

# **Efforts to Ease Physician Shortages**

### National Health Service Corps

The National Health Service Corps is a federal program created by Congress in 1971 to support health care in hardship areas by placing practitioners — primary care physicians, nurses, physician assistants, nurse practitioners, dentists, nurse midwives and others — in underserved areas. The program works on a quid pro quo basis by offering student medical scholarships or loan repayments in return for a commitment to serve for an equivalent period of time. Its funding was sharply reduced from the mid-1980s, until 1990 when the program was provided with additional resources to help meet the needs of underserved communities.

Since its inception in 1970, the NHSC has placed more than 22,000 health professionals/clinicians in designated HPSAs, with approximately 60% serving in nonmetropolitan HPSA sites. Demand for these practitioners continues to exceed supply.<sup>10</sup>

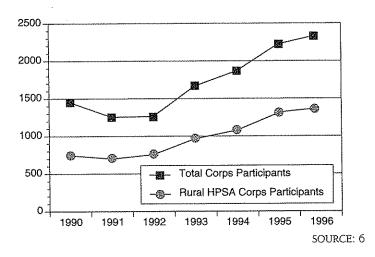
In 1996, 1,371 Corps professionals were serving in non-metropolitan HPSAs, up from a low of 700 in 1991.

While 16.5% of primary care practitioners choose to settle in nonmetropolitan areas, 60% of NHSC placements have been in these areas.

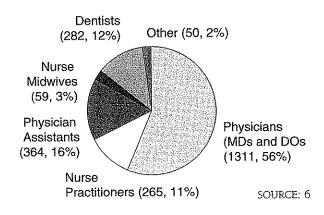
More than 50% of the NHSC physicians who served in nonmetropolitan areas while in the Corps have remained in nonmetropolitan sites after fulfilling their obligation.<sup>8</sup>

This fact sheet was developed by the North Carolina Rural Health Research Program, University of North Carolina at Chapel Hill Cecil G. Sheps Center for Health Services Research.

### National Health Service Corps Field Strength, Total and Nonmetropolitan HPSA Placements, 1990-1995



### Composition of National Health Service Corps Field Strength, 1996



#### **SOURCES:**

- 1. Area Resource File, Office of Research and Planning, Bureau of Health Professions, Health Resources and Services Administration, Public Health Service, US Department of Health and Human Services, February 1996.
- 2. American Medical Association, Physician Characteristics and Distribution in the US, 1996-1997. Chicago, IL: American Medical Association, 1997. (Table A-14)
- 3. American Medical Association. Physician Data by County-1993. Chicago, IL: American Medical Association, 1993.
- 4. American Medical Association. Socioeconomic Characteristics of Medical Practice 1996. Chicago, IL: American Medical Association, 1996. (Tables 7 and 15)
- 5. Selected Statistics on Health Professional Shortage Areas as of September 30, 1996, Division of Shortage Designation, Bureau of Primary Health Care, Health Resources and Services Administration, US Department of Health and Human Service (Table 2)
- 6. Division of National Health Service Corps, Bureau of Primary Health Care, Health Resources and Services Administration, US Department of Health and Human Services (9/30/96)
- 7. Frenzen Paul D. The Medicare and Medicaid Programs in Rural America. U.S. Department of Agriculture, March 1996.
- 8. Rosenblatt R.A., Sanders G., Shreffler J., Pirani MJ, Larson EH, Hart LG. Beyond Retention: National Health Service Corps Participation and subsequent practice location of a cohort of rural family physicians. April 1995.
- 9. American Medical Association, Physician Characteristics and Distribution in the US, 1987. Chicago, IL: American Medical Association, 1987. (Table A-6) 10. NHSC personal communication 1/9/97

A note about "Rural" and "Nonmetropolitan": Different methods for defining rurality are in common use. Between 1993 and 1995, 26 different definitions of "rural" were used by researchers in scientific papers (Ricketts and Johnson-Webb, 1996). For consistency, the classification, "Metropolitan/Nonmetropolitan", used by the US Office of Management and Budget (OMB) is the term used throughout this fact sheet.