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Access to Rural Health Care

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> Without a doubt, health care, and particularly rural health care, may be diagnosed as critical.
> --Richard Reinheimer, University of Georgia

Health care is one of the most pressing issues facing the United States. Increasing costs, millions of Americans without health insurance, increased litigation, and hospital closures are symptoms of what is being called the health-care crisis.

Health-care issues were prominent in the 1992 U.S. presidential campaign and are, of course, a priority of the Clinton administration. Various options are being examined to address these issues, including the "Oregon Plan," which limits Medicaid coverage to certain procedures but expands coverage to all needy people, and the "Canadian Plan," with funding by the national and provincial governments, fees set by administrative boards, and universal access to medical care. In April 1993, the Maryland legislature passed a bill that provides for regulation of doctors' fees and requires insurance providers to guarantee coverage to all employers, regardless of size (*Washington Post*, April 8, 1993).

The federal health-care initiative that emerges from these and other alternatives will probably involve some type of "managed competition," designed to control costs by encouraging competition among insurers and providers, with the federal government aggressively involved in setting fees and providing information. Unfortunately, the eventual federal plan will probably not solve the most serious *rural* health-care problem: *access*, to doctors, hospitals, emergency care, and health-care information. In this article, we describe some of the access problems facing rural Virginia, show how access has changed over time, and discuss how rural people might improve their health-care access.

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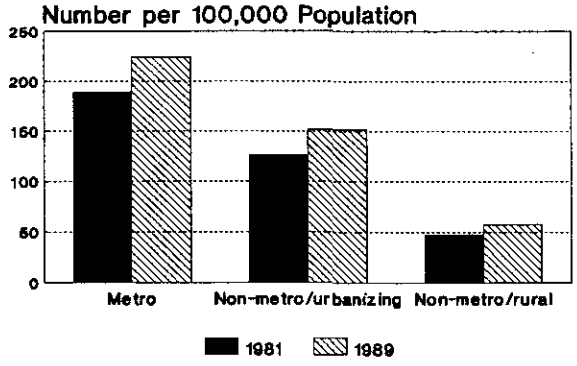
Characteristics of Health Care in Rural America

Like urban residents, many rural Americans face increasing health-care costs combined with inadequate access to insurance. While about 15 percent of all Americans lack health-care insurance, over 17 percent of non-metropolitan residents do. Substantially lower percentages of rural people receive health insurance through their place of employment. Overall, out-of-pocket health-care expenses are 10 percent higher in rural areas than in urban areas (Frenzen).

Ironically, some federal programs contribute to rural health-care problems. For example, Medicare reimbursement policies that have traditionally discriminated against rural hospitals are partially to blame for many hospital closings (10 percent of all rural hospitals closed during the 1980s). Other unfavorable treatment of rural areas from federal programs includes the following: Only 25 percent of the rural poor nationally qualify for Medicaid, while 43 percent of the urban poor do; despite a rural poverty rate significantly higher than the national rate, the federal government pays 42 percent fewer health-service dollars per capita in rural areas; and rural community and migrant health centers receive 15 percent fewer federal dollars per patient than do urban centers (Office of Technology Assessment).

Perhaps the most visible rural health-care problem is the disproportionately low number of doctors in rural areas (Figure 1). This problem of fewer doctors per capita in rural areas has long been recognized. In 1972, the federal government began the National Health Service Corps Scholarship program to provide financial aid for medical school students in exchange for post-graduation service in physician-short areas. Various other efforts were simultaneously undertaken to increase services in low-physician areas. (For this article, the terms "physician shortage" or "low-physician" refer to areas with 2500 or more people per primary care physician; areas with less than 2500 people per doctor are termed "adequately served" or "high-physician.")

Figure 1. Urban/rural distribution of doctors in the United States, 1981 and 1989.



These programs have had only limited success. Although the number of rural doctors increased between 1981 and 1988, disparities between rural and urban areas increased (see Figure 1). There are several related reasons why federal programs have not improved the relative conditions in rural areas: The "trickle down" of doctors is a slow and uneven process; doctors tend to cluster and not spread to the most needy areas; and rural areas may not offer the types of professional conditions that appeal to newly trained doctors. Moreover, the rural-urban disparity will probably worsen in the future. Many rural doctors are reaching retirement age, and, as these doctors leave practice, rural counties will struggle to compete with urban areas in recruiting replacements.

Health Services in Rural Virginia

Health services in rural Virginia closely follow national patterns. In 1989, 52 Virginia cities or counties were designated medically underserved, and sixty-six percent of the underserved population in Virginia resided in non-metropolitan areas. More than twice as many nurse practitioners and physician assistants per person serve in Virginia's metropolitan counties as in rural counties. State programs to increase the supply of doctors in underserved areas--such as the Virginia Medical Scholarship Program begun in 1942--have met with only limited success.

In Fall 1990, we began a REAP-sponsored study of health-care services in Virginia. The study focused on primary-care physicians (including general practitioners, pediatricians, and internists), because they often are the gateway to medical care and are the types of doctors most frequently found in rural areas. Data on the distribution of physicians for three years--1970, 1985, and 1989--were combined with county-level information on economic conditions, population, social services, and health and recreation facilities.

Two important observations were made from mapping the distribution of doctors (Figure 2, next page). First, the distribution in 1989 closely resembled that in 1970, indicating that areas with acute doctor shortages (one doctor serving more than 2500 people) in 1970 continued to suffer shortages in 1989. In particular, southwestern and south-central Virginia have had persistently inadequate supplies of primary care doctors, and some counties in the Northern Neck have seen the number of doctors per person decrease. Despite concerted state efforts to increase the number of primary care physicians in state medical schools, and to locate doctors in underserved areas, past and current state programs have evidently been largely ineffective in improving access, and may have only prevented the situation from worsening.

The second observation resulting from the geographical analysis is that counties with the greatest doctor shortages are clustered together. This clustering affects health-care access: Residents of the counties in the center of the clusters can be expected to have particularly poor access to physician services. On the other hand, the clustering may make more effective the use of regional or multi-county efforts to address the doctor shortages.

Combining economic data with data on the distribution of doctors revealed a marked difference between rural counties with adequate vs. inadequate numbers of doctors (Figure 3). In 1989, the average per-capita income of rural counties with doctor shortages was only 90 percent of the income in adequately supplied rural counties. Local school

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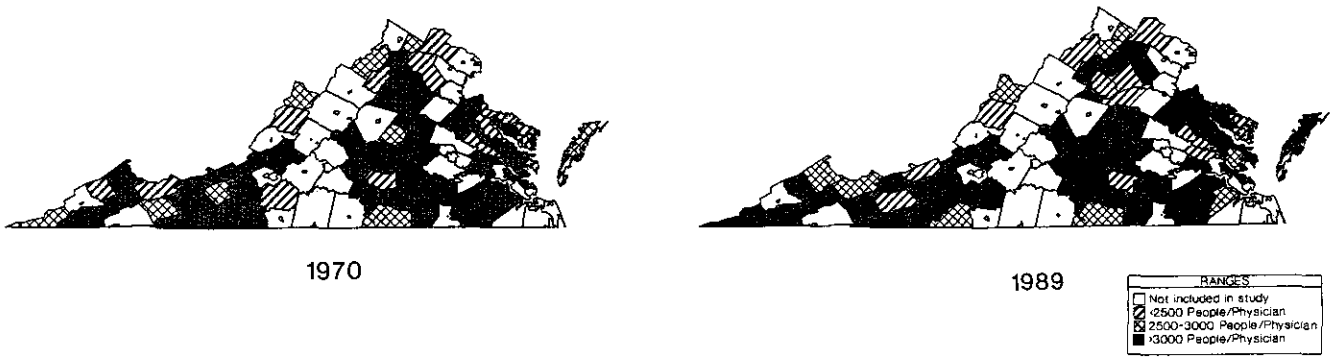
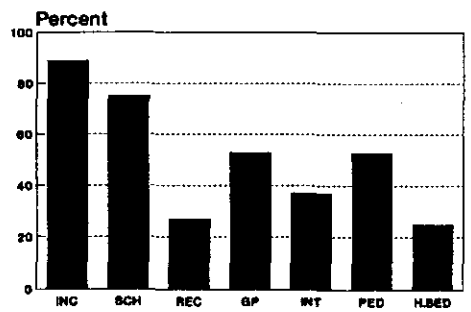
Figure 2. Distribution of primary care physicians in Virginia counties, 1970 and 1989.



expenditures, hospital beds per capita, and an indicator of recreation opportunities were all significantly lower for the low-physician counties. These differences between low- and high-primary care physician counties persisted over the entire period examined in the study.

Figure 3 also shows the degree of the doctor shortage. Rural counties with shortages had about one-half as many general practitioners and pediatricians, and about one-third as many internists, as did adequately supplied rural counties. The shortage in underserved counties is severe.

Figure 3. Low-physician vs. high-physician rural Virginia counties, percentage of various measures, 1989. Bars represent, for each measure, the low-physician counties' average as a percentage of the high-physician counties' average.*



*"Low-physician" means 2500 or more people per doctor; "high-physician" means fewer than 2500 people per doctor. INC = income; SHC = school expenditures; REC = recreation; GP = general practitioners; INT = internists; PED = pediatricians; and H.BED = hospital beds; all variables are per capita.

Lessons for Rural Virginia's Communities

What options exist for communities to improve their access to health-care services? As our study has helped document, state and federal efforts to enhance access have not solved--and may never solve--the problems rural areas face. Efforts to increase the overall supply of health-service providers will have only minor impacts on rural areas, and these impacts will be felt only over many years. Even efforts to change the characteristics--such as expenditures on education, public services, and recreation--that communities do control and that are associated with the supply of doctors will not necessarily improve a given community's health-care access. Ultimately, increasing the supply of doctors depends on community economic development and the increased incomes associated with development. Unfortunately, this process is slow, and the absence of adequate health services may itself hinder development efforts.

There are, however, several areas of promise for rural areas. Regional efforts are clearly appropriate: Unnecessary duplication of services can be avoided while service is expanded to more patients. For example, partnerships can be formed where providers in a small rural community offer primary care while more advanced care is provided in a larger community. Many efforts are underway to establish partnerships among local governments, hospitals, health maintenance organizations, physician and alternative-provider groups, and other public and private entities.

A fundamental assumption of all managed competition proposals is that increased information will improve access to services at lower costs. Such information reduces some of the uncertainty that rural residents face and improves their ability both to stay healthy and, when necessary, to find appropriate health care. Costs can be lowered by less use of unnecessary services, more information about alternative providers, and a more healthy populace. The recent legislation in Maryland, providing for a state commission to publicize different fees for medical procedures, is an example using increased information to combat rising health-care costs. In Virginia, Cooperative Extension is now able to assist in coordinating community efforts to solve health-related problems. Information on ways to recruit and retain health-service providers can be found through the new Virginia Office of Rural Health (phone 804-

786-4891) and through several publications. Using these resources, communities can be active in providing health-related information to residents.

Rural communities are an important factor in the rural health equation. A community's health-care crisis may actually be an opportunity to focus community efforts on broader development problems. Perhaps the worst thing a community can do is expect the solution to come from the federal or state governments. Support for community action is available from many sources, and this support encourages innovative approaches to solving rural health problems.

(*Ed. note:* A full report on REAP-sponsored health-care research will be published later this year.)

References and Further Reading

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NOTICES

*REAP Policy Paper #3, *The Disparity Issue in K-12 Education in Virginia* by Carlos Elías and George McDowell, has been mailed to all who were on either the *Horizons* or *State of Rural Virginia* mailing lists as of March 1993. If you did not receive a copy, or would like additional copies, please contact REAP at the address or phone number below.

*The Virginia Center on Rural Development (CORD) is now accepting applications for its Fiscal Year 1994 Innovation Grant competition. A total of $350,000 will be available in awards up to $25,000 for feasibility studies and $40,000 for implementation projects. The projects must employ "an innovative or creative approach to rural development," but they may address any of a broad range of issues (education, small business development, community services, tourism, etc.). Local governments, local and regional non-profit organizations, planning district commissions, and community action agencies are eligible to apply. Grant applications are due by July 7, 1993. For more information or to request an application packet, contact CORD, 501 N. Second St., Richmond, VA 23219; phone (804) 371-7075.

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