Health Care Delivery: Rural vs. Urban Communities (www.amsa.org)

More than 20 million people in the United States live in areas that have a shortage of physicians to meet their basic health care needs. This lack of access to quality health care for many people, particularly those living in rural and urban underserved communities, is a serious health care problem.[1] Health care delivery in rural and urban communities poses many unique challenges and students must be aware of these challenges when studying and practicing medicine. A common problem faced by both rural and urban communities is the lack of physicians practicing in these communities. In response to the physician shortage, medical schools have adopted a selective medical school admission policy to enhance a primary care choice in underserved communities.[2] Although some students initially recruited do eventually practice in underserved communities, many do not. While medical schools recruit physicians in-training for underserved areas, they do not have a curriculum that supports this mission. In addition, medical students are discouraged in both subtle and overt ways from entering the primary care specialties that serve underserved areas.[3]

What is "underserved"?
The Public Health Service (PHS) classifies counties as primary care shortage areas if they have more than 3,000 persons per physician (3.3 physicians per 10,000 persons). The PHS has four levels of priority; the highest priority is to have counties with no more than two primary care physicians per 10,000 persons.[5] Interested in finding demographic information about a particular rural or urban underserved community or even zip code area? Check out <http://www.census.gov/>. Accessing demographic data will allow students to understand changing population trends on providers, patients and community members.

Rural Communities: Access to Care
During this period of rapid changes to health care delivery, the demand for rural physicians remains high. Small towns around the country face the loss of their medical services because they have no doctors to run their clinics. Many factors have contributed to the disappearance of the country doctor, including the increasingly specialized nature of medical practices and the rapid pace of technological advancement. Medical schools, quick to respond to the advancement of science, have done very little to advance the state of medicine in rural communities.[4] Medical schools need to train more efficiently by using partnerships with rural and academic communities. Rural faculty members with rural practice experience and contacts at the rural, state and academic levels need to play a more integral role in maintaining rural residency training programs.[4] There are currently 27 rural residency training programs. Although the Accreditation Council for Graduate Medical Education has not designated any official urban underserved residency programs, students can contact their medical school for a listing of hospitals that provide residency training in inner cities.

Family physicians are the most well prepared of medical specialists to practice in rural communities. The American Academy of Family Physicians surveys indicate that the clinical practices of rural family physicians is different from those practicing in urban areas. Rural family physicians are more likely to provide routine and high-risk obstetric care, to perform major and minor surgery, to reduce and cast fractures and to perform gastrointestinal endoscopies.[5]

Longer Rural Rotations
The Minnesota legislature created the Rural Physician Associate Program (RPAP) in 1971. RPAP students spend their third year in a rural location. The third year involves two- to three-month rotations through medicine, surgery and other basic clinical rotations in rural locations.[4] However, despite the unique benefits of the RPAP program for students interested in rural medicine, the program remains a model for very few medical schools. Interested students should take the initiative and get their schools involved in this unique program. For more information, contact Dr. Robert Bowman at (402) 559-8873 or e-mail <rbowman@mail.unmc.edu>.

Programs and Contacts for Rural Residencies

- Univ. of Colorado Contact: Calvin Wilson, M.D. (303) 270-5191

- St. Mary's Hospital & Medical Center Contact: Daniel R. Dill, M.D. (303) 244-2800
- Family Practice Residency of Idaho Contact: Todd Swanson, M.D. (208) 322-0050
- Univ. of Kentucky Med. Ctr. Contact: Joseph A. Florence, M.D. (606) 439-3557
- North Mississippi Med. Ctr. Contact: J. Edward Hill, M.D. (601) 841-3000
- Univ. of Nebraska Rural Program Contact: Jeff Harrison, M.D. (402) 559-5159
- Univ. of New Mexico (Las Cruces) Contact: Michael Stehney, M.D. (505) 233-4270
- SUNY at Buffalo Contact: Daniel Morelli, M.D. (716) 688-3314
- East Carolina Univ. Contact: Dana King, M.D. (919) 551-4614
- Mountain Area Hlth Ed. Ctr. Contact: Wail Malaty, M.D. (704) 696-8264
- Univ. of Oklahoma Garfield County Med. Society Contact: J. Michael Pontious, M.D. (405) 242-1300
- Inland Empire Hosp. Svcs. Assoc. Contact: Gary R. Newkirk, M.D. (509) 624-2313
- Univ. of Wisconsin Contact: Hilary Scully, M.D. (715) 675-3391
- University of Wisconsin (Menomonie) Contact: William J. Hueston, M.D. (715) 839-5177
- Univ. of Wisconsin (Baraboo) Contact: James R. Damos, M.D. (608) 263-2550
- North Colorado Med. Ctr. Contact: Mark Wallace, M.D (303) 356-2424
- Medical College of Georgia Contact: Paul Forney, M.D. (706) 721-4675
- Univ. of Kansas Med. Ctr (Hays) Contact: Cynda A. Johnson, M.D. (913) 588-1902
- Lousiana State Univ. Med. Ctr. Contact: Michael B. Harper, M.D. (318) 674-5815
- Montana Family Practice Residency Contact: Tom Jones, M.D. (404) 248-1811
- Univ. of New Mexico (Santa Fe) Contact: Mario Pacheco, M.D. (505) 982-8440
- Univ. of New Mexico (Roswell) Contact: Karen Vaillant, M.D. (505) 627-4014
- Univ. of Rochester/Highland Hospital of Rochester Contact: Jeffrey Harp, M.D. (716) 554-6603
- Carolinas Medical Center Contact: J.Lewis Sigmon, M.D. (704) 355-8233
- Ohio State Univ. Contact: Mary Jo Welker, M.D. (614) 688-3908
- Univ. of Oklahoma Coll. of Med. Contact: W. Michael Woods, M.D. (918) 536-1024
- West Virginia Univ. Rural Contact: Konrad C. Nau, M.D (304) 535-6343

Communication may be the solution to the retention of rural doctors

One of the major problems that rural physicians face is isolation. However, pediatricians and family physicians serving in rural parts of Maine, New Hampshire and Vermont are trying to overcome the challenges of professional isolation while maintaining their practice. To overcome these problems, the Northern New England Rural Pediatrics Alliance (NNERPA) was begun.6 NNERPA gives physicians relief from their isolation. They have created a network in which they are able to discuss the mutual problems that they face: access to care, inadequate reimbursement rates and the effects of poverty. In most rural communities, a patient who has no financial resources but needs medical assistance is well known. The physician and community feel obligated to such patients because they encounter them during their daily activities. In rural communities, people share their resources, know each other well and are a support system for one another. Because privacy is a major challenge for many rural physicians, talking with NNERPA members outside their community has helped many. Another unique opportunity that NNERPA incorporates is allowing doctors and nurses to take "mini-sabbaticals" by providing physicians with a break from being the only pediatrician in town.6 This alliance could serve as a model for rural and urban underserved doctors around the country.

Differences in Physician Population by Location
1995 Active Physicians Per 100,000[5]

Urban
Large metro areas.....304
Small metro areas.....235
Rural
>10,000 persons & adjacent to large metro.....123
>10,000 & adjacent to small metro.....123
<10,000 & adjacent to large metro.....70
<10,000 & adjacent to small metro.....76
>10,000 & not adjacent to metro.....168
2,500-10,000 & not adjacent to metro.....88
2,500 & not adjacent to metro.....53

Access to Health Care: for Urban Underserved Communities
Too many inner-city residents lack access to health care. In 1997, some localities in 855 urban areas were designated as primary medical care Health Profession Shortage Areas (HPSAs). Suprisingly, inner-city access to physicians is not related to the supply of physicians in the surrounding metropolitan area. In rural communities, lack of physicians is often the dominant barrier to care, affecting residents regardless of insurance status, social class, income or ethnicity. However, urban underserved communities are almost always close to neighborhoods with an ample supply of physicians. Although urban residents may live close to concentrations of physicians, they do not have access to automobiles and are forced to travel on a crowded bus or on a convoluted urban mass transit system.[5]

The most vulnerable of the urban poor are women and children. In addition to infectious diseases that one commonly associates with underdeveloped rural areas, the urban poor also face health problems that are associated with developed countries: pollutants, accidents, cancer, substance abuse and violence.[7] The urban poor also possess inadequate information about health services and about access to health care services or have too few resources available to them. Decades of focusing development assistance on unserved and underserved rural areas has limited the attention given to the urban infrastructure. The result is inner-city communities unable to keep pace with rapid urbanization. Based on the assumption that most urban family planning systems are overwhelmed and not equipped to satisfy the potential demand for contraceptive services, Council on Graduate Medical Education (COGME) examined the availability and quality of family planning and health service delivery in urban areas and found that the number of working poor continues to increase, as do the problems they face: unemployment, lack of health insurance, poor housing conditions, language barriers, alcohol and drug abuse, exposure to environmental health hazards, poor nutrition, crime and lack of education. Community health centers in the underserved inner-city communities have responded to these needs by offering preventive health, behavioral health, dental care and social services that empower individuals to take better control of their lives. Physicians who work in these settings express a feeling of satisfaction when providing needed care to individuals in underserved inner-city areas.[5]

Life in an inner-city practice
There are considerable differences between rural and inner-city practices. Initially, a general practice in the inner city may seem very unattractive; however, it holds many opportunities. A recent study investigated the personal characteristics and professional experiences of medical providers working with medically underserved urban populations.[8] This study revealed that most of the participants expressed a strong sense of service to humanity and pride in making a difference. Physicians in these communities thrive on the challenges of dealing with complex patient needs and using limited resources.[8] In addition, inner-city urban populations have a high percentage of people from diverse ethnic backgrounds, which creates some inter-community tension. The social problems of those living in urban communities, such as unemployment and its implications for the health of those who are unemployed and their families, presents challenges that students must be able to effectively deal with when engaged in an inner-city practice. Additional challenges include HIV-positive patients, pregnant teenagers and substance abusers.

Components that are necessary for survival in an urban underserved setting include a hardy personality style, flexible but controllable schedule, and multidisiplinary practice team.[8]Despite the challenges present in an underserved inner-city practice, there is a cohort of medical care providers who chose to practice in medically underserved communities. The benefits of providing health care to the underserved include having a positive impact on their patients' lives and the satisfaction of providing health care to those who are underserved. In addition, the extrinsic motivation of money appears to be less important to providers in underserved communities than the intrinsic motivation of a challenging job setting.[8]

Dr. Fitzhugh Mullan, a pediatrician at the Cardozo Health Center in inner-city Washington D.C., explains that students must be trained not only in medical diagnosis but in the realities of the streets and lifestyles of those living in inner-city neighborhoods. Medical training lacks instruction about extenuating and complex issues of practicing medicine in urban underserved areas. Payment for pharmaceuticals is an example of the everyday problems faced in an inner-city practice, i.e., families of poor children have trouble finding cash to buy the medications to fight off an acute asthma attack.[9] Another cause of major health problems is old housing. Things that protect from illnesses- humidifiers, vitamins, healthy food- may be a luxury to those living in urban areas.[9] Medical school classes and conferences rarely discuss the large number of Americans without health insurance who have an unpleasant standard of living. Medical treatment and preventive medicine need to evolve to begin to serve those living in inner-city underserved communities.

Why are so many populations unable to receive basic health care? [5]

- Lack of medical insurance
- Lack of transportation services
- Need and expense of child care
- Limited hours and days of operation at medical facilities
- Low-income families tend to not practice preventive medicine
- Inner-city Black and Latino men usually cannot qualify for Aid to Families with Dependent Children; therefore, they often become homeless and face the health hazards associated with living in crowded, unsanitary environments
- Rural migrant workers are exposed to and suffer from parasitic infections at the rate of third-world countries, which is 20 times more often than the general U.S. population

The Bureau of Primary Health Care (BPHC)[11] helps underserved and vulnerable people get the health care they need. BPHC is part of the Health Resources and Services Administration (HRSA), one of eight agencies of the Public Health Service in the Department of Health and Human Services. The mission of the BHPC is to increase access to comprehensive primary and preventive health care and to improve the health status of underserved and vulnerable populations who experience financial, geographic or cultural barriers to care. These vulnerable populations include:

- Uninsured persons
- People in rural and frontier areas
- Underserved mothers and children
- Native Hawaiians and Pacific Islanders
- Inner-city and elderly poor
- Schoolchildren in poor communities
- Women and minorities living in poverty
- Residents of public housing
- High-risk pregnant women
- People who are substance abusers
- Homeless families and individuals
- New immigrants and detained aliens
- Adolescents
- People with Hansen's disease

- Migrant farmworkers
- People with HIV/AIDS
- People with Alzheimer's disease and related disorders

For more information, go to <http://bphc.hrsa.gov/>

Rural and Urban Communities: Different Concepts about Health
Health perspectives differ between rural and urban communities. The health perceptions of rural and urban residents significantly reflects their health-promotion behaviors, health maintenance, and illness treatment.[10] Those living in rural communities value independence and self reliance. Health care agencies, specialized services and infrastructure are usually less available to rural areas. Rural community members learn to distinguish between health impairments that can be tolerated for a period and those that will impede functioning. The lack of health insurance, land-based work that does not allow "sick days" and long distances from health care providers influence the way those living in rural areas view health and address illness. Rural men and women of a variety of age groups have reported health as the ability to work and to perform one's usual activities. For example, rural workers have been found to tolerate pain for long periods and not allow it to interfere with their ability to work. Urban residents also view health as the ability to work; however, the degree of importance is different. Urban inhabitants more frequently focus on the comfort and life-prolonging aspects of health.[10]

In the past, health care delivery systems have failed to recognize and address the beliefs and lifestyles of rural and urban communities. If their unique perspectives are overlooked in health care delivery, the result will be health care programs that are inaccessible or unacceptable to rural and urban communities.[5,10] By understanding the general differences in which these communities perceive health, medical students can maximize the delivery of adequate and efficient care to residents of rural and urban underserved communities.

The country faces major challenges with the rapidly changing health care system: uninsured people, continuing gaps/disparities in health outcomes, unknown impact of recent legislation, increasing need and decreasing resources. The following are programs that assist communities in addressing the needs of special populations at particular risk for poor health outcomes:

- Community Health Centers, Migrant Health Centers, Health Care for the Homeless and Public Housing Primary Care build system infrastructures by linking family-oriented primary care to social support services.
- The National Health Service Corps recruits community-responsive, culturally competent health care providers to serve in rural and urban health professional shortage areas by offering educational assistance to medical professionals.
- Special primary care initiatives meet varied needs of high-risk populations (such as children, pregnant women, people with HIV/AIDS, and substance abusers). These initiatives also identify creative, successful programs to serve as nationwide models and work directly with communities to build primary care systems and recruit clinicians.

What YOU Can Do to Make Underserved Populations a National Priority!

- Contact corporations for financial assistance in providing health care necessities to underserved communities. Collect donations of health care supplies from pharmaceutical companies or local businesses.
- Contact foundations involved in primary care initiatives for updated statistics and information regarding underserved health care delivery.
- Contact the media and ask journalists to focus on the needs of underserved communities. Ask local newspapers to write articles about the lack of health care to underserved communities. Express concerns about health care delivery to the underserved in the editorial section of the local paper.

Utilize the web! Try these web sites for valuable information

American Academy of Family Physicians

Rural Family Doc Homepage

Rural Information Center

Funding Resources for Practicing in Underserved Areas

National Health Service Corps
The National Health Service Corps (NHSC) program is designed to place physicians in medically underserved rural and inner-city communities. The philosophy of the NHSC is that placing more physicians in rural or inner-city areas with temporary financial support will motivate these physicians to stay on and establish a private practice after they complete their contractual obligations to the NHSC. However, much effort has been expended to place physicians in these rural or inner-city areas, and very little has been done to retain these physicians. Although the NHSC has been criticized because too few physicians fulfill their obligations, some excellent NHSC physicians are committed to providing obligated and nonobligated community service. For more information, call (800) 638-0824; in Maryland call (301) 443-6034.

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