

## **Equity and Distributive Justice: Issues of Access to Care and Diversity in US Health Care Workforce**

Atul Grover, MD, PhD and Karyn Gorman, MSPA (United States)

*For the 10<sup>th</sup> International Medical Workforce Collaborative, Vancouver, BC.*

### **Abstract**

Over 30 million Americans live in geographically designated Health Professional Shortage Areas (HPSA) and lack access to a usual source of care. Another 30 million live in underserved communities that lack access to care despite proximity to health professionals and institutions. Barriers to access disproportionately affect those in rural communities as well as those members of minority (non-white) populations including blacks, Hispanics, Asians, and Native Americans. Blacks receive poorer quality of care in two-thirds of areas measured and have worse access to care than whites for 40% of access measures. Access for Hispanics is worse than whites for 90% of measures and they, too, receive lower quality of care. Similar problems exist for the poor regardless of race or ethnicity.

Over the last four decades, the United States government and private philanthropic organizations have sought to improve access for those communities that remain medically underserved. However, recent advances in quality and outcome measurement only reinforce that health care disparities exist in the U.S. Access issues are only worsened by the lack of representation of individuals from minority and disadvantaged communities in health care. This report seeks to highlight major findings from recent studies that illustrate the magnitude of access problems and their impact on health outcomes. It also describes many of the programs in place to improve access through direct care and attempts to improve the diversity of the health professions; and examines many challenges facing the future success of such programs in the U.S.

## Introduction

Access to a regular source of medical care is critical to maintaining health while barriers to care result in poorer health outcomes. Unfortunately, health care access is not as easily obtained by all portions of the population in the United States. Racial and ethnic minorities, as well as people of lower socio-economic status, are disproportionately affected by inadequate access to healthcare (AHRQ, 2004). Barriers to health care affect rural and urban communities alike though the nature of these barriers—geographic, financial, and temporal—may differ. As many as 30 million people in the US live in areas without sufficient geographic access to physicians and an equal number are members of communities whose access to care is limited by other factors.

Health care disparities and limited access to care affect populations disproportionately. Over the last several decades, a number of programs have been created in the US to address geographic access to care and to improve access by disadvantaged populations who are often racial and ethnic minorities living in urban areas. While some problems with access (and disparities in outcomes) are related to a lack of health insurance, others persist despite insurance coverage and are clearly more prevalent among minorities.

Currently, about 75% of the US population is white while black or African Americans account for another 12%; Hispanics account for almost 13% of the population though they may classify themselves as white or black. One percent consider themselves Native Americans or Hawaiian/Pacific Islanders. However, the U.S. Census estimates that the nation's Hispanic and Asian populations could triple within the next fifty years while the black population is expected to grow by 71% (U.S. Census). As the nation becomes more racially and ethnically diverse, the burden of preventable disease and inequality in health care is likely to grow.

These disparities are partly attributable to lack of a usual source of healthcare. Thirty percent of Hispanics and 20% of blacks lack a usual source of care compared to less than 16% of whites (AHRQ, 2004). As a result, many treatable or preventable diseases may be left undetected or are addressed at late stages of illness. This in turn leads to higher morbidity and mortality rates for cancer, diabetes, and heart disease as well as other diseases.

Early detection is essential to good health, yet tests and screenings for minority women are disproportionately low. Hispanic women are significantly less likely than white women to have had a pap smear in the past year and cervical cancer is 5 times higher in Vietnamese women in the United States than white women (AHRQ). There is also evidence that minorities do not receive the necessary treatments once a problem is detected. One survey of physician referral practices found that blacks and women, particularly older black women, were much less likely to be appropriately referred for cardiac catheterization than whites and men (AHRQ).

Disparities in health care for specific illnesses are well documented. Diabetes is chronic and treatable, yet minorities are at a higher risk of developing and dying from the disease.

African-American and Hispanic diabetics are less likely to receive recommended services than their white counterparts and admission rates for uncontrolled diabetes are higher among blacks than among whites in all geographic areas but particularly in non-urban areas—176.3 admissions per 100,000 population (AHRQ).

As a result, African-American diabetics are seven times more likely to undergo limb amputations and develop kidney failure than white diabetics and are more likely to die from the disease. Cancer mortality rates are also 35 percent higher in blacks than whites (AHRQ), including higher death rates from breast, lung, and colorectal cancers than any other racial or ethnic group (Kaiser Family Foundation, 2007).

Living in a metropolitan area does not guarantee access to routine care despite the high concentration of physicians. After adjusting for underlying population characteristics such as insurance status, income, and race/ethnicity, higher levels of physician supply were not associated with better access. It is interesting to note that the number of patient care physicians virtually doubled in metropolitan areas between 1970 and 1990 (COGME, 1998), making it seem counterintuitive that urban residents would face barriers to healthcare. However, physicians are more likely to be located in affluent areas of cities (Rosenblatt, 2000) while poor neighborhoods are prone to physician shortages (COGME, 1998).

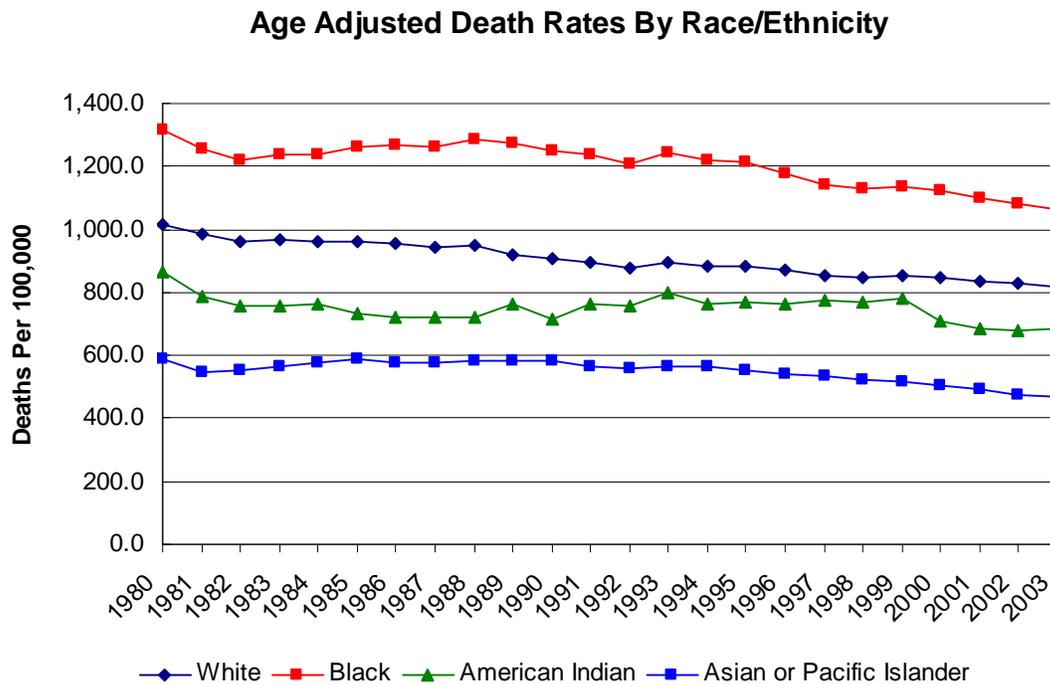
There are several reasons for this lack of access. In the inner city, the use of health services is affected by culture, language, class, income level, ethnicity, transportation and insurance (COGME, 1998). Even those who do have health insurance report financial barriers to obtaining health care; 16.9% of Americans report at least one financial barrier to care. Among those with private insurance, the poor (28.4%), near poor (23.4%), and those with functional impairments (22.9%) were more likely to report avoiding care due to cost (Weinick, 2005). According to one study of urban health disparities, poorer access to care appeared to be explained mainly by lack of health insurance and other factors unrelated to physician supply (Grumbach, 1997).

Those without health insurance are least likely to utilize care regardless of location. Hispanics as a group are the most likely to be uninsured and, compared to the general population, have lower utilization of health services (Mueller, 1999). Hispanic and Latino women are less likely to have health insurance coverage and a usual place of care compared with non-Hispanic white women and non-Hispanic black women (Freeman, 2006). Hispanic children are nearly 3 times as likely as non-Hispanic white children to have no usual healthcare.

As improvements in quality of care measurement are made, new programs are created and tailored to address some disparities. The Federal Health Resources and Services Administration's (HRSA) Health Disparities Collaborative provides support to a number of projects involving community health centers and other community-based organizations that are focused on improving health care quality and the health status of predominantly minority populations. Preliminary findings from one of these projects indicate that it has improved the quality of care for patients with diabetes, and also appears to have reduced

hospitalizations and shortened inpatient stays. These preliminary results also indicate a reduction in the annual cost to care for these patients (AHRQ). However, as is clear from death rates (**FIGURE 1**) observed in the US population, much progress has yet to be made.

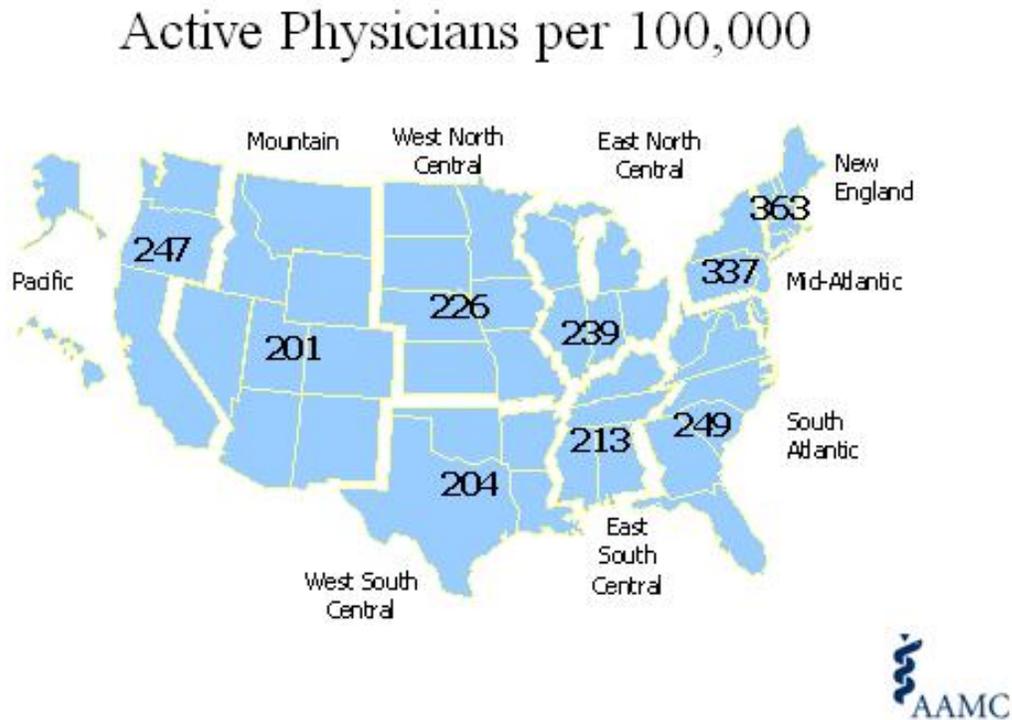
Figure 1.



**Geographic Barriers to Access**

There are wide ranges in the number of physicians per capita across regions of the U.S. (**FIGURE 2**) The shortage of physicians outside of major metropolitan areas continues to be a major barrier to health care access. While rural residents constitute more than 20% of the U.S. population, only 9% of U.S. physicians practice in rural communities (Rosenblatt, 2000). Rural populations have fewer visits to health care providers and are less likely to receive recommended routine and preventative services (AHRQ). For example, in 2001, residents of non-core based statistical areas not adjacent to urban areas were less likely to report a dental visit in the past year than residents of large metropolitan statistical areas; rates of admissions for uncontrolled diabetes were higher among residents of these areas as well. Rural individuals have more chronic disease, are in poorer health, experience more injuries and perceive themselves as less healthy than their urban counterparts (Lishner, 1996).

**Figure 2.**



This problem is compounded for rural minority populations who face greater disparities in health care (Mueller, 1999). Similar to all minorities, there are observable differences in cancer screening and management of cardiovascular disease and diabetes (AHRQ), even compared to their urban counterparts. For example, rural Hispanics have higher rates of diabetes compared to whites and urban Hispanics (Mueller, 1997)

A study by Mueller et al found that rural black women are less likely to be screened for cervical cancer than their rural white counterparts (or black women in urban areas) and that rural Hispanics are less likely to use psychiatric and dental care services (Mueller, 1997). Hispanics in general are the least likely of all racial and ethnic groups to have had a dental visit in the past year (Kaiser Family Foundation, 2007). Being a minority and living in a rural area are strong predictors of poorer health and worse outcomes.

There are numerous programs that address geographic distribution at the federal, state, and local level. One of the most well known federal programs is the National Health Service Corps (NHSC). The NHSC provides scholarships or loan repayment for two years or more of service in an underserved area, most of which are in rural communities. It was established in 1972 to help meet the needs of the underserved by offering loan repayments and scholarships and 27,000 have served since that time. The NHSC and programs like it are important incentives to rural practice in light of the fact that most medical students graduate with over \$130,000 in educational debt. These programs provide important financial incentives for practice in underserved areas/communities.

Although only one quarter of NHSC assignees remain in their original assignment counties, they provide a large amount of non-obligated service to similar areas and populations throughout their careers (Rosenblatt, 2000). Of those who leave, many remain in rural practice or work in community-oriented urban practices. The contribution of the NHSC to serving rural communities is undeniable but there is room for improvement. A recent evaluation suggests that the NHSC may need to focus more on loan repayment program as opposed to scholarships in order to meet the needs of underserved populations. (Konrad, 2000) However, scholarships are more likely to improve the participation of students who are financially disadvantaged in the health professions; for over two decades, most medical students have come from families in the top quintile of income.

Individual states have formed similar programs based on the NHSC model with good results. Some states, such as Oklahoma, report retention proportions are much higher than federally administered programs with two-thirds of those who completed an obligation deciding to stay (Lapolla, 2004). A study by Pathman found that program participants indicated that state-designed initiatives under state control better met the needs of their community; locally tailored programs are also more likely to yield lasting results, perhaps because smaller program size allows for more innovation and flexibility (Pathman, 2000). Family physicians, in particular, are critical participants in these programs; however, fewer US medical students are choosing to practice family medicine further worsening access for many populations.

Because over 50% of health care in the US is paid for by public money, government payment policy may also have a role in improving access for rural populations. The Medicare Payment Incentive Program was established in 1987 to retain and attract rural physicians by providing small (and some say insignificant) payment incentives for rural practice. An analysis of the program in 2003 found a declining trend in the use of Medicare bonus payments for physicians serving rural areas (Shugarman, 2003) There are also a number of federally funded programs that seek to make a difference at by improving direct access to care, regardless of ability to pay. Community Health Centers (CHC) are the source of care for many residents. The Federal government also provides support to a number of projects involving CHCs and other community-based organizations focused on improving health care quality and the health status of predominantly minority populations.

### **Creating a Diverse Physician Workforce**

Although about 1-in-every-3 U.S. residents was part of a group other than single-race non-Hispanic white in 2005, minorities are still underrepresented in healthcare, as evidenced by the following (TABLE 1):

**Table 1. Race/Ethnicity of US Population, Physicians, and MD Graduates**

|  | <b>US Medical School Graduates by Race and Ethnicity, 2005</b> | <b>US Physicians by Race and Ethnicity, 2000</b> | <b>2000 U.S. Census Population Estimates</b> |
|--|--|--|--|
| <b>White</b>                                   | 10,023 (63.7%)   | 73.6%  | 69.1%  |
| <b>Asian</b>                                   | 3,111(19.8%)   | 14.9%  | 4.3%   |
| <b>Black</b>                                   | 1,043 (6.6%)   | 4.4%   | 12.1%  |
| <b>Hispanic Origin</b>                         | 935 (5.9%)   | 5.1%   | 12.5%  |
| <b>Native American/Hawaiian Alaska natives</b> | 96 (0.6%)  | 0.3%   | 0.8%   |

*AAMC, AMA, US Census Data. Excludes unknown/multiple race*

Cohen and colleagues suggest that a workforce that resembles its patient population will be more likely to understand the beliefs, biases, and cultural factors important to individual and population health; and that the educational and research environment is enriched by this diversity as well (Cohen, 2002). Indeed, there is evidence that racial concordance between patients and physicians improves quality of care and raises patient’s satisfaction levels (Saha, 1999). Studies have also shown that minority physicians provide care for a large proportion of minorities and the underserved (Saha, 1999). For instance, black and Hispanic physicians care for higher proportions of Medicaid patients (the public insurance system for the poor) and poor patients than their white counterparts (Xu, 1997).

Komaromy et al found that black physicians practice in areas where the percentage of black residents is nearly five times as high, on average, as in areas where other physicians practice. Hispanic doctors practiced in areas where the percentage of Hispanic residents was twice as high as in areas where other physicians practiced. After controlling for racial and ethnic makeup of the community, black doctors cared for more black patients and Hispanic doctors cared for Hispanic patients than did other physicians (Komaromy, 1996). The evidence that minority physicians disproportionately care for minorities and disadvantaged populations has been one reason for trying to improve the participation of these groups in the health professions.

The United States educational community has long sought to improve the diversity of the health care workforce for a variety of reasons. However, attention to health professional education alone is unlikely to significantly impact the composition of the workforce since high school drop-out rates are much higher for blacks and Latinos and far fewer minorities hold bachelor degrees. As a result, many otherwise qualified students never reach the level of education necessary to seek medical school admission. Many efforts to improve diversity in the workforce have come under public assault in the form of legal challenges.

The U.S. Supreme Court ruled in *Grutter v. Bollinger et al.* that race and ethnicity could be considered in the educational admissions process if the practice is “narrowly tailored” and does not violate the constitutional rights of non-minority applicants; however, this recent change in the US legal landscape has made the diversification of the workforce more difficult (IOM, 2004). Despite these challenges, the number of minorities and disadvantaged students in the health professions has grown within medicine, nursing, and public health.

The US federal government has supported a variety of programs to increase educational opportunities in the health professions through the Bureau of Health Professions (Health Resources and Services Administration, Department of Health and Human Services). Federal programs outside of HRSA include those by the National Science Foundation, the Centers for Disease Control and Prevention, the Indian Health Service, and the National Institutes of Health. In addition, numerous decentralized programs operate at the local level and focus on general educational skills through mentoring, counseling, social/scholarship support, and academic intervention. Private foundations, including the Robert Wood Johnson Foundation, the Kellogg Foundation, and the Howard Hughes Medical Institute have also contributed millions of dollars to the effort to improve the diversity of the health care workforce.

Achieving adequate funding for these programs in the public sector has remained an ongoing challenge. For example, federal programs operated under HRSA undergo a yearly budget appropriations process that involves Congress and the Executive Branch. For the past several years, President Bush has proposed major funding decreases or complete elimination of many of these programs with some success; major programs directed towards improving the diversity of the physician workforce under Title VII of the US Public Health Service Act have seen funding cut from \$117 million in FY 2005 to \$64 million in FY 2006 (-46%). The President’s FY 2008 budget proposes that these programs be reduced another 84%, to just \$10 million a year. We detail the major programs below.

- The Health Careers Opportunities Program (HCOP) is the most comprehensive, and includes activities such as counseling, research training, exposure to primary care, and development of the applicant pool. Several professions are targeted, including physicians, optometrists, dentists, pharmacists, and physician assistants. HCOP funding decreased from \$35.6 million (FY 2005) to \$4 million in FY 2006.
- The Centers of Excellence (COE) program is aimed at improving the capacity of health professions schools to train underrepresented groups through grants awarded to schools with significant numbers of these students. COEs establish educational pipelines from the surrounding communities to schools of medicine, dentistry, pharmacy, psychology, and counseling. These grants, which include funds for minority faculty development and student stipends, were decreased from \$33.6 million in FY’05 to \$11.9 million in FY’06.
- The Disadvantaged Faculty Loan Repayment Program (FLRP) awards schools funds to help faculty members from underrepresented/disadvantaged backgrounds to repay educational debt. Its funding has remained stable at approximately \$1.3

- million per year, as have Scholarships for Disadvantaged Students (SDS) at \$47 million.
- Title VIII of the PHS Act includes funding for nursing workforce diversity and has remained stable at \$16 million a year.

## **Conclusions**

The US continues to have large numbers of uninsured and disadvantaged residents who are unable to receive medical care in a timely and appropriate manner. Moreover, the physician workforce will shrink relative to population growth in the next several decades, making access more difficult for those without adequate geographic access. While the nation has made attempts to address access and outcomes issues, it has been unable to address them for a variety of reasons, not the least of which is financial.

Funding for these programs amounts to a small fraction of the \$2 trillion the US spends annually on health care. However, the current fiscal climate in the US is unlikely to stimulate further growth in programs to improve the diversity of the health professions any time in the near future despite the evidence that such programs do have an impact. Improved measurement of outcomes and quality of care may help to shed more light on the importance of public policies that improve access to care for a nation that is becoming more diverse every year.

## **References:**

Agency for Healthcare Research and Quality, "National Healthcare Disparities Report," Rockville, MD:2004

Agency for Healthcare Research and Quality, "Healthcare for Minority Women," Rockville, MD:<http://www.ahrq.gov/research/minority.pdf> (accessed 5 March 2006)

Agency for Healthcare Research and Quality, "Selected Findings from the 2004 National Healthcare Disparities Report," Rockville, MD:2004

Cohen J.J., Gabriel B.A., and Terrell C, "The case for diversity in the health care workforce," *Health Affairs* 21, no. 5 (2002):90-102.

Council on Graduate Medical Education, "Physician Distribution and Health Care Challenges in Rural and Inner-City Areas," February 1998. <http://cogme.gov/10.pdf> (accessed 5 March 2007)

The Henry J. Kaiser Family Foundation, "Race, Ethnicity & Medical Care, 2007." Washington, DC: <http://www.kff.org/minorityhealth/upload/6069-02.pdf> (accessed 5 March 2007)

Freeman G. and Lethbridge-Cejku M, "Access to Health Care Among Hispanic or Latino Women: United States, 2000-2002," <http://www.cdc.gov/nchs/data/ad/ad368.pdf> (accessed 5 March 2006) Advanced Data, Center for Disease Control.

Grumbach K., Vranizan K., and Bindman A.B, "Physician Supply and Access to Care in Urban Communities," *Health Affairs* 16, no. 1 (1997): 71-86.

Komaromy M., Grumbach K., Drake M. et al, "The Role of Hispanic Physicians in Providing Health Care For Underserved Populations," *NEJM* 334, no. 20 (1996):1305-1310.

Konrad T.R., Leysieffer K., and Stevens C, "Evaluation of the Effectiveness of the National Health Service Corps," Bethesda, MD: Department of Health and Human Services, 2000.

Lapolla M., Brandt E.N., et al, "State Public Policy: The Impact of Oklahoma's Physician Incentive Programs," *Journal of Oklahoma Medical Association* 97, no. 5 (2004):190-194.

Lishner D.M., Richardson M., Levine P. et al, "Access to Primary Health Care Among Persons With Disabilities in Rural Areas: A Summary of the Literature," *Journal of Rural Health* 12, no. 1 (1996):45-53.

Mueller K.J., Ortega S.T., Parker K et al, "Health Status and Access to Care Among Rural Minorities," *Journal of Health Care for the Poor and Underserved* 10, no. 2 (1999):230-249.

Pathman D.E., Taylor D.H. et al, "State Scholarship, Loan Forgiveness, and Related Programs," *JAMA* 284, no. 16 (2000):2084-2092.

Rosenblatt R.A. and Hart G.L., "Physicians and Rural America," *Western Journal of Medicine* 173, no. 5 (2000):348-351.

Saha S., Komaromy M., Koepsell T.D. et al, "Patient-Physician Racial Concordance and the perceived Quality and Use of Health Care," *Archives of Internal Medicine* 159, (1999):997-1004.

Shugarman L.R. and Farley D.O., "Shortcomings In Medicare Bonus Payment For Physicians In Underserved Areas," *Health Affairs* 22, no. 4 (2003):173-178.

Smedley B, Stith Butler, and Bristow L, eds, "In the Nation's Compelling Interest: Ensuring Diversity in the Health-Care Workforce". Washington, D.C.: Institute of Medicine, The National Academies Press, 2004

U.S. Census Bureau. State and Country Quick Facts.  
<http://quickfacts.census.gov/qfd/00000.html>

Weinick R.M., Byron S.C. et al, "Who Can't Pay for Health Care?" *Journal of General Internal Medicine*, no. 20 (2005):504-509.

Xu G., Laine C., Velloso J.J. et al, "The Relationship between the Race/Ethnicity of Generalist Physicians and Their Care for Underserved Populations," *American Journal of Public Health* 87, no. 5 (1997):817-822