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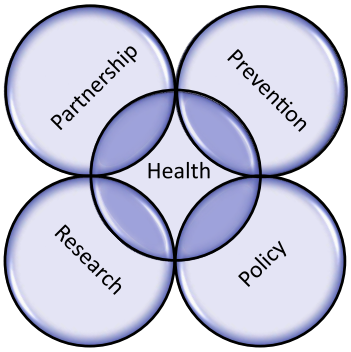

The Role of a Diverse Health Professions Workforce in Reducing Health Disparities

by
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THE ROLE OF A DIVERSE HEALTH PROFESSIONS WORKFORCE IN REDUCING HEALTH DISPARITIES

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EXECUTIVE SUMMARY

The United States consistently demonstrates the greatest disparity in quality of health care measures between rich and poor citizens among industrialized nations. Unlike other countries of the world, health disparities in the United States are clustered by racial/ethnic group. As racial and ethnic minorities disproportionately comprise the lowest levels of socioeconomic position, these individuals receive suboptimal health care. This is of particular concern considering the predicted growth of such populations in the near future. Despite extensive health care expenditures in the United States, minorities and the poor remain vulnerable with regard to health care. Current interest in racially- and ethnically-linked health and health care disparities has spurred several hypothesized solutions. One idea is that mitigation of racial disparities requires greater diversity in the health professions workforce. This report explores various pathways that may link diversity in the health professions to amelioration of disparities. These mechanisms include increased health care access and utilization, increased patient satisfaction, and increased adherence to physician orders related to cultural competence and language proficiency. Eliminating health disparities will require innovative approaches based on policy-relevant research that should address factors at all levels of the social ecological model and translation to policy makers, health care providers, and the community.

INTRODUCTION

For many racial and ethnic minorities in the United States (U.S.), struggling with poor health is a constant challenge, and proper health care is lacking. The demographic changes that are anticipated over the next decade magnify the importance of addressing disparities in health status. By 2050, groups currently labeled as "racial/ethnic minorities" will represent half of the U.S. population.[1] Unfortunately, many major health problems, like cardiovascular disease, infant mortality, and diabetes, disproportionately affect minority groups. Minority populations also suffer from health care disparities, with poorer access to quality medical care and lower insurance rates. These racially- and ethnically- linked disparities in the United States are persistent and well-documented.

Racially-linked *health care* disparities, defined as differences in access to and receipt of high quality health care by race, may be different from racial *health* disparities, which imply different health status by race and ethnicity. Although disparities in both health care and health status are pervasive challenges in the U.S., the causes of each are not easily understood. It remains unclear if improving health care disparities will result in improved health status and reduced health disparities. What is clear, however, is that health disparities and gaps in access to health care are disproportionately experienced by minorities and persons of low socioeconomic position. Thus, with the expected exponential growth of these populations in the U.S., the health care needs of racial/ethnic minorities have become the focus of much recent investigation.

Of late, health disparities have generated much financial and political interest. While the release of the 2002 Institute of Medicine (IOM) report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* detailed severe racial disparities[2] and the subsequent U.S. Department of Health and Human Services' *National Healthcare Disparities Report* (2003) claimed lessened racial differences,[3] support for the elimination of health disparities has largely fallen on political party lines. The elimination of health disparities is an overarching goal of *Healthy People 2010* and thus a suggested priority focus area for the U.S. health care system and research institutions. While the goals have generated much interest among stakeholders and numerous funding investments have focused on alleviating this challenging public health problem, disparities persist and widespread solutions are lacking. The purpose of this paper is to explore the possible contribution of a diverse health professions workforce to reducing health disparities in the U.S.

BACKGROUND

Race as a biologic concept is widely debated. As noted by scholars,[4,5] an overemphasis on race as a biologic concept may lead researchers away from the social and environmental issues that contribute to and maintain racial disparities in the first place. Less than 5% of overall genetic variation in humans can be attributed to race. When health disparities are examined globally, they do not cluster in any racial group, but rather in lower socioeconomic classes.[4] While the modern concept of race is based primarily on phenotypic qualities, both self-reported and observer-reported race characterizations are widely collected demographics. The social connotations of race, especially in the United States, may have more relevance to health care

because race is an important social, economic, and historical marker that contributes to job placement, neighborhood segregation, health, education, and socioeconomic position[6]. As noted in a report to address health disparities, "health disparities are associated with cultural and psychosocial factors related to patient perceptions of health, illness, and the health care system, all of which influence the health care-seeking behavior and are also influenced by structural characteristics of our health care system."[7](p.57) In the United States, these cultural and psychosocial factors are undoubtedly related to race.

Unlike other countries of the world, health disparities in the United States are clustered by racial/ethnic group. In rankings of health care systems by the World Health Organization and the Commonwealth Fund, the United States fares poorly compared to other systems around the world. As noted in a *New York Times* Opinion Poll,[8] a primary contributor to the poor ranking is the issue of *fairness.* On measures of equity, the United States consistently demonstrates the greatest disparity in quality of care measures between rich and poor citizens.[8] As minorities disproportionately comprise the lowest levels of socioeconomic position, these citizens receive suboptimal health care. Despite large health care expenditures in the United States, minorities and the poor remain vulnerable with regard to health care.

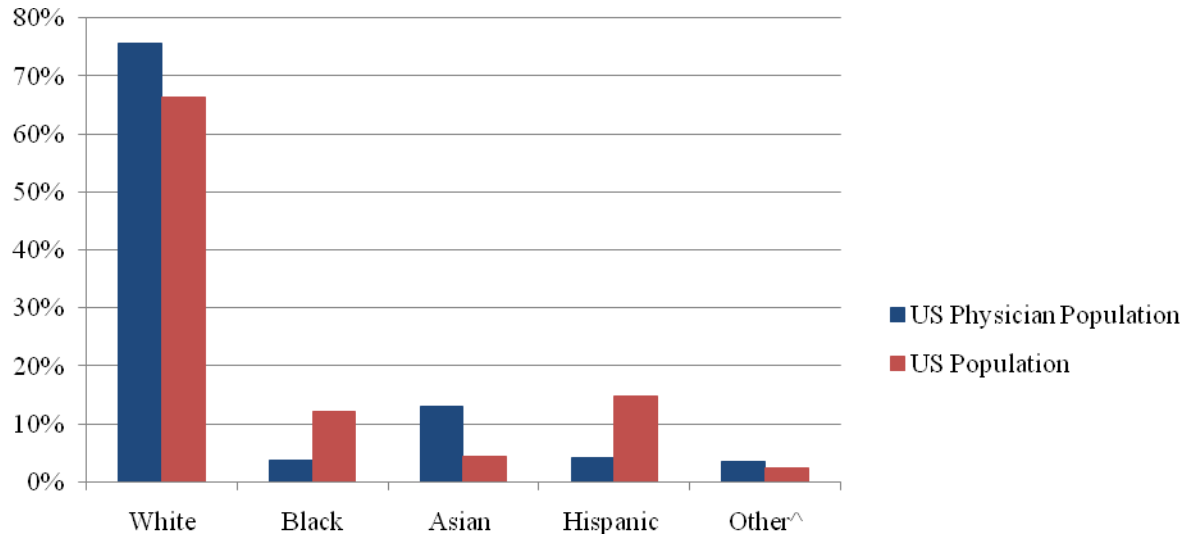
INCREASING DIVERSITY IN THE HEALTH PROFESSIONS WORKFORCE

A growing body of research has documented the contribution of diversity in the health professions workforce to the mitigation of racial disparities.[9-12] This was explored as an important strategy for combating health disparities by IOM's Committee on Institutional and Policy-Level Strategies for Increasing the Diversity of the U.S. Health Care Workforce.

The need to increase diversity in the health professions workforce is evidenced by the racial composition of physicians in the United States; the physician population is not racially representative of the population at large. As of 2006, there were over 940,000 nonfederal allopathic and osteopathic physicians in the United States, for which approximately 60 percent had known race/ethnicity data. Of those with available racial/ethnic identity information, three-fourths were White, 13 percent were Asian, and less than five percent each were African American, Hispanic, or Other. These rates were similar in Texas. Of the physicians with known race, approximately 70 percent were White, 13 percent were Asian, 10 percent were Hispanic, and less than five percent each were African American and Other.[13] While Whites and Asians are overrepresented in the physician population compared to the general population, African Americans and Hispanics are severely underrepresented. It is not possible to extrapolate the known statistics to the 40 percent of physicians that have not reported their race/ethnicity; however, it is not likely that this group of individuals is entirely minority. Data are presented for the United States and Texas in *Figure 1* and *Figure 2*, respectively.

Increasing diversity in the health professions workforce may be viewed as an accepted strategy that is already being implemented and may serve to provide short-term returns in reducing disparities. However, there is currently no empirical evidence to date that directly links increased diversity in the physician workforce to long-term decreased racial health disparities. Data suggest that increasing the number of minority health providers may *indirectly* ameliorate

FIGURE 1. US NONFEDERAL MD/DO PHYSICIANS* VS. US POPULATION BY REPORTED RACE, 2006



Source for Physician Statistics: Kaiser Family Foundation
Source for Population Statistics: US Census Bureau, 2006 American Community Survey
* Includes only those physicians for whom reported race data is available, approximately 60% of the total US physician population.
^ Other category for general population combines American Indian, Native Hawaiian, Pacific Islander, Other, and Combined Races categories that were provided by the US Census Bureau

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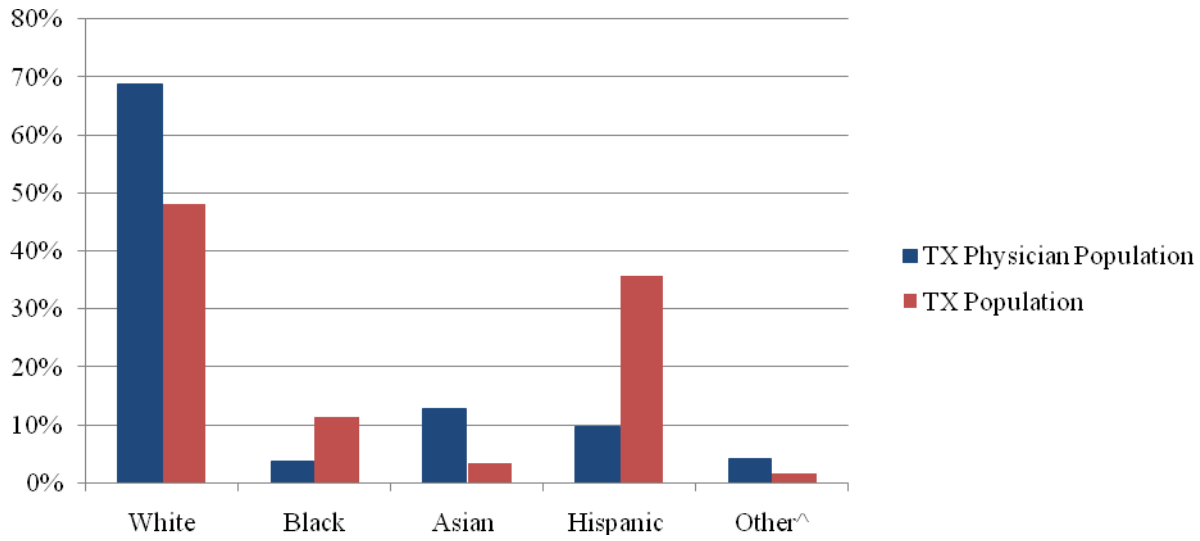
FIGURE 2. TEXAS NONFEDERAL MD/DO PHYSICIANS* VS. TEXAS POPULATION BY REPORTED RACE, 2006



Source for Physician Statistics: Kaiser Family Foundation
Source for Population Statistics: US Census Bureau, 2006 American Community Survey
* Includes only those physicians for whom reported race data are available, approximately 62% of the total Texas physician population.
^ *Other* category for general population combines American Indian, Native Hawaiian, Pacific Islander, Other, and Combined Races categories that were provided by the US Census Bureau

health disparities through increased health care access and utilization, increased patient satisfaction, and increased adherence to physician orders related to cultural competence and language proficiency. Each of these potential pathways is elaborated below.

HEALTH CARE ACCESS

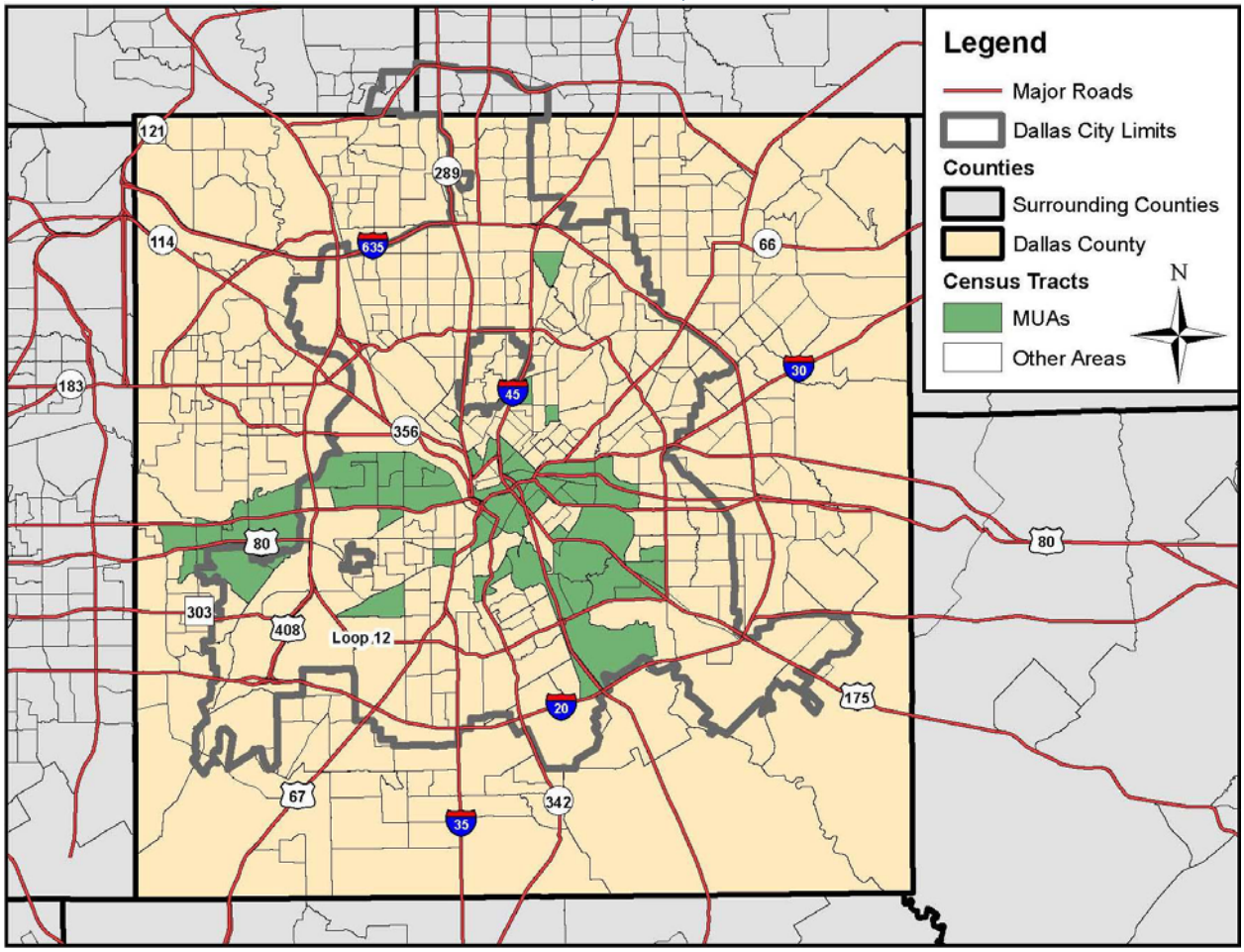
One reason for improving diversity in the physician workforce is to increase access to health care for underserved individuals. Numerous studies have indicated that minority physicians are more likely to serve minority patients in underserved locations. In an analysis of the National Medical Expenditure Survey, investigators found that minority patients were 4 times more likely than non-Hispanic White patients to receive health care from minority physicians.[14] In addition, the study established that non-White physicians were more likely to have minority, medically indigent, and sicker patients than White physicians. Cantor, Miles, Baker, and Barker[15] found similar results. Minority physicians and female physicians were found to disproportionately serve minority, poor, and Medicaid patients. Because the service area of a physician is relatively consistent throughout his or her career, less diversity in the physician workforce could be detrimental to underserved populations. A study that examined service patterns of pediatric residents concluded that African American, Asian, and Latino residents served more patients from their own racial/ethnic groups, even after adjusting for language issues.[16] Komaromy et al.[17] studied the role of African American and Hispanic physicians in providing health care for the underserved. After adjusting for racial proportions by geographic area, the investigators determined that African American and Hispanic physicians were significantly more likely to serve African American and Hispanic patients, respectively. They also found that these minority physicians were more likely to locate their practices in areas with higher proportions of medically underserved residents.

African Americans and Hispanics are underrepresented in the physician population, yet these physicians historically serve primarily minority populations in medically underserved areas (MUAs). These MUAs are geographic divisions in which residents have a shortage of health services.[18] The designation of an MUA is standardized using a weighted score of four variables: the ratio of primary care physicians per 1,000 individuals in the area population, the infant mortality rate, the percent of the population with an income below the federal poverty level, and the percent of the population aged 65 or older.[18] In Dallas County, the evidence of health services shortage is great. MUAs by census tract in Dallas County are presented in *Figure 3* and reveal large areas without appropriate levels of health care access. Because a healthier community has a balanced, responsive, and efficient health care delivery system,[19] increasing the numbers of African American and Hispanic physicians in the health care workforce on many levels – in Dallas, Texas, and the United States – may lead to healthier communities through the health care delivery system access.

UTILIZATION AND SATISFACTION

Increasing diversity in the health professions workforce is also essential to enhance choice of providers by patients. Although not all patients have a preference for the race of their health care provider,[20] most patients will choose a provider of their own racial or ethnic background when given a choice. Among patients who do prefer racial/ethnic concordance, there is some evidence

FIGURE 3. MEDICALLY UNDERSERVED AREAS (MUAS) OF DALLAS COUNTY, 2007



to support that concordance has a positive effect.[21] Minority patients who select racially concordant health care providers report greater satisfaction with the care they receive compared to minority patients in racially discordant situations.[22] LaVeist, Nuru-Jeter, and Jones[23] examined the association between physician-patient racial concordance and health services utilization. Compared to patients in racially discordant situations, patients who were of the same race as their physician were more likely to obtain necessary health services, less likely to delay seeking care, and more likely to report a higher volume of overall health services. Even after adjusting for other variables of health care utilization, this pattern was observed for African American patients. Similarly, Saha, Komaromy, Koepsell, and Bindman[24] found that African American patients with African American physicians were more likely than those with non-African American physicians to report receiving preventive care and all needed health care in the previous year.

CULTURAL COMPETENCE AND TRUST

Within the provider-patient relationship, the importance of cultural competence may provide further support for increased diversity in the health professions workforce. Cultural competence

is defined as "the knowledge, skills, attitudes, and behavior required of a practitioner to provide optimal health care services to persons from a wide range of cultural and ethnic backgrounds."[25](p.92) This trait may be one aspect of racial concordance – a provider likely has a stronger understanding of the belief systems, family structures, and social norms of his/her racially concordant patients.[25] In fact, because cultural competence is difficult to measure empirically, it is often defined, for research purposes, as racial concordance. It is important to note, however, that racial concordance is not necessary for a health professional to achieve cultural competence. In fact, by definition, cultural competence suggests that providers are able to understand and properly treat racially discordant patients. Despite these measurement difficulties, studies have shown that cultural competence is likely an important part of the provider-patient relationship. As a more distal solution to increasing cultural competence, diversifying the student body of academic institutions will allow increased exposure to different cultures and is intended to create a climate that embraces diversity.[26]

Cultural competence is highly valued by patients[16] and has garnered much attention recently from policymakers, insurers, and educators as a potential tool to reduce health disparities.[10] Organizations including the American Medical Association, the Association of American Medical Colleges, and the American College of Healthcare Executives have launched cultural competence initiatives to inform their constituencies. Cultural competence was also highlighted, along with patient-centered care, in two recent Institute of Medicine reports- Crossing the Quality Chasm and Unequal Treatment- as potential contributing factors to eliminating disparities.[27, 28] A patient's level of trust with his or her health care provider may be an important factor for patient adherence to provider orders, which may again reflect overall racial concordance or cultural competence. Cooper-Patrick et al.[29] reported that African American patients in racially concordant health care situations rated their health care as more participatory and satisfactory. In addition, Saha, Komaromy, Koepsell, and Bindman[24] found that African American patients with African American physicians were more likely to rate their physicians as excellent, compared to those with non-African American physicians. In a sample of HIV positive individuals, Sohler, Fitzpatrick, Lindsay, Anastos, and Cunningham[30] reported that racially concordant physician-patient relationships lowered patient mistrust in the health care system. While cultural competence is difficult to measure, these studies imply the importance of cultural competence on the part of the physician. With the predicted exponential growth of minority populations in the United States, it is critical to diversify the health professions work force in order to increase levels of cultural competence. A recent examination of the inclusion of cultural competence in U.S. graduate medical programs found that 50.7 percent offered cultural competence training in some form in 2003-2004, up from 35.7 percent in 2000-2001.[31]

COMMUNICATION AND LANGUAGE

Another convincing rationale for racial concordance is effective communication and language proficiency. The Commonwealth Fund[32] reported that, on average, 1 in 5 Americans have difficulty communicating with their physician, with even higher rates for minority populations. The quality of patient-provider communication predicts patient satisfaction, adherence to provider instructions, and health status.[33] Barriers in communication are related to poor utilization, satisfaction, and adherence to physician orders.[34] Derose and Baker[35] examined Latinos of limited English proficiency and found that compared to native English speakers, those

with limited English proficiency reported 22 percent fewer physician encounters even after for adjusting for other determinants of health care utilization. Adjusted rates showed limited English proficiency was associated with fewer physician visits, no health insurance, poor health, and no regular health care. Woloshin et al.[36] examined language as a primary determinant of health screening utilization in Canada. After adjusting for socioeconomic position and cultural differences, investigators found that compared to English speakers, French-speaking women were significantly less likely to receive clinical breast exams, mammography, or Pap testing. The study concluded that women who spoke a non-English language at home were less likely to receive preventive services, and that improvement in communication may enhance utilization of screening services in a non-English speaking population.

QUALITY OF CARE

Provider behaviors such as prejudice or bias may also contribute to racial and ethnic health/ health care disparities. Van Ryn[37] proposes that both conscious and unconscious (i.e., stereotyped) beliefs about a patient influence the clinical decision-making of the physician, which then determines the treatment of the patient. Validation of the link between provider beliefs/behavior and patient race/ethnicity is needed to further study this hypothesis; however, there is a limited but growing body of research to suggest that health care providers contribute to inequities by providing unequal care for different racial groups. Johnson, Saha, Arbelaez, Beach, and Cooper[38] reported racial/ethnic differences in patient perceptions of received care. After adjusting for confounding variables, African American, Hispanic, and Asian patients perceived that they would have received better medical care if they belonged to a different racial/ethnic group and that they were treated unfairly because of their race/ethnicity. In a study that evaluated coronary artery bypass graft surgery recommendations, van Ryn, Burgess, Malat, and Griffin[39] found that race was a significant predictor of surgery recommendations among male patients, independent of clinical characteristics and payer status. King, Wong, Shapiro, Landon, and Cunningham[40] found that African American patients with racially concordant physicians received protease inhibitors for HIV care much earlier than African American patients with white health care providers. Green et al.[41] examined implicit bias among physicians using an internet-based tool comprised of a clinical vignette, questionnaire, and Implicit Association Test. Among the sample of emergency medicine residents in two geographic locations, results indicated that physicians had no conscious racial preference in response to the questionnaire. However, the Implicit Association Test revealed that Whites were unconsciously favored over African Americans, who were stereotyped as less cooperative with health care procedures.

In sum, conscious and unconscious beliefs and behaviors of providers impact patient perceptions and experiences of care. These examples provide support for racial concordance through increased diversity in the health care workforce.

CONCLUSIONS

Health and health care disparities remain persistent, insidious challenges of major public health importance in the United States. While continued biologic and genetic research is needed, solutions to racially- and ethnically-linked disparities will only be understood from a

multidisciplinary approach that includes behavioral sciences, social sciences, and environmental influences.[22] Collaborations with external agencies and the community are vital to ameliorating health and health care disparities in the United States. In particular, minority communities must be partners in the disparity reduction strategy.[22] Community-based participatory research, which involves the empowerment of the community and key stakeholders, is essential for future policy-relevant health disparities research.

It has been estimated that at least one half of all racially-linked health disparities cannot be explained by differences in health care access and utilization alone.[2] Therefore, increasing health care access and utilization through minority physicians who serve minority populations may reduce, but will likely not eliminate, health disparities. Results of increased diversity have not yet had the necessary observation time to prove long term viability as a solution to disparities. Furthermore, even with a longer time period, it may be difficult to accurately capture the true effect of diversity.

Although the entirety of racially-linked health disparities cannot be explained by a lack of diversity in the health care workforce alone, data suggest that increasing diversity would improve the health care experience for the most vulnerable populations by increasing patient access, utilization, satisfaction, and quality of care. Consistent support for diversity in the form of recruiting underrepresented minority- especially Hispanic and African American students and underrepresented faculty members to academic institutions is needed.[26] In addition, cultural competence should be at the heart of medical school curricula. The HRSA-funded Area Health Education Centers (AHECs) are uniquely positioned to support this strategy. AHECs bring together academic institutions and community-based organizations to train health care providers in State- and local-specific issues and to attract students into health professions careers.

Eliminating health disparities will require innovative approaches based on research that should address factors at all levels of the social ecological model, dissemination to appropriate partners, and translation to policy makers, health care providers, and the community. Ultimately, diverse perspectives and a long-term vision for change may improve the health experience in the United States by changing policies that continue to sustain racial inequities in health.

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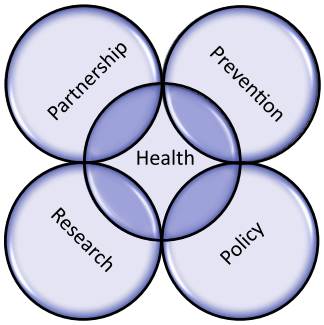

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Center for COMMUNITY HEALTH

at UNTHSC

The vision of the Center for Community Health is to foster healthy, vibrant communities. In partnership with community organizations, we conduct policy-relevant health research and enhance community capacity to promote health. The Center strives to translate research into practice and policy, eliminate health disparities in the North Texas area, and create replicable models of change to improve population health in our nation. The Center for Community Health is a partnership between the J. McDonald Williams Institute and the University of North Texas Health Science Center.

THE J. MCDONALD WILLIAMS INSTITUTE

The J. McDonald Williams Institute takes a holistic approach to understanding and examining the complex issues faced by the residents of distressed urban communities. Our atypical research strategy is centered around the concept of quality of life. We utilize the interdisciplinary perspectives of six focal areas—Education, Crime and Safety, Health, Housing, Social Capital, and Economic Development—to underpin our research initiatives. Yet we recognize that the many strands woven into the fabric of community do not exist independently, and so we must study them as they are—linked to one another in ways we do not fully appreciate. Because quality of life is multi-dimensional, we know that the solutions that will improve it must also be multidimensional. The Institute not only seeks to better understand the mechanisms by which indicators of quality of life interact with each other, but also to apply that understanding to generate lasting revitalization across all dimensions of quality of life in distressed urban neighborhoods. *www.thewilliamsinstitute.org*

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UNIVERSITY of NORTH TEXAS HEALTH SCIENCE CENTER at Fort Worth

Education, Research, Patient Care and Service

The University of North Texas Health Science Center, Fort Worth's medical school and more, is one of the nation's distinguished graduate academic health science centers, dedicated to education, research, clinical care and community engagement. It comprises the Texas College of Osteopathic Medicine (TCOM), the Department of Physician Assistant Studies, the Graduate School of Biomedical Sciences, the School of Public Health, and the School of Health Professions. UNT Health, the TCOM faculty practice program, provides direct patient care in 33 clinics across Tarrant County.

In 2007, TCOM was named a top 50 medical school in primary care by U.S. News and World Report for the sixth consecutive year. The institution contributes almost $500 million to Tarrant County and Texas economies annually. *www.hsc.unt.edu*

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