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CENTER FOR URBAN HEALTH RESEARCH
RESEARCH BRIEF
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Partnering with the community to reduce health disparities

Can Dallas Achieve Health Care Equity?

Central Dallas Ministries-Community Health Services

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Health inequity has been a growing concern in the United States. Social disparities have resulted in increased morbidity and mortality as well as unnecessary suffering for certain segments of our population.

Health inequities can be seen by viewing the differences in life expectancy and infant mortality rates for different subpopulations. These differences are not viewed simply as health care issues, but also as social justice issues.

INTRODUCTION

Health disparities are defined by health care delivery and health outcomes that vary significantly between individuals' distinctive personal characteristics:

1) Race/ethnicity
2) Age
3) Gender
4) Income and education (e.g., socioeconomic status, or SES)
5) Other personal characteristics (e.g., primary language skills)

Defining the health of a population, whether a county or country, can be determined with two metrics: life expectancy and infant mortality. When these and other metrics are reported and compared across the above five variables, troubling messages emerge.

> ***The United States is not fulfilling its promise of equality and justice. … If we are to achieve justice in health and health care, the U.S. health leadership must consider a major transformation that addresses variation across these five variables.***

The U.S. Department of Health & Human Services (HHS) has set the goal of eliminating health disparities by the year 2010 (HHS, n.d.). There are three key interrelated dimensions to consider when contemplating the improvement in health disparities (U.S. Department of Health & Human Services Agency for Healthcare Research and Quality, 2004, p.20):

1) Access to health care services
2) Quality of health care delivery
3) Health outcomes

To continue progress already attained related to achieving the HHS goal of eliminating disparities, we must identify and address the multitude of environmental, social, and individual factors that impact the three dimensions of inequity. For instance, a number of social conditions have been shown to affect health outcomes. At the individual level, socioeconomic factors such as low income, lack of education, unemployment, minimal social support, and stressful living and working conditions have all been associated with increased odds of morbidity and mortality. Additionally, many environmental factors have been associated with higher rates of disease throughout a population. For example, researchers have found that communities with poor transportation, limited availability of nutritious foods, inadequate housing, poor social cohesion, or high rates of poverty have increased chronic diseases when compared with communities living without these factors (Marmot & Wilkinson, 1999). Such matters must be addressed if we are to reach the HHS goal of eliminating health disparities by 2010.

Another important concern related to health disparities is a lack of access to quality health care. In the United States, access to health care is intimately linked to health insurance. According to the National Health Insurance Survey, approximately 14.5% of the U.S. population were uninsured between January and March 2006. This included 9.3% of children, 58.0% of unemployed adults, and 22.0% of employed adults (Hampton, 2006). In Texas, uninsured rates were even higher, with 24.6% of Texans lacking health insurance—the highest rate in the nation (U.S. Census Bureau News, 2006).

Traditionally, the assumption has been that the uninsured have access to care through hospital emergency departments and that nonprofit hospitals and clinics provide a safety net to the poor, uninsured population. The American Hospital Association reported that $25 billion was spent by hospitals on uncompensated health care in 2004 alone (Weissman, 2005). Nonprofit hospitals are not able to keep up with this growing need.

To truly improve health outcomes for the poor, individuals must receive comprehensive primary care and prevention, not simply access to acute care through hospital emergency departments. Many of the most common causes of hospitalization in Dallas—such as bacterial pneumonia, chronic obstructive pulmonary disease, congestive heart failure, and diabetes—are diseases that could be prevented or controlled if patients had access to complete primary care (Parkland Health and Hospital System, 2005).

For example, blood glucose testing and proper nutrition could help patients with diabetes control their health and prevent hospital admissions. Without such measures, diabetes can lead to severe complications, including blindness and loss of limbs, which may require emergency hospital care. These preventable complications place a heavy burden not only on the individuals who experience them, but also on society as a whole, through increased health care expenses, lost productivity, and other personal costs.

Fortunately, there are new and innovative models of health care focused on access for the uninsured population of Dallas. One example is Central Dallas Ministries' Com-

munity Health Services (CDM-CHS), which provides quality primary health care for the indigent and uninsured individuals in an attempt to reduce health disparities while limiting the uncompensated health care delivery burden placed on hospitals.

HISTORY & BACKGROUND

The development of Central Dallas Ministries' Community Health Services (CDM-CHS) is founded upon the strength of its parent organization, Central Dallas Ministries (CDM). CDM is a large faith-based community social service agency in Dallas that serves financially distressed communities primarily in South and near East Dallas. Services include emergency food and shelter, after-school programming, computer technology training, affordable housing, health care, legal aid, community-based health improvement, and spiritual development. The health care dimension of these services has experienced the most rapid growth, buoyed by the changing marketplace demands of the uninsured.

CDM-CHS utilizes a community-based health improvement strategy that includes a primary care health clinic with a sliding fee schedule, a part-time dental clinic, a Class D pharmacy, community care coordination and case management, community health promotion, community health advocacy, and chronic disease management. Under development since 1998, CDM-CHS has enjoyed a strong collaborative relationship with the Baylor Health Care System (BHCS) and its physician organization, Health Texas Provider Network (HTPN). Through the Office of Community Health Improvement at HTPN, Central Dallas Ministries' senior leadership has partnered to develop a robust approach to improving community health improvement. Originally conceptualized to increase access to affordable primary health care services through professional volunteerism, CDM-CHS has matured into a multifaceted community health improvement strategy.

The organization's vision statement is:

> *CDM-CHS will strive to provide faith-based, quality, affordable, preventive, and episodic health care services to the working poor, while creating opportunities for healthier communities to develop among the neighborhoods we serve.*

CDM-CHS has the following diverse menu of services, consisting of the following:

- ***Community Medical Clinic*** – The full-time primary health care clinic enlists three full-time family physicians and support staff to serve uninsured patients who find health care difficult to negotiate or who are referred from Baylor University Medical Center's emergency department and inpatient units. Operating from two sites, these Community Medical Clinics also provide a platform for professional medical volunteerism to increase patient care capacity in the community and innovation in health care delivery research to address equity in health outcome disparities.
- ***Community Chronic Disease Management*** – Collaborating with Baylor University Medical Center's Ruth Collins Diabetes Center, the program focuses on training community health workers to augment care and management of patients with chronic illnesses (e.g., diabetes).
- ***Community Care Coordination (CCC)*** – Closely aligned with Project Access Dallas (PAD), the CCC focuses on training and utilizing community health workers (CHWs), who assist patients with navigation of the health care delivery system, increasing adherence and compliance when patients need tertiary care referrals or home health care.
- ***Community Pharmacy*** – Collaborating with the Texas Tech University School of Pharmacy, CDM-CHS operates a Class D pharmacy, which provides patients with critically needed medications at affordable prices to better manage acute and chronic illnesses.
- ***Community Dentistry Clinic*** – Through the part-time dental clinic, CDM-CHS provides dental care to patients through the services of two part-time employed dentists, while also creating a platform for professional dental volunteerism to increase patient care capacity and oral health prevention programs.
- ***Project Access Dallas (PAD)*** – Collaborating with the Dallas County Medical Society, Dallas-Fort Worth Hospital Council, and HTPN, PAD works to connect patients with medical specialists, radiology, laboratory, pharmacy, care coordination, and hospital services.
- ***Vulnerable Patient Network (VPN)*** – The VPN focuses on providing in-home care for CDM-CHS homebound patients with complex clinical conditions that prohibit them from visiting the medical clinic. All VPN patients have CDM-CHS Community Care Coordinators (CCCs)—Community Health Workers (CHWs) who play a critical role in providing them with a continuum of care.

In addition to Central Dallas Ministries and Baylor Health Care System, many other community organizations participate in this effort. These include the following :

- Central Dallas Ministries: Food Pantry, Legal Action Works Center, CDM Works

- East Dallas Health Clinic: A Parkland Community Oriented Primary Care (COPC) Clinic
- Dallas Housing Authority: Roseland Homes
- Texas Tech University School of Pharmacy
- Dallas County Medical Society: Project Access Dallas
- Preston Road Church of Christ: Christ Family Clinic

Communities with poor transportation, limited availability of nutritious foods, inadequate housing, poor social cohesion, or high rates of poverty have increased chronic diseases when compared with communities living without these factors.

RESULTS

CDM-CHS had 7,300 patient visits and served approximately 1,600 patients between January and June 2006, the majority of whom were Hispanic/Latino (80%) and African American (11%). They were mostly adults between the ages of 25 and 64 (78%) and female (69%). Although most patients came from Southeast Dallas (zip codes 75217 and 75227) and East Dallas (zip codes 75204, 75223, and 75228), residents from many areas of Dallas and neighboring counties utilized CDM-CHS services (see Figure 1).

CDM-CHS measures its progress related to improving health disparities for the working poor across three dimensions:

1. Quality – Receipt of adult preventive health services
2. Service – Patient satisfaction with health care delivery
3. Finance – Reduction in the utilization of hospital emergency departments

Central Dallas Ministries' community health improvement strategy compares favorably across the three progress dimensions when compared with Baylor Health Care System's Health Texas Provider Network (HTPN) private physicians' practices. HTPN is a network of approximately 400 primary and specialty care physicians across the Dallas–Fort Worth metropolitan area. In fiscal year 2006, the HTPN network had 1,183,097 patient visits.

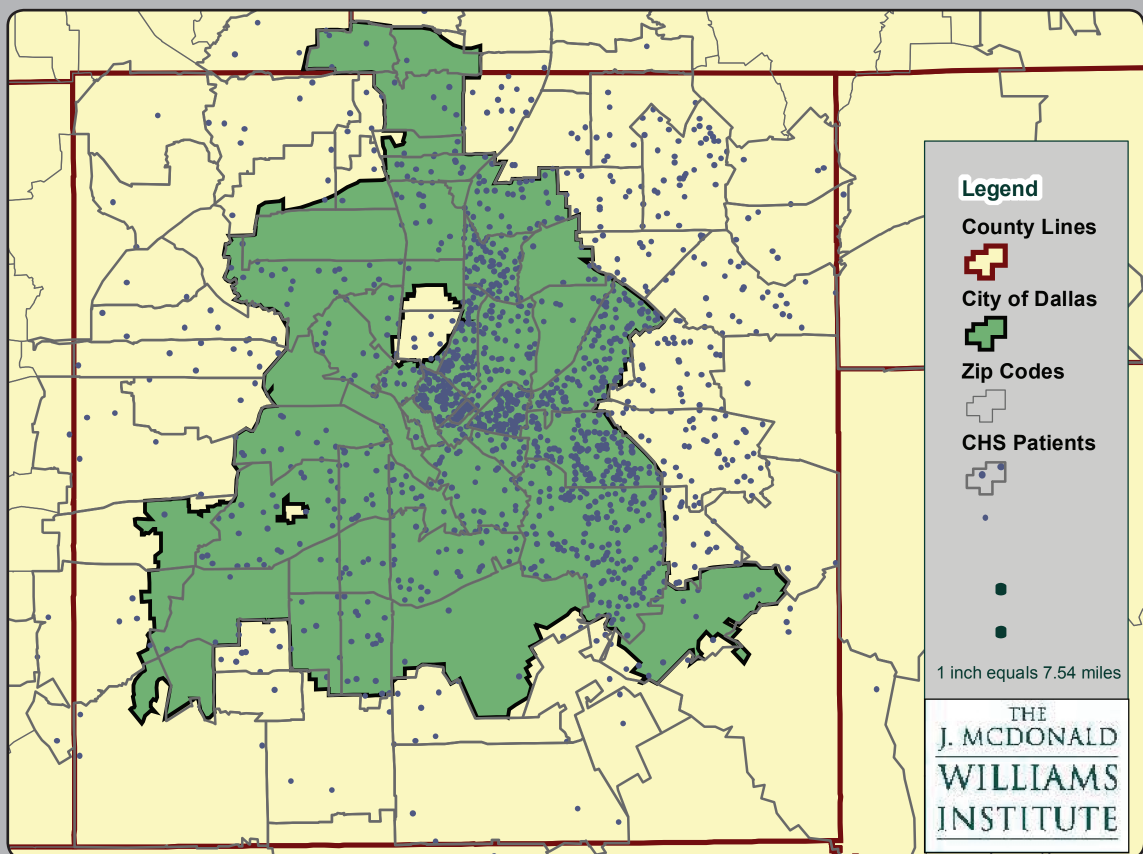

Figure 1. Distribution of Patients Visiting CDM-CHS – Dallas County, January–June 2006

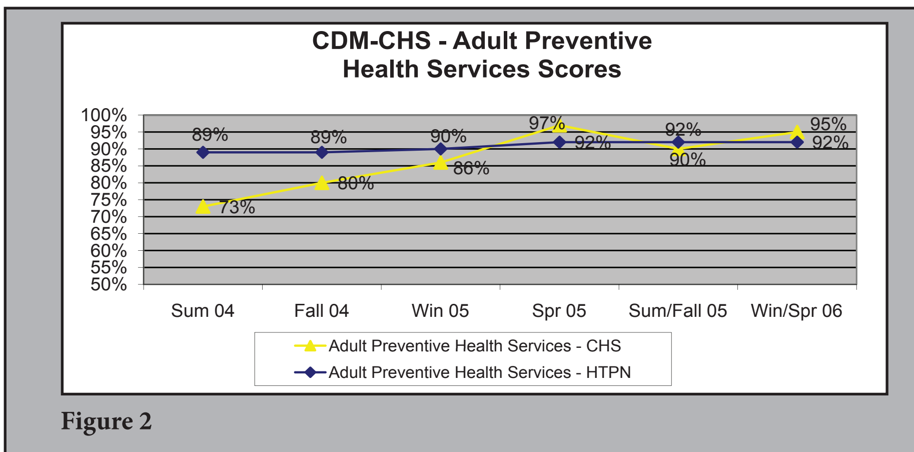

Figure 2

The majority of HTPN practices serve patient populations with much lower proportions of uninsured, self-pay patients than does the CDM-CHS medical clinic. CDM-CHS demonstrates very competitive results across all three dimensions with its exclusive self-pay, indigent population (see Figures 2 and 3).

Quality: Adult Preventive Services

Quality is tracked and managed according to the percentage of patients who are informed of and receive preventive procedures as outlined by the U.S. Preventive Services Task Force (PSTF). These recommended preventions include screenings for hypertension, hypercholesterolemia, tobacco use, colorectal cancer, breast cancer, and cervical cancer, and adult vaccines for pneumonia and tetanus. Recommendations and frequency are based on the patient risk profile as outlined by the PSTF task force. The patient profile is aligned with these parameters to produce an "Adult Preventive Health Service Score," which is a management tool used to track quality by aggregating these various dimensions.

CDM-CHS demonstrates very competitive results across all three dimensions with its exclusive self-pay, indigent population.

For the 6-month period ending in June 2006, CDM-CHS achieved a score of 95%, while HTPN had a 92% score for the percentage of qualifying patients receiving recommended preventative health services (see Figure 2).

Service: Patient Satisfaction

Service is managed and tracked according to patient satisfaction surveys, in which both the physician and front office staff are evaluated. The instrument used to track satisfaction is an HTPN tool that measures patient perceptions across the following areas:

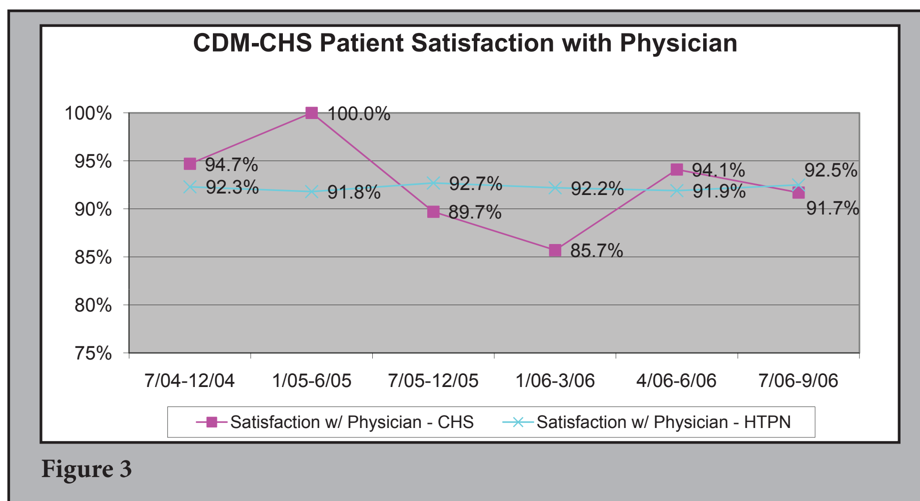

Figure 3

- Access to care
- Experience of the visit
- Care provider
- Personal issues
- Overall experience

As shown in Figure 3, CDM-CHS patients reported a physician satisfaction rate (91.7%) that compared favorably to patients within HTPN practices (92.5%).

Finance: Utilization of Emergency Departments

The financial impact of CDM-CHS has been considerable and has been measured by the rate at which its

patients utilize the hospital emergency department (ED). It has been common for individuals without health insurance coverage to use EDs for episodic primary care—a very expensive and inequitable model for delivering health care services. By providing a "medical home," with access to affordable primary health care and a voluntary referral network for specialty care, CDM-CHS has helped to reduce unnecessary visits to local emergency departments for primary care needs.

Figure 4 comprises the 2006 emergency department utilization from approximately 800 CDM-CHS patients who initiated care at CDM-CHS during the previous calendar year (2005). The CDM-CHS patient population's utilization was also compared to a "background" population from a community of 12 zip codes. While the "background" population's utilization remained consistent, the CDM-CHS patient population's ED utilization fell 18.6%.

By providing a "medical home," with access to affordable primary health care and a voluntary referral network for specialty care, CDM-CHS helps reduce unnecessary visits to local emergency departments for primary care needs.

CDM-CHS financial impact is also tracked according to the following industry-tracked variables:

- **Cost per Emergency Department (ED) Visit** – Provides an important snapshot of the cost incurred in each ED visit with the CDM-CHS population when compared with a similar population. The comparative population is based on zip codes with similar socioeconomic status. The variable is significant in that it can provide a snapshot of the financial impact of keeping patients from utilizing the ED for their primary care.

- **Admission Rate (per 1,000)** – Contributes a snapshot of the frequency with which the CDM-CHS population is actually admitted to the hospital through the ED. The population served by CDM-CHS, as with most indigent populations, does not have access to a primary care physician, which necessitates that these patients use the ED for primary care. A high admission rate through the ED is an indicator of lack of access to a continuum of care that includes access to a primary care physician.

- **Average Length of Stay (ALOS)** – Supplies a snapshot of how long a patient must stay in the hospital after admission, which for the CDM-CHS population will be through the ED. The ALOS variable is a financial indicator; hospital costs can be easily compared using the cost per day metric, as well as equity. A sample population with a high ALOS is an indicator of inequitable access to a continuum of care.

In Figure 5, the CDM-CHS population's average ED visit cost is also noted to decrease 14% after establishing access to the primary care "medical home" at CDM-CHS, while the "background" population's costs remained essentially constant.

As presented in Figures 6 and 7 (see page 7), the hospitalization rate for CDM-CHS patients fell approximately 10.5% after accessing CDM-CHS as a medical home, while the average length of stay in the hospital fell by 20.6%. Both of these findings suggest that the primary care "medical home" provided by CDM-CHS may decrease the acuity of illnesses of participating patients, decreasing the need and length of time for hospitalization.

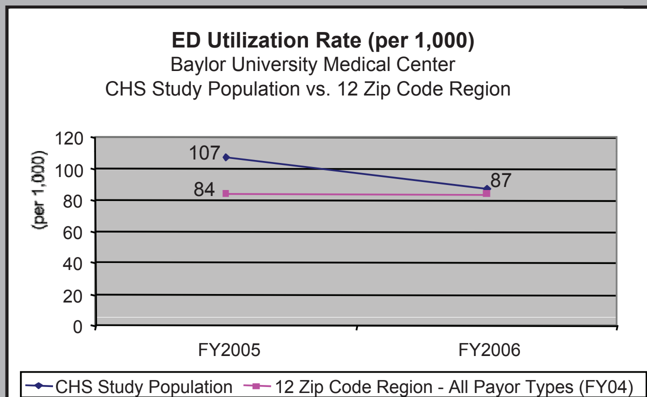

Figure 4

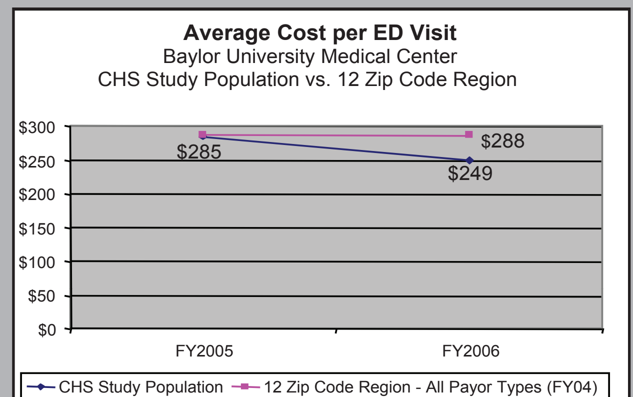

Figure 5

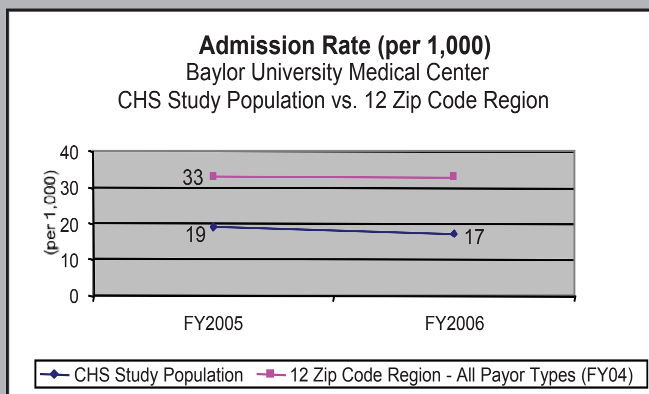

Figure 6

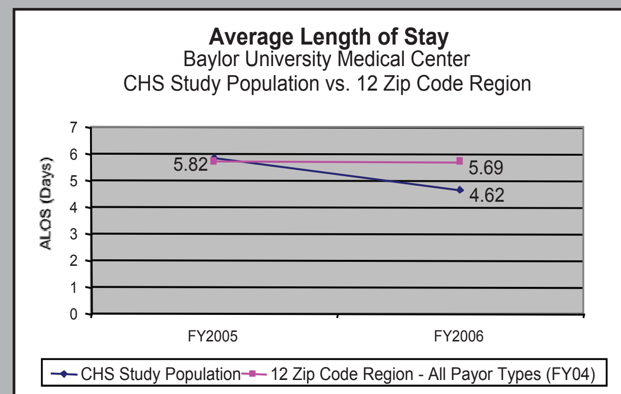

Figure 7

SUMMARY

Armed with robust outcome measures, CDM-CHS will continue its aggressive approach to community health improvement, making strategic investments in operating strategies that can be leveraged for an even higher return on investment.

The need for and timeliness of CDM-CHS's community health improvement strategy can be viewed from multiple perspectives: local, state, and federal government; local business and health care delivery; community social service agency; or the individual level. However, the one enduring perspective CDM-CHS has come to understand is that of vulnerable community residents. The following account illustrates this:

A few weeks ago, I saw two patients in the volunteer community clinic operated by Central Dallas Ministries-Community Health Services. The first had been discharged from one of our local hospitals after a 4-day stay. He had been admitted for severe dehydration and malnutrition after going to the emergency department when he became too weak to eat or drink. His medical history would lead even the most junior physician to know the diagnosis was most likely esophageal cancer with a severe obstruction that limited the intake of both solid and liquid nutrition. He was treated with intravenous fluids and, prior to discharge, a minor surgical procedure was performed to place a feeding tube into his stomach to bypass the esophageal obstruction and enable him to receive nutrition and fluid at home. His discharge plan was rather simple: referral to our public hospital, Parkland, for biopsy and treatment of what was most assuredly a cancerous lesion. I saw him in the interim period because he couldn't afford the liquid nutritional supplement that was prescribed and he was becoming weak from recurrent malnutrition and dehydration, as well as a side effect to the blood pressure medication that he was prescribed. When I saw him, he weighed 97 lbs (5 ft. 10 in. tall) and his blood pressure was dangerously low (80/45). He was unable to swallow, and his caregiver (a distant cousin) had run out of funds to buy the liquid nutritional supplement and was buying ice cream so that she could melt it and put it into the feeding tube for nutrition. My diagnosis was malnutrition, dehydration, and a side effect of the blood pressure medication he was still taking. Amazingly, our clinic had a week earlier received a donation of four cases of liquid nutritional supplement that we were more than happy to give to the patient until he was able to be seen at the public hospital. I saw him two more times in follow-up as his condition improved slowly.

The second patient had been discharged from a similar facility a couple of months previously after being treated for a painful compression fracture of her spine. She had been treated for several years in the same facility's asthma center while she had health insurance. The medication to control her severe asthma had adversely damaged her bones, causing osteoporosis, back pain, and ultimately a spontaneous fracture. While she was in the hospital, her pain was brought under control with medication and a surgical procedure to stabilize her spine. However, after discharge from the hospital, she was unable to obtain the medications for her asthma and osteoporosis because she had lost her job and health insurance. Incidentally, she also lost her opportunity to return to the asthma center because of her lack of insurance. When I saw her, she had run out of pain medication and was close to running out of asthma medication. Her asthma was well controlled, but her back pain was causing severe disability. We were able to assist her with obtaining pharmaceutical assistance through the patient assistance programs of the pharmaceutical manufacturers for her medications. Within two weeks of restarting her medications, her quality of life had improved significantly, avoiding the need for an antidepressant medication that she declined.

-Jim Walton, D.O., Volunteer Physician, CDM-CHS

Health inequities can easily be seen by viewing the differences in life expectancy and infant mortality rates for different subpopulations. These differences are not viewed simply as health care issues, but also as social justice issues.

DISCUSSION & CONCLUSION

Central Dallas Ministries' Community Health Services (CDM-CHS) provides a medical home for the working uninsured across Dallas, profoundly impacting the lives of CDM-CHS patients and their families. However, evaluation and discussion of the success of CDM-CHS must include moving "upstream" and examining which social, political, and economic power structures necessitate its very existence.

In 1943, President Franklin D. Roosevelt proposed a "Second Bill of Rights" for Americans, declaring "freedom from want" to be an essential liberty necessary for human security. His definition of freedom included the right to adequate medical care and the opportunity to achieve and enjoy good health (Rosenman, 1950).

The right to health subsequently enshrined in the Universal Declaration of Human Rights adopted by the United Nations in 1948. Article 25 states, "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, and medical care. … Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection" (United Nations, 1948).

This declaration, adopted at the urging of the United States and President Roosevelt, seems to reflect the sentiments of our founding fathers as well. However, current federal policy largely disregards the spirit of both of these declarations.

Current evidence indicates that this is not simply a capital allocation issue; the United States spends far more per capita on health care than the rest of the world; in 2002, the United States spent 53% more than any other country (Anderson, Hussey, Frogner, & Waters, 2005). Our nation's health policy relates to a "segmentation issue." That is to say, for certain segments of the population, the United States has some of the poorest health indicators in the industrialized world.

The United States is the only industrialized nation not to offer its citizens universal access to medical services (Battista & McCabe, 1999). Mexico, South Africa, and Thailand are among nations attempting to implement some form of health care coverage for all their citizens.

The success of organizations like CDM-CHS may be celebrated; however, one must not lose sight of why special places like this need to exist. Collective apathy toward certain segments of citizenship is the driver of this demand. Providing access to equitable, quality health care for the most vulnerable populations is defined by many in the international community as a fundamental human right.

REFERENCES

Anderson, G., Hussey, P., Frogner, B., & Waters, H. (2005). Health spending in the United States and the rest of the industrialized world. *Health Affairs, 24,* 903–914.

Battista, J. R., & McCabe, J. (1999, June 4). The case for single payer, universal health care for the United States. Simsbury, CT: Connecticut Coalition for Universal Health Care.

Hampton, T. (2006). Health insurance coverage. *JAMA, 296*(20), 2429.

Marmot, M., & Wilkinson, R. (Eds.). (1999). *Social determinants of health*. Oxford: Oxford University Press.

Parkland Health and Hospital System. (2005). *2005 Dallas County community health checkup*. Retrieved February 7, 2007, from http://www.dfwhc.org/about+dfwhc/documents/DCNA2005.pdf

Rosenman, S. (Ed). (1950). The public papers and addresses of Franklin D. Roosevelt (Vol. 13, pp. 40–42). New York: Harper.

U.S. Census Bureau News. (2006, August 26). Income climbs, poverty stabilizes, uninsured rate increases. Washington, DC: U.S. Department of Commerce. Retrieved January 6, 2007, from http://www.census.gov/Press-Release/www/releases/archives/income_wealth/007419.html

U.S. Department of Health and Human Services (HHS). (n.d.). Healthy People 2010: What are its goals? Retrieved December 13, 2006, from http://www.healthypeople.gov/About/goals.htm

U.S. Department of Health & Human Services Agency for Healthcare Research and Quality. (2004, July). *National healthcare disparities report*. Retrieved March 1, 2007, from http://www.ahrq.gov/qual/nhdr03/nhdr03.htm

United Nations. (1948, December 10). Universal Declaration of Human Rights. Retrieved May 9, 2007, from http://www.un.org/Overview/rights.html

Weissman, J. (2005). The trouble with uncompensated hospital care. *The New England Journal of Medicine, 352*(12), 1171–1173.

C U H R - DALLAS

The Center for Urban Health Research – Dallas (CUHR-Dallas) is a collaborative partnership between the Institute for Faith Health Research Dallas (IFHR-Dallas), a Central Dallas Ministries (CDM) program, and the Foundation for Community Empowerment (FCE), in addition to other key stakeholders. CUHR-Dallas engages in research that involves close collaboration with the community through outreach, training, and education. For more information, please contact:

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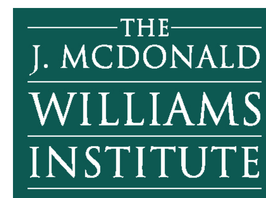
Central Dallas Food Pantry, d/b/a Central Dallas Ministries, is a 501(c)(3) non-profit organization operating under EIN #75-2332948. Each year, we partner with over 50,000 of our neighbors to improve their lives, families and communities. For more information, please visit www.cdm-hope.org.

IFHR-DALLAS

Working with Community and Faith Based Organizations (FBOs), the Institute for Faith Health Research – Dallas (IFHR-Dallas) exists to study and develop replicable models of community health improvement; alleviate and prevent unnecessary suffering; and promote community wellness both nationally and internationally. For more information, please visit www.ifhrd.org.

FCE, a 501(c)3 non-profit organization, was founded in 1995 by J. McDonald "Don" Williams, Chairman Emeritus of the Trammell Crow Company. FCE is a catalyst for the revitalization of low-income neighborhoods in Dallas through the empowerment of individuals, community- and faith-based organizations, and entire communities. FCE seeks to build bridges of opportunity, and to foster relationships where investments of money, time, people, and resources should be made. For more information, please visit www.fcedallas.org.



The J. McDonald Williams Institute, the research arm of the Foundation for Community Empowerment, is dedicated to conducting non-partisan outcomes research and public policy evaluation related to comprehensive community revitalization of low-income urban areas. For more information, please visit www.thewilliamsinstitute.org.