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Metropolitan universities have an excellent track record in establishing partnerships with local government agencies and community organizations to address social problems. This article discusses the importance of partnerships between metropolitan universities and academic health centers for addressing community health issues. The collaborative efforts of the University of North Texas and the UNT Health Science Center at Fort Worth are discussed with reference to a newly developed public health (M.P.H.) program and other projects. The unique opportunities and challenges for these relationships are highlighted.

In the Interest of Community Health:

Building Relationships between Metropolitan Universities and Academic Health Centers

One of the central missions of metropolitan universities is to establish "creative partnerships" that strengthen the institutions' capacity for having significant, positive impacts on the quality of community life. With increasing frequency, effective partnerships are being developed between metropolitan universities and public schools, community colleges, businesses and corporations, nonprofit social service organizations, and government entities. The common characteristic of these partnerships is that they are with organizations external to the broader university community.

While it is very important that these external partnerships are developed, it is equally important for departments, centers, schools, and colleges in metropolitan universities to form working relationships within the institution or with companion institutions to address community and regional problems. The problems that challenge our universities and institutions cannot be effectively addressed or solved by the limited intellectual, financial, and time resources of single departments or schools. The rapidly growing body of literature on the efficacy of multidisciplinary problem-solving methodologies provides ample evidence of the need for greater cooperation and coordination among the institutions' various disciplines, units, and programs.

Ironically, forming partnerships within the university and with companion institutions can sometimes prove more difficult and challenging than developing relationships outside the university. This difficulty stems, in some measure, from reward structures that encourage the independent activities of faculty members and departments as well as from competition for increasingly limited resources and recognition. Other factors include organizational cultures and institutional norms that foster dissimilar or even competing theoretical, professional and symbolic values and paradigms.

The purpose of this paper is to identify, describe and discuss the benefits and challenges of building collaborative research, service, and instructional relationships between departments and programs of metropolitan universities and their university-based or associated academic health centers. Some examples of joint programs at the University of North Texas (UNT) and the University of North Texas Health Science Center at Fort Worth are used to illustrate the value and difficulties encountered when developing partnerships and collaborative efforts.

Health Care and Models for Collaboration

One of the lessons of the national debate on health care has been the recognition that the current health care delivery system alone cannot produce a healthy society and personal well-being. Using the definition adopted some forty years ago by the World Health Organization, health is "...a state of complete physical, mental and social well-being, and not merely the absence of disease or injury." Numerous contemporary models of health and health care reflect the multidimensional character of these concepts. For example, R. G. Evans and G. L. Stoddart's model of health identifies the social, physical, and genetic environments as the "prime determinants" of well-being. Health care system responses, as well as individual responses to these determinants, may modify their impact on disease, the health and functioning of the individual, their prosperity, and, ultimately, the well-being of individuals in a population.

Lu Ann Aday, in her work on vulnerable populations, presents a conceptually similar model that incorporates the two dominant perspectives in health care, i.e., the macro-level/community perspective and the micro-level/individual perspective. Individual rights emphasize autonomy, independence, and individual well-being, while community rights highlight norms of reciprocity, interdependence, and the public good. Although these perspectives often have been in conflict in American society, Aday argues that community and individual perspectives and resources can complement each other in solving health care needs, particularly the needs found in vulnerable populations.

The authors of this paper believe that community and individual perspectives, roles, and responsibilities must complement and reinforce each other to effectively

address our society's health care needs. Thus, the central proposition of this paper is that the biomedical scientists in academic health centers and the social and behavioral scientists in universities must work cooperatively if we are to achieve the integrated, multidisciplinary approaches needed to solve the nation's health care problems.

Metropolitan Universities, Academic Health Centers and Communities

Among of the nation's greatest national assets and resources is its academic health centers. There are approximately 121 academic health centers in the United States: 47 are public, university-based; 24 are public, free-standing; 32 are private, university-based; and 18 are private, free-standing. Five of the public, university-based, academic health centers are located within universities that identify themselves as "metropolitan."

These include the University of Alabama at Birmingham, the University of Illinois at Chicago, the University of Louisville, the University of Missouri-Kansas City, and Virginia Commonwealth University. Although not formally "university-based," many academic health centers, including the University of North Texas Health Science Center, have close organizational and working relationships with metropolitan universities. The great majority of academic health centers are located in the nation's major metropolitan areas, many of which are also served by a metropolitan university.

In addition to training physicians and health care professionals to address the nation's growing health needs, academic health centers provide highly specialized medical care, develop and maintain sophisticated biomedical research programs in basic and clinical sciences, and are increasing their status as key players in community health and health promotion. Within the system of higher education, academic health centers have primary responsibility for educating health professionals, who must work effectively with other service providers, policymakers, community leaders, and residents in maximizing and maintaining community health.

In many respects, the changing roles and rapidly expanding community health responsibilities of academic health centers reflect the principles and missions that set metropolitan universities apart from their more traditional counterparts, i.e., being responsive to the needs of their metropolitan regions. These similar principles and missions that characterize both metropolitan universities and academic health centers are nowhere better reflected than in the recent Sun Valley Forum on National Health, sponsored by the Association of Academic Health Centers. William C. Richardson, President of The Johns Hopkins University, and his colleague, Michael Field, in their presentation to the symposium, "The Role of the University in Urban Health," report that three quarters of the nation's academic health centers are lo-

cated "amid the dysfunction of contemporary urban society," where the issues of violence, drugs, homelessness, social disintegration, and despair are the norm. Inadequate sanitation, malnourishment, communicable diseases, and the resulting high morbidity and mortality rates, especially infant mortality rates, found in the inner cities of many of these metropolitan regions are no better than in many of the world's poorest developing countries. As Richardson and Field argue, "surely universities—and in particular the academic health centers—with their abundance of intellectual resources, their history of innovation, and their structural predisposition to find solutions when problems are identified are, by their very natures, bound to play an important role in crafting a solution to these problems" (pp. 11-12).

The similarity of purpose shared by metropolitan universities and academic health centers to assert and accept a broadened responsibility of bringing their functions and resources to bear on the needs of our metropolitan regions—particularly the problems of community health—provides a strong rationale for increased collaboration between these increasingly important institutions.

At least equally important in this relationship, however, is the essential role of the community in defining health priorities and developing effective, culturally acceptable solutions for community health problems. The effective inclusion of the community as a full partner in improving community health is a complex, sensitive, but essential undertaking. The complexity of the task is frequently exacerbated by the lack of understanding of what the community really is and how to establish relationships with it.

Communities tend to be mosaics of numerous institutions, organized groups, other collectives, and individuals, with a wide variety of demographic, economic, social, ethnic, political, religious, occupational, and educational characteristics and interests, living and interacting in a socially and geographically defined area. Considerable understanding of social structures and processes, community organizations, and public opinion is required to initiate and develop effective working relationships with the community. The mix of social and behavioral science disciplines, as well as the skills developed by establishing numerous community partnerships and outreach programs commonly found in metropolitan universities, provides valuable resources for academic health centers in their efforts to better understand and establish partnerships with the community.

University, Health Science Center and the Metroplex

The University of North Texas is a metropolitan research university located in Denton, a city on the northern perimeter of the Dallas-Fort Worth Metroplex, a metropolitan region with a population approaching five million people. With an enrollment of approximately 26,000 students, UNT is the largest and most comprehensive university in the region and the fourth largest in Texas. As a metropolitan

research university, UNT is increasingly focusing its research and service activities on the major issues and problems of the Metroplex. One expression of its metropolitan mission is the School of Community Service (SCS) which offers a broad range of social and behavioral sciences and human service programs. The major theme of the instructional and research programs at the school is health—health services administration and health services research with a special focus on substance abuse and the health of the elderly. Significant health related expertise and programs also are found in the UNT College of Arts and Sciences—particularly environmental health—and the College of Education. Growth in the size and quality of these health-related assets at the university is a reflection of the increasing importance of health in American society during the past decade.

The UNT Health Science Center at Fort Worth began in 1970 as a private school of osteopathic medicine. Within a few years, the basic science courses for the new Texas College of Osteopathic Medicine were taught at North Texas State University, now the University of North Texas. This early successful collaboration led the Texas legislature to designate the Fort Worth medical school as a state-supported institution and place it under the jurisdiction of the state-appointed regents of what is now the UNT. Although separate and independent institutions, the university and the Health Science Center have forged working relationships in several fields to capitalize on their common goals and combined strengths to better serve the metropolitan region.

For the university and the health science center, "community" refers to the Dallas-Fort Worth Metroplex or the North Texas metropolitan region. Because of its location in Fort Worth, the health science center also has a special commitment to citizens of that city and Tarrant County. The Metroplex, as the name suggests, is a large, diverse, and complex metropolitan region anchored on the east by Dallas and on the west by Fort Worth. With a population approaching five million residents and scores of local governments and special districts, the Metroplex mirrors the paradox common in most major metropolitan areas, i.e., enormous, highly sophisticated health care assets amid substantial unmet health care needs. The health care industry, the largest in the Metroplex, generates more than $13 billion in annual volume, provides more than $4.1 billion in payroll and employs more than 167,000 people, according to the Health Industry Council of the Dallas-Fort Worth region. Notwithstanding the dominance of the health care industry in the Metroplex economy and the dramatic increases in public and private health care expenditures in recent years, the health and medical indices for inner-city and low income families and individuals have worsened, as they have in metropolitan areas across the nation. It is in this setting that the university and the health science center seek to be responsive to the growing needs and problems of the community.

Joint University/Health Science Center Initiatives: Two Examples

In their more than twenty year relationship, the University of North Texas and the UNT Health Science Center have developed institutional goals, strategic plans and administrative relationships that provide a framework for cooperation and collaboration on various health related issues. While efforts to collaborate in solving these issues have not always been easy and successful, there is a growing recognition that each institution needs the other, and each one's ties with the community,to successfully address the growing health concerns and problems of the region.

Two examples have been selected from several collaborative initiatives and projects to illustrate the benefits and challenges of joint efforts between universities and academic health centers.

Community Clinics

In the Fall of 1989, the University of North Texas and the UNT Health Science Center in Fort Worth were invited to form a partnership with the University of Texas at Arlington School of Nursing to apply for a grant from the Kellogg Foundation to plan a teaching clinic in a medically underserved community that would train student nurse practitioners and medical students to work together to provide health care in such communities. The African American Fort Worth community of Stop Six—the most medically underserved area in the county—was chosen as the site for the teaching clinic by a community advisory board that consisted of representatives of philanthropic organizations, social service agencies, and major health care providers in Fort Worth. The next step was the development of a neighborhood advisory board to plan the project and ensure that it met community needs. The city councilman from Stop Six agreed to help organize the advisory board but only if the two universities and the health science center agreed to continue to work with the community even if the Kellogg Foundation proposal was not funded. With agreement (in writing) from the presidents of the three institutions, the neighborhood advisory committee was formed. Board members included professional people from the community, such as teachers, school principals, education counselors, physicians, ministers, lawyers, accountants and a justice of the peace.

Although the proposed teaching clinic was not funded, the planning process initiated collaboration between the university, the health science center, and Stop Six continues today.

Members of the neighborhood advisory board had been advocating for a community health center for ten years and, once their expectations were aroused, were not inclined to let the matter drop. The neighborhood board continued planning for a community health center and invited the university and the health science center to participate in their efforts. Faculty and staff from the institutions agreed and served

as ex-officio neighborhood board members. The neighborhood advisory board met regularly every week from May 1991 through April 1994.

As members of the advisory board, university and health science center faculty and staff were able to provide technical assistance and other forms of expertise throughout the project.

An important resource in the planning stage was the Texas Institute for Research and Education on Aging (TIREA), a program jointly funded by the university and the health science center. With funds and other resources from TIREA, health care needs assessments were conducted in the Stop Six and other communities. One of the objectives of these assessments was to plan needed health and social services that would improve the individual and public health levels of the areas. Modeled on a design developed by William Foote Whyte (1991), subjects of the research are involved in all stages of the process including the planning, data collection, analysis, and the formulation of action recommendations.

With findings from the assessment, community and board members described what they needed in the health center. University and health science center faculty and staff developed these notions into concrete, specific concepts and drafted a proposal for Community Development Block Grant (CDBG) funding. Administrators from the university and the health science center attended the public hearings and spoke in support of the CDBG proposal before the Fort Worth City Council. The proposal was approved, providing $400,000 in "seed money" to purchase land for the health center. Additional funds needed for construction, staffing, and maintenance were obtained through the community's successful efforts to have the clinic incorporated in the county hospital district. The Stop Six community health center officially opened in April, 1994.

A similar process was occurring simultaneously across the city in the Mexican American Fort Worth community of Diamond Hill. A coalition, including the Harris Methodist Hospital system and a group of concerned community residents, was advocating a badly needed health center in that community. University and health science center faculty and staff, together with the county hospital district, supported this initiative. As in Stop Six, additional assistance for the Diamond Hill health center was provided by the Texas Institute for Research and Education on Aging in the form of support for health care needs assessment. Other community partners included the Tarrant County Area Agency on Aging and the Gerontological Society of America. In this project, the needs of older community members and their caregivers were investigated. One of the recommendations was the development of respite services for the caregivers of older adults.

The Diamond Hill community clinic, serving the health care needs of this neighborhood under the auspices of the county health district, came on line at approximately the same time as the Stop Six community clinic. Health care services at the

clinic, unlike the Stop Six facility, are being provided under contract from the UNT Health Science Center. The clinic's medical director is a faculty member at the health science center, and medical students rotate through the clinic as part of their training.

With the successful establishment of the Stop Six and Diamond Hill community clinics, new collaborative ventures were initiated between the university, the health science center, the two new clinics and, a new player, the Texas Department of Health. With leadership from the Texas Department of Health and TIREA, a Healthy Communities project was launched to encourage student interns to volunteer for health and social service projects in these neighborhoods. This was the first time students have been linked formally with community action projects and community volunteers, and the relationship provides a model for the kind of future community service internships urged by Robert Coles.

Public Health

The need for graduate public health education in the Dallas-Fort Worth/North Texas region has been long recognized. An effort by the University of North Texas School of Community Service in the early 1980s to establish a Master of Public Health degree program was not supported by the Texas Higher Education Coordinating Board. The failure of this early initiative was due largely to the lack of available health related resources that could be dedicated solely to the proposed public health program.

In 1993, the Texas legislature approved the establishment of the University of North Texas Health Science Center (formerly the Texas College of Osteopathic Medicine), and granted it authority to propose needed health related programs. This authority, combined with the longstanding interest in public health and the growing health related assets at the university and the health science center, as well as growing need for public health education in the North Texas region, provided the impetus for the two institutions to jointly develop and propose a Master of Public Health (M.P.H.) degree program. Other factors, including independent evaluations of the need for public health professionals in Texas and significant financial support from area foundations for public health education planning grants, strongly reinforced the initiative for the program.

An inventory of existing programs, faculty, and curricula at the university and the health science center that might be relevant to an M.P.H. degree program showed significant assets in areas such as environmental health, family health, health behavior, health economics, health services administration, health services research, and occupational health. These assets, however, were organizationally and geographically scattered among several schools and colleges on two separate campuses of independent institutions located forty miles apart. The key link between the univer-

sity and the health science center and the rationale for cooperation was the fact that both institutions share a common board of regents and the same chancellor, who agreed that the proposal for a new M.P.H. program should maximize appropriate collaboration between the two institutions and should not unnecessarily duplicate existing faculty or curricula.

The resulting challenge for the university and the health science center was to find an effective governance and administrative structure that would provide adequate incentives to assure participation by directors of relevant programs. At the same time, adequate controls to meet accreditation standards of the Council on Education in Public Health and other regulatory bodies had to be instituted.

After more than six months of discussions, negotiations, proposals, and counterproposals, the major participants achieved agreement on the program's mission, educational objectives, core curriculum and specialization tracks, admission standards, degree requirements, program policymaking, and administration. The most difficult of these were program policymaking, administration, and specialization tracks. It was clearly evident in the discussionsabout these issues that major differences existed between the two institutions with respect to professional and institutional "cultures." These cultural differences were reflected in decision-making modes, clinical and academic perspectives, definitions of central working concepts, and a variety of other areas. Notwithstanding these significant differences, there emerged a shared vision and a desire to develop an innovative, truly community-based public health program.

In the end, it was agreed that The North Texas Master of Public Health Program (the name was also an important questionto be resolved) will have an Advisory Council that is an interinstitutional body consisting of three representatives each from the health science center and the university, appointed by the presidents of each institution. The council makes recommendations to the Vice President for Health Affairs at the UNT Health Science Center on all matters of program administration and policy, including recommending candidates for the position of M.P.H. Program Director and conducting performance evaluations. The council is responsible for curriculum review, graduate course content, core requirements, special degree tracks, student admission standards and performance measures, course and program evaluations, and fiscal matters pertaining to the program.

Following in-depth reviews by several external public health education consultants, the final proposal was submitted to and approved by the Texas Higher Education Coordinating Board. The curriculum of the new program consists of foundation courses, core curriculum, track requirements, designated electives, and thesis or capstone course. Both campuses will contribute courses and faculty as needed and appropriate; however, as indicated in Figure 1, the participating schools and colleges will assume responsibility for specialty tracks that fall primarily within their current academic programs.

Figure I

The North Texas M.P.H. Program
Core Curriculum

Principles of Public Health	Environmental Health
Principles of Epidemiology	Health Administration
Biostatistics	Behavioral Epidemiology

Specialization Tracks

University of North Texas	UNT Health Science Center
1. Environmental Health (CAS)	1. Epidemiology
2. Health Behavior (CAS)	2. Family Health
3. Health Economics (CAS)	3. Occupational Health
4. Health Services Administration (SCS)	
5. Health Services Research (SCS)	

Note: CAS = College of Arts and Sciences
SCS = School of Community Service

A central feature of the North Texas M.P.H. program is the role of distance learning technology. The campuses of the university and the health science center are located in Denton and Fort Worth, respectively, a distance of approximately 40 miles. Although many students and faculty regularly commute between the campuses, distance is a significant cost and convenience factor. To reduce the amount of intercampus commuting, many, and ultimately most, of the M.P.H. courses will be taught in studio classrooms that are linked by a two-way, fully interactive television system, through which faculty and committee meetings are already regularly scheduled.

Although not without substantial challenges, the North Texas M.P.H. program has been jointly developed and implemented using the relevant assets of the university and the health science center to meet a major public health education need in the Dallas-Fort Worth Metroplex and North Texas region. Governance and administrative structures, as well as the other essential components of a new graduate degree program have been agreed to in a manner that meets state requirements and national accreditation standards. It is clear to all parties, particularly our community partners, that our ability to develop a high quality, innovative, interdisciplinary M.P.H. program has been greatly enhanced by our commitment to make this a truly joint effort using the best appropriate assets from both institutions.

Observations and Lessons Learned

Anyone who has participated in the development of collaborative ventures or partnerships knows that such efforts are never easy, always time-consuming and fraught with a high degree of risk for all parties. When successful, however, the potential accomplishments exceed the capacity of institutions working independently. The two examples described above are but a few efforts at collaboration that have taken place between the University of North Texas and the UNT Health Science Center. We have gained insights from these efforts that, if remembered and followed, can help increase our chances of forging other successful partnerships. On the surface, they seem to be plain common sense; unfortunately, it seems we have to learn the lessons anew with each partnership attempted.

- Seek to understand and appreciate the different perspectives of your partners. These perspectives are conditioned by disciplinary, organizational, and professional "cultures" and are not easily set aside.

- Seek to involve the broader community, solicit their advice, and appreciate the difficulty community members have in trying to understand the academic and health science communities.

- Resist the urge to control your partners in favor of finding common ground that provides a basis for cooperation, identification, and mutual progress.

- Be patient and prepared to invest time in discussion and negotiation. In most instances, our joint initiatives involve resolving complex political, fiscal, and organizational issues. These discussions will take time and effort.

- Be trustworthy and do not be afraid to trust. Trust can take a long time to develop but is quickly and easily lost.

- Learn that some differing points of view can be resolved; some cannot. Accept, adapt, agree to disagree, and move on.

- Remember that process is sometimes more important than product.

- When you are tempted to withdraw, remember what might be lost.

- Trust that each successful collaboration makes subsequent ventures a little easier.

•Always keep in mind that our progress is increasingly dependent on our ability to forge successful partnerships.

Conclusion

The difficulties and challenges that universities and academic health centers encounter when they begin to collaborate are considerable. Despite these obstacles, it is more important than ever before that mechanisms and models for collaboration be developed if universities and academic health centers are to be successful in addressing the growing health problems of our metropolitan regions. It is only in the mix of disciplines found throughout the universities and academic health centers that effective solutions to the complex problems affecting community health will be found.

Suggested Readings

Aday, Lu Ann. *At Risk in America: The Health and Health Care Needs of Vulnerable Populations in America*. San Francisco: Jossey Bass, 1993.

Coles, Robert. *The Call of Service: A Witness to Idealism*. Boston and New York: Houghton Mifflin Co., 1993.

Etzioni, Amitai. *The Spirit of Community in America: Rights, Responsibilities and the Communitarian Agenda*. New York: Crown Publishers, Inc., 1993.

Evans, R. G. and G. L. Stoddart. "Producing Health, Consuming Health." In Robert G. Evans, Morris L. Barer, and Theodore R. Marmor. *Why Are Some People Healthy and Others Not? The Determinants of Health of Populations*. New York: Aldine de Gruyter, 1994.

Hogness, J. R., C .J. McLaughlin, and M. Osterweis, eds. *The University in the Urban Community: Responsibilities for Public Health. Association of Academic Health Centers*: Sun Valley Forum on National Health, 1995.

Wilson, William Julius. *The Truly Disadvantaged: The Inner City, The Underclass, and Public Policy*. Chicago and London: The University of Chicago Press, 1987.

Whyte, William Foote, ed. *Participatory Action Research*. Newbury Park: Sage, 1991.