

Section IV: UME-21 and Beyond: Outcomes and Policy Implications for Medical Education

Partnerships Between Health Care Organizations and Medical Schools in a Rapidly Changing Environment: A View From the Delivery System

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Background and Objectives: *The Undergraduate Medical Education for the 21st Century (UME-21) project encouraged the formation or enhancement of partnerships between medical schools and health care organizations distinct from the traditional teaching hospitals. The purpose was to prepare medical students in nine content areas that were components of the UME-21 project. Despite their importance today to medical schools, such partnerships with health care organizations are a challenge to develop and maintain in the midst of a rapidly changing health care environment. This article categorizes the partnerships formed and discusses the benefits and the barriers encountered in such collaborations. **Methods:** Information about the partnerships was abstracted from written reports from each of the UME-21 partner schools. Additional information was obtained from personal communications with external project representatives and from a post-project survey presented to all UME-21 partner schools. **Results:** The eight partner schools established or enhanced 32 educational partnerships with external organizations. External partner organizations contributed to curriculum planning and implementation, course development and presentation, and provision of clinical sites and preceptors. Twenty-seven of 32 initial affiliations continued in some form beyond the contract period. **Conclusions:** Partnerships formed as part of the UME-21 project improved medical students' exposure to the health care system and their knowledge and skills for effective practice in the 21st century health system. Barriers encountered included financial pressures, changes in leadership, different organizational missions and priorities, and preexisting prejudices against new relationships. Factors associated with successful partnerships include the presence of a health care organization and an academic "champion" dedicated to the project, strong individual relationships, and a medical school commitment to involve external partners.*

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A rapid increase in affiliations among health care systems and between health care systems and academic medical centers has been one response to an increase in economic pressures.¹ The Undergraduate Medical Education for the 21st Century (UME-21) project resulted in formation of multiple affiliations between medical schools and health care organizations, most built on preexisting relationships modified or developed in response to the project. During the 3-year UME-21 project, many participating organizations experienced major changes, including mergers, corporate restructuring, and changes in key personnel. Some entities disappeared entirely. In spite of this, many suc-

cessful collaborations were formed and continued beyond the grant period.

This paper examines the factors involved in the formation and continuance of these affiliations and explores the predictors for success, the challenges, and the benefits experienced. Effects of the affiliations on both the institutions and individuals involved are described.

Methods

Information about the external partners was obtained from written reports provided by the eight UME-21 partner schools to the project's national Executive Committee and by interviews with local project directors and external partner representatives. A qualitative post-project survey administered to project directors of these schools at the final UME-21 annual meeting in March 2002 provided further information about the 32 external partner organizations.

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Results

The external partners are categorized within four major groupings: 16 health plans (managed care organizations), eight integrated groups/health systems, four community health centers and health departments, and four area health education centers (Table 1). There was one employer group (Ford Motor Company).

Twenty-seven of 32 (84%) partnerships continued beyond UME-21. Of these, 25 (93%) began prior to the contract, and most described UME-21 as a facilitative, but not the major, reason for development of the partnership. Five partnerships did not last beyond UME-21.

All were health plans or managed care organizations, three of which began with the UME-21 project and described UME-21 as a major reason for the partnership. The dynamic and adaptive nature of these UME-21 partnerships is illustrated in the following case studies.

The Partnerships

AvMed Health Plans and the University of Miami

AvMed Health Plans (AvMed) was a logical choice to be a managed care partner with the University of Miami. First, as Florida's oldest and largest not-for-profit HMO, licensed in 1973 with 300,000 members

Table 1

Original Partnership Affiliations

<i>Organization</i>	<i>Health Plan/MCO</i>	<i>Group/Health System</i>	<i>CHC/Health Department</i>	<i>AHEC</i>
Dartmouth Medical School	Anthem/ BlueCross/ Blue Shield of New Hampshire Matthew Thomson Health Plan CIGNA/Healthsource	Hitchcock Clinic		New Hampshire AHEC
University of California, San Francisco	Brown and Toland Medical Group	Kaiser Permanente San Francisco	Community Health Network of San Francisco City and County	
University of Miami	AvMed Health Plans		Miami-Dade County Health Department Jefferson Reaves Overtown Clinic Camillus Health Center for Homeless	University of Miami-Dade County AHEC
University of Nebraska	BlueCross/BlueShield/ HMO of Nebraska Exclusive Healthcare United Health Care of the Midlands Principle Health Care	Nebraska Health System		
University of Pennsylvania	Aetna-US Healthcare	Clinical Care Associates of University of Pennsylvania Health System		
University of Pittsburgh	UPMC Health	University Services Organization		SWPenn AHEC
University of Wisconsin	Unity Health Plans Blue Cross/Blue Shield of Wisconsin Physicians Plus/ Community Physicians Network	University of Wisconsin Medical Foundation		Wisconsin AHEC
Wayne State University	Blue Care Network The Wellness Plan	Henry Ford Health System Ford Motor Company Department of Healthcare Management*		

• Employer group
MCO—managed care organization
CHC—community health center
AHEC—area health education center

statewide, AvMed had a long tradition of providing care to Florida's communities and institutions. Second, AvMed and the University of Miami had recently embarked on a special business relationship. Just prior to the UME-21 request for proposals, the University of Miami selected AvMed as its exclusive health plan for the university's 17,000 faculty, employees, and dependents. Finally, the AvMed and University of Miami leadership were both personally committed to the partnership. AvMed's regional medical director, who became a UME-21 project co-director, was a former Division of Medicine and Dentistry director in the Health Resources and Services Administration, while AvMed's group vice president for network operations was a former University of Miami graduate and faculty member in the University's pediatric department. Just as important, the University of Miami's senior dean for medical education, who was the UME-21 project director, as well as the dean, were strongly supportive of the partnership.

These aforementioned factors contributed to a close partnership. AvMed's regional medical director served as co-project director and the group vice president as a member of the UME-21 steering committee. These AvMed Health Plans physicians and other staff contributed significantly to the UME-21 program's development, gave presentations to the medical students, and organized the third-year medical students' site visit to AvMed Health Plans.

Midway through the 4-year contract, however, several key developments threatened the entire partnership. First, the University of Miami ended its business relationship with AvMed, selecting another managed care organization as its exclusive health plan. Second, key top AvMed leadership supportive of the relationship retired or left AvMed, including its chief executive officer, group vice president for network operations, and chief medical officer (CMO). Third, both AvMed and the University of Miami were increasingly preoccupied with the financial constraints and pressures of a rapidly changing local health care environment.

However, for several important reasons, the AvMed-Miami partnership survived and even flourished despite these challenges. First, the AvMed regional director and the University of Miami senior dean for medical education worked effectively together to maintain the partnership. Second, the incoming CEO and CMO both reaffirmed AvMed's leadership in the UME-21 project. The CMO became an active faculty member in the third-year medical students' site visit and even expanded AvMed's role in medical education by establishing a similar third-year student site visit at its Gainesville corporate office in response to interest expressed by the University of Florida (UF).

AvMed's commitment to both the University of Miami and UF has continued beyond the end of the UME-

21 project. Today, UF and University of Miami faculty contribute to AvMed as members of AvMed's Quality Improvement and Technology Assessment Committees. In addition, a University of Miami clinical faculty member serves as the part-time quality medical director for the University of Miami plan office.

*The University of California, San Francisco (UCSF);
Brown and Toland, Kaiser Permanente;
and Community Health Network*

UCSF partnered with three very different health care systems: (1) Brown and Toland Medical Group (BTMG), an independent physician association (IPA) of more than 1,200 physicians comprised of community private practice and UCSF faculty practice physicians, (2) San Francisco Kaiser Permanente (KP), a foundation model providing care for about 160,000 of San Francisco's population, and (3) the Community Health Network (CHN), an extensive public health-funded network providing care for about 55,000 of the uninsured and special need families of the community.

For more than 40 years, physicians in all three settings have participated in UCSF teaching programs. Many community-based private physicians who are members of BTMG participate as volunteer clinical faculty for UCSF teaching programs. The KP health system provides clinical experience for UCSF medical students and residents. The CHN includes UCSF medical students and residents in their programs and contributes many hours to teaching.

Top leadership from BTMG, KP, and CHN endorsed the program, and participants included supportive mid-level administrative physician-educators from all three groups. Physicians and other key leaders within each organization had strong ongoing relationships with UCSF program faculty. Even so, a confluence of changes in the health care environment at the inception of UME-21 created significant pressures at all three sites, challenging the development of a planned 6-month longitudinal clinical experience for third-year students.

BTMG had a severe financial crisis leading to a major restructuring. The resulting uncertainty, with concern about decreasing income and resources, contributed to a significant decrease in availability of physician preceptors and preceptorship sites. At the same time, San Francisco KP deferred hospital expansion plans, electing instead to remodel an existing facility. This process led to a temporary shortage of examination rooms, significantly limiting available space for students. Within the CHN, financial and resource shortages led to increased pressures on an already-stressed public health sector, significantly affecting available physician resources for teaching.

As a result, the UME-21 at UCSF planning committee was faced with recruiting preceptors for the planned third-year longitudinal clinic at a time of unprecedented

difficulty in identifying preceptors for the already-required 300 yearly placements in other courses. Weekly planning meetings included UME-21 leadership and external partner representatives as well as program and clerkship directors from all affected sites. Through a combination of support from the top down, strong individual commitment from all involved in planning, close and ongoing communication, meticulous attention to the concerns of each site, and individual willingness to compromise for program needs, program goals were met. Supported by the response of UCSF clinical faculty, a greatly expanded, 6-month longitudinal systems-based clerkship was implemented successfully. All three partners continue in ongoing relationships with the program, and the longitudinal clinic continues as part of the core clinical curriculum.

Wayne State University (Wayne State) and Ford Motor Company

This partnership was unique. It was a partnership between an academic medical center and a large employer health group providing care to 621,000 employees, retirees, and their families. Ford Motor Company and Wayne State had a strong preexisting relationship through mutual participation in the Wayne State Occupational Medicine Residency Program. This relationship involved several residency teaching sites and a position for Ford Motor personnel on the Wayne State Occupational Medicine Residency Advisory Committee.

For UME-21, the Ford Motor representative was directly involved in teaching medical students and was a member of the Wayne State UME-21 Steering Committee. As a member of the steering committee, he participated in curriculum development and implementation.

Health care economics and the role of the employer as the purchaser of health care services through the offering of health plans to employees, retirees, and their families were stressed through sharing with the committee information based on aggregate data collected from the health plans. Communicating these economic and health issues related to caring for the Ford Motor Company "family" is especially important because many of the current medical students remain within the area and become the physicians caring for Ford Motor Company employees, retirees, and their families.

Characteristics Associated With Successful Affiliations

Successful affiliations lasting beyond the grant period had both individual and institutional support. They had an academic "champion" and a health care organization champion, with a focus from both partners on developing and sustaining relationships beyond those between specific individuals. The top leadership of external partner organizations was either supportive or

neutral. In contrast, effective medical schools had highly supportive top leadership with a commitment to develop effective partnerships and to integrate program goals and content into the curriculum. The medical schools had an explicit process for maintaining external partner involvement during program planning and implementation. Medical centers described their external partner organizations as very important to the schools' educational goals, while external partners saw the relationship as beneficial but not necessarily central to their goals.

Barriers Encountered

Academic centers and their external partners had different economic and financial priorities. Their differences were exacerbated by increasing financial pressures and limited resources in the late 1990s. Increased expectations for physician productivity resulted in fewer available preceptors and sites and affected available faculty time to fully develop and sustain external partnerships. Developing and maintaining relationships was a major challenge because of the sudden changes in organizational structure of external partners. As described by one health plan executive, "The important relationships were primarily individual, yet the individuals changed very rapidly."

Acceptance of program content by medical students, project faculty, and preceptors was affected by reactions to managed care terminology, used when the UME-21 project began to describe the health care environment and nine content areas required for effective practice. During the project period, both the perception and reality of managed care were changing rapidly, with pervasive effects on the institutions and individuals involved.² Dissatisfaction with managed care was increasing, and reforms were being discussed.³ The term "managed care" became both limiting and potentially polarizing as it became increasingly synonymous with one specific insurance model whose dominance was being questioned. Some faculty, preceptors, and students perceived incorrectly that the purpose of the UME-21 contract was to "sell" managed care economic agendas to a reluctant physician community, undermining acceptance of the content areas. Program responses included integrating the content areas into existing medical school curriculum and decreasing the emphasis on managed care.

Integrating new content and clinical experiences into a large number of diverse clinical settings was also a challenge. Students, residents, and preceptors did not necessarily "buy in" to the importance of the content areas, especially if a "managed care" label was perceived. When this content lacked validation by residents and preceptors it was less well accepted by students.

Effect of the Affiliations on the Institutions and Individuals

External partners brought to the medical centers exposure to a wide variety of new clinical resources such as community health centers, skilled nursing facilities and rehabilitation centers, hospice programs, and health plan administrative offices. They also provided expertise in content areas, enhancing clinical content with examples from the delivery system and participating in learning modules, didactic sessions, and seminars.

The effects of the affiliations on the external partner organizations were less clear. Some were essentially unaware of the overall UME-21 program except for their own involvement, while others described benefits, including improved relationships with the academic community and the stimulation of contact with students and faculty. Effects on individuals within the external partner organizations included expanded professional opportunities, increased recognition, mutually beneficial professional relationships, and satisfaction related to teaching.

Discussion

The project evaluation was not designed to obtain ongoing information about the external partnerships. The complexity and variety of changes experienced by the institutions during the grant period precluded quantitative analysis of data. In addition, the level of detail reporting on evolution of partnership relationships was uneven across sites. Despite these limitations, detailed qualitative information was provided about the personal and institutional relationships.

The factors important to partnerships formed by the UME-21 schools share many characteristics with those important to other educational partnerships developed, as described by Case Western Reserve University.⁴ However, the UME-21 experience was unique because of the large numbers and wide variety of partnerships formed simultaneously for similar purposes. This allowed a qualitative assessment of factors that appear to generalize across different organizational structures.

Our conclusions are that several factors are important in forming and sustaining successful partnerships. First, there needs to be a champion in both the external health care organization and the academic center. Second, there must be a focus from both medical schools and their external partners on developing and sustaining individual relationships, the institutional commitment to continuing the association beyond specific individuals. Third, supportive leaders are needed at the academic medical center and leaders in the health care organization must be supportive or at least neutral. Finally, partnerships are strengthened by an external partner important to the educational goals of the medical center and by mutually beneficial relationships between individuals and institutions. While medical schools and external partners are different in their needs for successful collaboration, highly effective educational partnerships can be formed. Once established, the relationship must be nurtured through a process of ongoing communication and developing institutional relationships that reach beyond the individual.

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