Graduate Primary Care Training: A Collaborative Alternative for Family Practice, Internal Medicine, and Pediatrics
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The Residency Program in Social Medicine at Montefiore Medical Center is a collaborative, integrated training program for primary care pediatricians, internists, and family physicians within one interdisciplinary organization. Since 1970 we have trained more than 200 physicians, prepared them for board certification in their specialty, emphasized the psychosocial aspects and social determinants of health and illness, and shared a faculty, curriculum, and commitment to provide medical care for inner-city, underserved populations. We discuss the program’s history and curriculum, administrative and academic structure, shared “cross-track” faculty units (psychosocial; social medicine; and research, education, and evaluation), and graduates’ practice outcomes. The interdisciplinary character of the Residency Program in Social Medicine helps physicians successfully serve the underserved and exemplifies that interdisciplinary medical education succeeds when interdisciplinary health care teams are organized for optimal patient care. Only the federal government has the perspective and power to foster more interdisciplinary collaboration and strengthen primary care education in a period of shrinking resources.


Although “primary care” has a long international history, it was virtually unknown in the United States before the mid 1960s when “general practice,” failing to keep pace with the dramatic advances and specialization of modern medicine, fell into disrepute and almost disappeared (1). Responding to the popular perception of a “doctor shortage,” the public policy of the 1960s expanded medical schools and promoted primary care. In the 1970s policy was refined to address “specialty and geographic maldistribution” and in the 1980s to face the consequences of the 1960s and 1970s—the so-called “doctor surplus.” Public policy promoting primary care was adopted as an antidote for the “specialty maldistribution.” Unlike the trend toward specialization, the social forces favoring primary care came largely from outside medicine (2).

Rather than creating a single generic primary care specialty, primary care was defined as a process. Apart and Charney (3) identified primary care as a medical care process that begins with first contact for the patient, assumes longitudinal responsibility regardless of health status, and coordinates specialist care. After reviewing 38 definitions of primary care in the literature, the Institute of Medicine identified five essential characteristics: continuity, accessibility, accountability, comprehensiveness, and coordination (4).

Pediatricians and internal medicine practitioners have identified primary care with the practice of generalists and the basic education within their discipline (5-10). Family medicine practitioners have organized themselves around the delivery of primary care within the context of the family (11). Obstetricians-gynecologists and psychiatrists have identified primary care services they provide for large populations that may have no other contact with the medical system. Similarly, other specialists and subspecialists have identified 20% to 60% of their activity as primary care, suggesting a large hidden pool of primary care providers (12). Such specialty-oriented definitions have contributed to the confusion in terminology between primary care, principal care, general care, and generalist physicians (13). New proposals for hybrid (14, 15), generic (16), combined (17), and subspecialty (18, 19) primary care training continue to be offered, calling into question the legitimacy and adequacy of existing models.

Responding to such questions, Geyman (20) described three options for the relations among specialties providing primary care: an unregulated continuation of the status quo; competition among the three primary care specialties—family practice, internal medicine and pediatrics—and creation of a generic primary care specialty from a coalition of these specialties. We have developed and practiced for 15 years a viable and effective fourth option—collaboration—which integrates the three primary care specialties within one interdisciplinary organization, the Residency Program in Social Medicine. Each discipline prepares residents for each specialty’s board certification while sharing a common mission, a biopsychosocial approach, faculty, and curriculum.
Historical Development

The Residency Program in Social Medicine at Montefiore Medical Center was founded in 1970 to meet the needs of the Dr. Martin Luther King, Jr., Health Center (one of the first neighborhood health centers founded by the Office of Economic Opportunity). The center needed physicians who could work closely with other health professionals and community residents to provide health care in the South Bronx. An initial effort to recruit general and family practitioners failed, so a team model of internist, pediatrician, nurse practitioner, and family health worker evolved to provide family-oriented health care to distinct neighborhoods (21). After these teams were formed, internal medicine and pediatric residency “tracks” were initiated with a common ambulatory continuity practice outside the hospital at the Health Center. In 1973 a family practice track was added; it was recognized as a full hospital department in 1978. The model family practice unit” was the Health Center’s Bathgate Satellite. In November 1980 the department opened the Montefiore Family Health Center where all its residents now maintain their continuity practices along with full-time family physicians and nurse practitioners.

Program Structure

The structure of the Residency Program in Social Medicine is shown in Figure 1. There are now 8 residents each postgraduate year in family practice (total, 24), 6 residents each year in internal medicine (total, 18), and 4 residents each year in pediatrics (total, 12). There have also been fourth-year fellowship positions emphasizing administration, research, developmental disabilities, or faculty development, depending on the funding source.

The common, or “cross-track,” faculty units include psychosocial; social medicine; and research, education, and evaluation. Each unit provides instruction and supervision to residents of all three disciplines. Faculty time is shared between the ambulatory care sites and hospital-based training.

The Faculty

The multidisciplinary faculty views itself as a single faculty, primarily affiliated with the Residency Program in Social Medicine with secondary responsibility to the parent departments (although family practice has no medical school department). There are three internists, two pediatricians, and eight family physicians on the biomedical faculty. The psychosocial unit is usually composed of a social worker, psychologist, and psychiatrist; the social medicine unit is composed of a family physician, a nurse practitioner-administrator, and a counselor who specializes in complementary and alternative therapies; and the research, education, and evaluation unit is composed of an educational psychologist and research assistant. The chairman of the department of family medicine is the director of the Residency Program in Social Medicine and also a family physician.

All faculty may seek academic appointments at the Albert Einstein College of Medicine in medicine, pediatrics, or epidemiology and social medicine. Internal medicine and pediatric faculty conduct teaching rounds on the inpatient wards of the primary teaching hospitals (Montefiore and North Central Bronx Hospitals), whereas family physicians conduct teaching rounds on the community hospital inpatient service (St. Barnabas Hospital). The faculty and residents teach medical students on the wards, in the ambulatory care sites, in first year “Human Dimensions” groups, and in courses and electives offered by the department of epidemiology and social medicine.

Internal Management

The Residency Program emphasizes resident participation in most aspects of program administration, in-
including recruitment and selection of new residents and faculty, curriculum and practice site development and evaluation, selection of practice partners and chief residents, discretionary budget decisions, faculty evaluations, and service project and grant development. This participation is accomplished through a committee structure. Each discipline chooses a representative (usually a chief resident) to the management group. These representatives meet with faculty and administration representatives to discuss issues pertinent to the program, training sites, and hospital (Figure 2). Standing subcommittees of the management group include: the Curriculum Coordinating Committee, which has resident and faculty representation from all disciplines and faculty units; develops, reviews, and evaluates all curriculum; and oversees ongoing seminars, rounds, and courses; the Recruitment and Selection Committee, which coordinates outreach efforts for overall resident as well as minority recruitment and organizes the interviewing and selection of new residents in its three disciplinary subcommittees; the Budget Committee, which allocates travel and conference funds for residents; and the Retreat Committee, which organizes the Residency Program's annual retreat, which serves both as a graduation ceremony for residents completing training and an introductory orientation for residents beginning training.

Other important support groups are the Third World Caucus for Black, Hispanic, and Asian residents and faculty that is represented on the Management Group, Recruitment and Selection Committee, and all search committees; and the Gay and Lesbian Caucus that has organized courses and grand rounds on gay and lesbian health issues.

**Curriculum**

The curriculum has been described in detail by Boufford (22), Strelnick and Shonubi (23), and Massad (24), so only components shared by all three disciplines will be reviewed.

**Psychosocial and Behavioral Science Education**

Like other primary care residencies, most of the teaching in the psychosocial aspects of primary care is provided through direct supervision, precepting, and conferences at the hospital and ambulatory care sites. The group learning experiences described below allow participation from all three tracks.

Behavioral science topics are regularly presented in weekly ambulatory care rounds (along with biomedical and social topics) and at the weekly evening conferences that emphasize the social context of health issues. Clinical presentations address the relevant psychosocial issues and integrate them into patient assessment and management.

Once every month there is a joint medicine-pediatrics wrap-up session. Biomedical and psychosocial faculty join residents at the end of the patient-care session to discuss in depth one family being followed conjointly by medical and pediatric residents. This case conference emphasizes the life cycle and family context issues that affect medical care and joint patient-family medical management. These case seminars grew from requests from residents in internal medicine and pediatrics for more exploration of their different approaches to clinical management, family dynamics, and social context.

In the second half of the first postgraduate year, the psychosocial faculty teaches an introductory seminar (10 to 15 sessions) on psychosocial and behavioral science concepts and skills in primary care, including the biopsychosocial model, the family life cycle and genograms, the epidemiology and diagnosis of mental health problems in primary care, the mental status examination, and psychosocial problem assessment for residents from all three disciplines. The unique perspective of each discipline has proven complementary, and their interaction has enhanced learning. Pediatrics emphasizes normal development, health promotion, and disease prevention; internal medicine focuses on pragmatic problem formulation and behavioral intervention; and family practice highlights contextual issues such as family dynamics and the doctor-patient relationship. Taken together, a fuller biopsychosocial model emerges.

**Social Medicine and Community Health**

All components of the social medicine curriculum are taught conjointly for all three specialties.

**First-Year Orientation:** During the fourth month of the first postgraduate year residents from all three disciplines have a 1-month orientation to the Residency Program, its entire faculty, its community, hospital,
health centers, and to community-oriented primary care (23). The major learning vehicle for the orientation month is a collective, community-based project that the residents design, plan, implement, evaluate, and present with faculty support and supervision.

**Weekly Evening Seminars:** Each week a 2-hour lecture and discussion is held on Tuesday evening on topics that examine the broader context of health and the health care system. These topics are organized in mini-courses, 3 to 8 weeks long, on occupational medicine, women’s health, black families and health, political economy of health care, and others.

**Core Curriculum in Social Medicine:** After several years of discussion to define the core skills and knowledge expected of our residents in social medicine, a core curriculum of three courses was organized: “Spanish for the Clinician” (applied communications skills), “Understanding the Health System and Health Teams” (applied organizational skills), and “Community Assessment, Epidemiology and Research” (applied quantitative skills) (For details see [23]). Each course is a required 1-month rotation.

**Social Medicine Projects:** Each resident must complete a project that examines a biomedical, psychosocial, or social issue in depth. The project may be done independently or with other residents, program faculty, or faculty mentors. Projects range from reading tutorials to research and service projects and grant proposals. Some projects have become incorporated into program and institutional activities including many clinical protocols, satellite health centers, a lead screening program, a rape crisis intervention team, an adolescent mothers’ support group, a high school-based health clinic and day care center, and an outreach team to provide health care to the homeless in the Bronx.

**Complementary Therapies:** Since 1974 a portion of the curriculum has been devoted to introducing residents to therapeutic and self-care techniques, including acupuncture and acupressure, deep relaxation, self-hypnosis, yoga, herbal and home remedies, biofeedback, and massage. Emphasis is placed on the adjunctive application of these therapies in primary care to stress-related conditions, chronic pain, morning sickness, insomnia, migraine, and other conditions where traditional medicine has limited efficacy (25).

### Shared Biomedical Areas

Areas of clinical interest for all three disciplines are regularly examined during ambulatory care rounds in domestic violence, drug and substance abuse, nutrition, human sexuality, sexually transmitted diseases, diabetes, asthma, orthopedics and sports medicine, gynecology and family planning, ophthalmology, otolaryngology, and clinical decision-making. Curriculum development has emphasized clinical problems with high prevalence rates in the South Bronx.

Some cross-disciplinary supervision has been provided at the ambulatory practice sites, primarily for family physicians covering pediatric or internal medicine ambulatory precepting. The converse is more difficult, but the use of internal medicine and pediatrics faculty as consultants for family medicine is common, and collaboration is fully supported by all faculty.

### Results

The residency program has trained 218 residents (84 interns, 61 pediatricians, and 73 family physicians), 78% of whom are board certified, 71% are engaged in primary care, 56% serve primarily low-income patients, and 73% practice on interdisciplinary teams. Other characteristics of graduates are shown in Table 1.

To examine the association between practicing on interdisciplinary teams and providing care to poor and working class patients, we used data from a 1985 survey of our graduates to compare the mean percentages of poor and working-class patients served by graduates who worked on teams and graduates who did not. The mean percentage of poor and working-class patients served by graduates not practicing with teams \( (n = 39) \) was 17.6% and 8.7%, respectively. The mean percentage of poor and working-class patients served by graduates working with teams \( (n = 103) \) was 40.1% and 24.9%, respectively. These differences were statistically significant (poor patients, \( P < 0.008 \); working-class patients, \( P < 0.001 \)) (Table 2). A strong association between interdisciplinary team practice and serving greater percentages of poor and working-class patients exists among our graduates. Almost three quarters of our graduates practice on an interdisciplinary team.

To test the impact of our training against the effects of resident selection in achieving our goal of providing physicians to underserved urban areas, we surveyed our graduates in internal medicine from 1978 to 1983 and compared their practice settings with applicants to our program for the same period who trained elsewhere. We compared their practices on 10 variables important to our objectives: interest in primary care; actual practice in primary care; organ system subspecialty fellowship training; urban practice; serving minority, Hispanic, poor, and working-class patients; leadership in administration; and board certification.

We could find no statistically significant difference in these variables between applicants we ranked at various levels, applicants who ranked our program at various levels, or applicants reporting different levels of interest in primary care.
We then compared our graduates during a 5-year period with applicants trained elsewhere during the same period. Of 116 applicants trained elsewhere, 81 (70%) responded and of the 28 graduates, 27 (96%) responded. We found 2 of the 10 variables showed a statistically significant difference in a positive direction: the percentage in primary care practice (73% for our graduates compared with 60% for applicants trained elsewhere; \( P = 0.045 \)) and the percentage of working class patients in their practices (\( P = 0.019 \)). Comparisons of the remaining eight variables showed our graduates exceeding the applicant group in the desired direction but not by enough to reach statistical significance. Even controlling for the degree of interest in primary care, our graduates were practicing primary care at a greater rate than applicants trained elsewhere.

Our graduates are achieving our objectives and their practices are influenced by our interdisciplinary training (among other aspects of the training program) and not solely the selection process (Schorow M, Bateman WS. Quality assessment of a residency program using outcome measures. Submitted for publication).

**Assessment**

A qualitative assessment of the program’s interdisciplinary structure is shown in Table 3. The common training experience teaches the differences between disciplines and promotes mutual respect, cooperation, and support for primary care within each discipline. Each discipline brings special strengths to conjoint learning experiences. The developmental perspective of pediatrics emphasizes health promotion, anticipatory guidance, and disease prevention; the scientific, problem-focused approach of internal medicine emphasizes differential diagnosis and proven interventions; and the contextual perspective of family medicine emphasizes relationships and interactions between doctor, patient, and family.

The fact that the three disciplines have not shared a common ambulatory practice results from logistic and space limitations rather than philosophic or pedagogic grounds. In fact, a single ambulatory site would yield added economies of reduced faculty and resident travel time, reduced requirements for resident supervision by faculty preceptors, reduced requirements for audiovisual equipment, increased opportunities for joint conferences and cross-fertilization through broader contacts by residents with faculty, and increased opportunities for sharing the direct care of patient families. Although these interactions occur in our hospital-based activities, our clinical practice sites have been less integrated than the ideal.

**Discussion and Review of the Literature**

The literature on interdisciplinary medical education can be roughly divided into three periods. In the late 1950s and 1960s considerable experimentation and documentation took place in undergraduate medical education in what was then called “comprehensive (family) medical care” (26-29). The 1970s gave considerable attention to the development of the primary health care team and education that crossed professional disciplines between medicine, nursing, social work, midlevel practitioners, and other health workers (30-32). The 1980s have focused on interdisciplinary health teams in specialized areas, for example, dialysis, geriatrics, and rehabilitation (33-35).

What was widely called “comprehensive care” in the 1950s and 1960s evolved into “primary care” in the 1970s.

**Table 2. Comparison of Service to Low-Income Patients by Graduates of the Residency Program in Social Medicine Working with and without Teams**

<table>
<thead>
<tr>
<th></th>
<th>Mean Percentage of Patients Served</th>
<th>Poor Patients*</th>
<th>Working-Class Patients†</th>
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</thead>
<tbody>
<tr>
<td>Working with teams ((n = 103))</td>
<td>40.1%</td>
<td>24.9%</td>
<td></td>
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<tr>
<td>Working without teams ((n = 39))</td>
<td>17.6%</td>
<td>8.7%</td>
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* \( P < 0.008 \).
† \( P < 0.001 \).

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* Results of survey conducted of all graduates in 1985.
† Did not pursue organ system subspecialty fellowship training but includes graduates in adolescent and community medicine, geriatrics, psychiatry, and public health.
‡ Indicates greater than 50% poor and working-class patients by graduates’ report of their practice profile.
Common philosophy and mission builds esprit de corps and professional identity that transcends disciplines. Unique mission, high morale, and excellent clinical training attracts highly qualified residents and faculty and expands applicant pool.

Joint conferences, shared curricula and faculty promote cross-fertilization among disciplines. Creation of "critical mass" and team fosters faculty research in shared areas (for example, nutrition, clinical decision-making, epidemiology, behavioral sciences, family systems). Experience prepares residents for cross-coverage and multidisciplinary practice. Experience develops appreciation for other disciplines.

Conjoint efforts enhance recruiting, especially for minority candidates. Increased diversity in funding sources permit flexibility in budgeting. Several part-time positions for separate tracks may become single full-time positions. Faculty promote cross-coverage for teaching and administration.

Mutual support network of highly identified graduates provides many career opportunities. Program has established reputation for quality, socially minded graduates.

Program identity and goals occasionally conflict with parent institution. Residents receive minority group status within hospital.

Faculty development and research in discipline is limited. Promotion often requires leaving program. Few senior faculty present as mentor or role models for faculty.

Expected economies of scale are limited by mandated faculty: resident ratios, multiple clinical sites, and faculty-intensive ambulatory teaching.

Marginality has limited traditional departmental and disciplinary networks.

One article (41) described two combined medicine-pediatrics residencies without specific attention to their interdisciplinary collaboration and another (42) referred to plans for joint practice and training among the three primary care disciplines.

Editorials on interdisciplinary collaboration are quite common. The Institute of Medicine report on primary care (4), for example, identified four practice units—family practice, multispecialty, family practice team, and multispecialty team—and, as its first recommendation said:

... because no practice arrangement has been found consistently superior to any other, primary care... should continue to be delivered by various combinations of health care providers in a variety of practice arrangements. Pluralism is a useful feature of the delivery of primary care services and... should be preserved...

Colwill (43) has argued, "Gradual integration of the three disciplines is the best approach to the challenge of meeting future primary care needs," while in the same journal Friedman (44) wrote, "Integration of primary care training into a single unified program, combining the best elements of current approaches, is logically appealing." Mascia and associates (45) noted:

There continues a lack of consensus on how to teach several aspects of primary care, even within each primary care specialty. While existing heterogeneity con-
Table 4. Federally Funded Combined Primary Care Residency Programs (General Internal Medicine and General Pediatrics)*

<table>
<thead>
<tr>
<th>University</th>
<th>Grant Support Period</th>
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<tbody>
<tr>
<td>California</td>
<td>University of California School of Medicine, Los Angeles July 1984-present</td>
</tr>
<tr>
<td>University of California School of Medicine, San Francisco October 1977-June 1983</td>
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<tr>
<td>Colorado</td>
<td>University of Colorado School of Medicine, Denver October 1977-June 1981</td>
</tr>
<tr>
<td>District of Columbia George Washington School of Medicine, Washington October 1977-present</td>
<td></td>
</tr>
<tr>
<td>Illinois Chicago College of Osteopathic Medicine, Chicago October 1978-June 1982</td>
<td></td>
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<tr>
<td>University of Illinois School of Medicine, Chicago October 1977-June 1982</td>
<td></td>
</tr>
<tr>
<td>Iowa University of Iowa School of Medicine, Iowa City October 1977-September 1978</td>
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</tr>
<tr>
<td>Maryland Johns Hopkins University School of Medicine, Baltimore October 1978-June 1984</td>
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<tr>
<td>Massachusetts Boston University School of Medicine, Boston October 1978-June 1981</td>
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<tr>
<td>University of Massachusetts School of Medicine, Worcester October 1977-June 1982</td>
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<tr>
<td>Michigan Michigan State University of Medicine, East Lansing October 1977-June 1985</td>
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<tr>
<td>University of Michigan School of Medicine, Ann Arbor October 1977-June 1982</td>
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<tr>
<td>Nevada University of Nevada School of Medicine, Reno October 1978-June 1981</td>
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<tr>
<td>New Jersey Columbia University School of Medicine/Overlook Hospital, Summit October 1978-September 1983</td>
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<tr>
<td>New York Albert Einstein College of Medicine, Bronx Montefiore Medical Center October 1977-June 1986</td>
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<tr>
<td>Bronx Municipal Hospital Center, North Bronx Hospital October 1979-June 1982</td>
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<tr>
<td>Interfaith Medical Center, Brooklyn July 1984-present</td>
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<tr>
<td>Mount Sinai School of Medicine (CUNY), New York October 1978-September 1980</td>
<td></td>
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<tr>
<td>New York University Medical Center, New York July 1983-present</td>
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<tr>
<td>University of Rochester School of Medicine, Rochester October 1977-June 1986</td>
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<tr>
<td>Ohio Wright State University School of Medicine, Dayton July 1984-present</td>
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<tr>
<td>Oklahoma University of Oklahoma School of Medicine, Oklahoma City October 1978-June 1981</td>
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<tr>
<td>Pennsylvania University of Pennsylvania School of Medicine, Philadelphia October 1978-June 1985</td>
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<tr>
<td>South Carolina Medical University of South Carolina, Charleston October 1977-June 1983</td>
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<tr>
<td>Texas Baylor College of Medicine, Houston October 1977-September 1980</td>
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<tr>
<td>Vermont University of Vermont College of Medicine, Burlington October 1977-September 1980</td>
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<tr>
<td>West Virginia University of West Virginia School of Medicine, Morgantown July 1984-present</td>
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* Adapted from the Bureau of Health Professions (49).

tributes to flexibility, further sharing of approaches can enhance the efforts of all the primary care specialties.

Alpert and colleagues (46) noted:

Primary care specialties comprise several groups, among which there is no organizational unity, insufficient communication, and little professional cooperation. Yet these groups... share the same basic concerns. Working in concert, they could have a profound effect on health care delivery in the U.S.... A coalition, or organization, of primary care disciplines is needed to ensure that opportunities are not lost.

The United States Public Health Service's Division of Medicine's conference on "Future Developments of Primary Care Graduate Medical Education" (47) concluded:

Individuals within internal medicine, pediatrics, family practice, and osteopathic medicine share common interests. They should enhance communications among themselves, and develop shared goals which will promote the training of primary care physicians.

Given the scarcity of descriptive literature, one might conclude that the collaboration of primary care disciplines at the Residency Program in Social Medicine is an anomaly and not a potential model. However, more thorough review suggests that collaborative experimentation and training can be found in various settings with potential for considerable growth. Table 4 shows the 27 federally funded joint residency programs in internal medicine and pediatrics. The primary care residency training grants, administered by the division of medicine, encourage joint application and cooperation between these two disciplines. Only two of these programs (West Virginia and Wright State) are designed to prepare trainees for dual board
eligibility. The Robert Wood Johnson Foundation reviewed (49) nine primary care residencies that received their financial support and found that two thirds had some interdisciplinary collaboration.

Descriptions of collaboration, however brief, can be identified for the following institutions: Albert Einstein College of Medicine (50); Boston University (49-51); Dartmouth (49, 52); George Washington University (49, 50); Harvard (8, 53, 54); Interfaith Medical Center (State University of New York-Downstate) (50); Medical University of South Carolina (50); University of California (42); Irvine (49, 50); Los Angeles (49, 50), and San Francisco (49, 55); University of Missouri-Kansas City (49); University of Rochester (49, 50, 55, 56); University of Texas (Dallas) (50); and Washington University (55, 57).

In addition, as shown in Table 5, while other primary care residency positions and programs have stabilized in number over the last several years, combined pediatric-internal medicine residencies leading to dual board eligibility are growing considerably. In 1985 pilot triple board programs in pediatrics, psychiatry, and child psychiatry were started at Tufts, Brown, Mount Sinai, University of Kentucky, University of Utah, and Albert Einstein College of Medicine.

Only limited generalizations may be made from the brief descriptions of these programs that are available. These generalizations, however, are similar to generalizations drawn about comprehensive care a decade ago (36, 59): Interdisciplinary graduate medical education has developed in community-based settings, such as neighborhood health centers, health maintenance organizations, and university health plans, and in hospital-based settings where traditional outpatient departments have been reorganized into model ambulatory care units or distinct primary care buildings or departments. Interdisciplinary education thus takes its place alongside interdisciplinary health care delivery and team practice organized for optimal primary care.

Policy Implication and Proposal

Graduate medical education is facing a new environment. Its contribution to rising medical costs at a time when a physician surplus seems imminent is receiving growing attention (60). Likewise, the financial and political environment of the academic health center is also changing rapidly (61). Resources for primary care graduate training are likely to dwindle despite a continuing and, perhaps, growing need for primary care physicians and case managers. Therefore, increased collaboration between the primary care disciplines will become necessary to maintain quality graduate medical education, whereas the other ideologic, administrative, educational, and professional advantages to integration (listed above) will become recognized with growing experience.

As noted at the conference on “Future Developments in Primary Care Graduate Medical Education” (45):

Only the federal government has the perspective of the nation’s medical manpower needs taken as a whole. Therefore, it remains essential for the federal government to continue to monitor and influence specialty distribution to meet the population’s needs.

Between 1977 and 1988 the federal government will have invested $451 million in grants to departments and residency programs in family medicine and residency programs in primary care internal medicine and pediatrics (62-64). Medical schools receiving federal support between 1983 and 1986 in two or more primary care disciplines are shown in Table 6. Fifty medical schools have the potential for interdisciplinary cooperation and collaboration from schools receiving federal grants alone. Currently, federal grants are awarded in each discipline without regard for other federal grant support for primary care efforts. In the past federal grants have favored applicants in medically underserved areas who promote interdisciplinary practice with nurse practitioners and physicians assistants or new programs applying for start-up funds. The federal government, therefore, can take an important lead in promoting greater collaboration between the primary care disciplines by mandating or rewarding the sharing of resources and curriculum among its own grantees. This method would strengthen primary care within these institutions, as well as maximize the shrinking financial resources available for supporting graduate medical education.

Conclusion

The Residency Program in Social Medicine has developed a model for the integration and collaboration of the three primary care disciplines in graduate medical
education. This model has been successful in providing primary care physicians for underserved communities. Like other residency programs that have developed interdisciplinary primary care training, this program is community based with its model ambulatory care sites delivering primary care in teams that include residents and students. Interdisciplinary education is considerably more prevalent and developed than its published literature.

The federal government has already played a vital role in the development of primary care graduate medical education. Yet only the federal government has the perspective and the power to foster still more interdisciplinary cooperation, collaboration, and integration by mandating or rewarding such efforts by its grantees. Such collaboration will strengthen primary care in general, and graduate medical education in particular during a period of shrinking resources.

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*Adapted from Division of Medicine (63-65).


64. Health Professions Grants for Residency Training in General Internal Medicine and/or General Pediatrics: Table I. Mimeograph, 1 July, 1986:1-9. Available from Division of Medicine, Bureau of Health Professions, Health Resources, and Services Administration, Public Health Service, Department of Health and Human Services, Bethesda, MD 20857.