Preparing Family Physicians to Care for Underserved Populations: A Historical Perspective

Denise V. Rodgers, MD; Andrea L. Wendling, MD; George W. Saba, PhD; Megan Ruth Mahoney, MD; Joedrecka S. Brown Speights, MD

**BACKGROUND:** Family physicians have been involved in the care of rural and urban underserved populations since the founding of the specialty. In the early 1970s family medicine training programs specifically focused on training residents to work with the underserved were established in both urban and rural settings. Key to the success of these programs has been a specific focus on improving access to care, understanding and eliminating health disparities, cultural competency and behavioral science training that recognizes the challenges often faced by patients and families living in poor rural and urban areas of the country. In keeping with a focus on the underserved, several urban underserved residencies also became national models for the provision of primary care to patients and families affected by HIV/AIDS. Family medicine training programs focused on the underserved have resulted in the development of a cohort of family physicians who care for those most in need in the United States. Despite these achievements, persistent challenges remain in providing adequate access to care for many living in rural and inner city settings. New strategies will need to be developed by family medicine programs and others to better meet these challenges.

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The 1910 Flexner Report, commissioned by the Carnegie Foundation, significantly impacted medical education. One of its major effects was the redistribution of medical education from small geographically dispersed programs throughout America to an urbanized university-centered model of education. This fundamental shift had the unintended consequence of worsening the geographic maldistribution of physicians away from rural areas of the country. Furthermore, poor and minority populations living in urban areas did not benefit from the increased physician supply and often lacked access to adequate health care services. Poor, inner city residents were often viewed as “good teaching cases” in these hospital settings, and little attention was paid to their need for ongoing comprehensive primary care.

In 1966, the American Medical Association issued the Millis Report which examined the state of graduate education of physicians fifty years after Flexner. It documented the prevalence of poor quality care, a lack of access to comprehensive primary care, and the lack of standardization in graduate medical education. While the report made a strong case for the development of a primary care physician, it negated the need for geographically distributed physicians who would practice in rural areas of the country.

With the farm population down to 6 percent of the total, and with only a small percentage of the population not having easy access to good highways, it is no longer reasonable to educate physicians on the assumption that they must or will work in isolation. In structuring the education of future physicians, it must be expected that most of them will practice in close proximity to other physicians and that transportation facilities will permit quick patient access to hospitals and to specialized diagnostic and therapeutic centers.

From the Office of Interprofessional Programs, Rutgers Biomedical and Health Sciences (Dr Rodgers); College of Human Medicine and Family Medicine, Michigan State University (Dr Wendling); Department of Family and Community Medicine, University of California, San Francisco (Dr Saba); Division of Primary Care and Population Health, Stanford University (Dr Mahoney); Department of Family Medicine and Rural Health, Florida State University (Dr Brown Speights).
Rural Training and Health Care in Family Medicine

It is important to note that the need for access to care in rural areas has not lessened significantly in the 50 years since the Millis report. In many underserved rural communities, family physicians are responsible for the majority of medical services, providing care to rural residents from conception to end of life. Rural communities depend on family physicians trained to provide comprehensive care in low-resource areas, a task that requires familiarity with rural systems as well as comprehensive training. In fact, over 90% of primary care capacity in rural areas is supplied by family medicine and general practitioners.4,5

Despite the somewhat improved access provided by family physicians, many rural residents still experience disparities in health outcomes due to, poor socioeconomic status, unhealthy behaviors, and poorly controlled chronic conditions, all exacerbated by geographic isolation and an inadequate provider workforce. Similar to their inner-city counterparts, rural populations are more likely to experience low birth weight, higher teen birth rates, obesity, preventable hospital stays, and diabetes.6-9 Rural populations also experience delays in access to emergency care that are more pronounced for racial and ethnic minority populations.8 Social determinants of health play a significant role in the health disparities observed in many poor, medically underserved minority patients residing in either rural or inner-city communities. In both settings it is likely that improved access to primary care would result in lower overall mortality.11 Persistent physician shortages inhibit access to primary care for rural and urban underserved populations, and its solution, although multi-factorial, is intricately tied to family medicine.

Since its inception, family medicine has been on the forefront of rural medical education for both medical students and residents. In the early 1970s, responding to persistent rural disparities, a few medical schools developed innovative rural training models. Shared characteristics of these early programs included significant and often longitudinal training opportunities in rural communities, selective admissions favoring students with rural backgrounds, and an emphasis on family medicine. This combination proved fairly successful, with many studies consistently showing graduates of medical school rural training tracks more likely to be practicing family medicine in rural communities.12-21 The regional and statewide impact of these programs on the rural physician workforce has been well documented.12,18,22

Several of these pioneer rural undergraduate training programs have remained successful, including University of Minnesota’s Duluth campus and Rural Physician Associates Program (RPAP),23-25 Michigan State University’s Rural Physician Program (RPP),26 Thomas Jefferson University’s Physician Shortage Area Program (PSAP),27 and the Rural Preceptorship Program at University of Kansas.28 These early programs have served as models for up to forty similar programs, which have expanded across the nation in the last 25 years.29,30

Rural family medicine residency programs, emphasizing comprehensiveness and rural exposure, began training residents for rural practice in the 1980s. These models included urban programs with rural experiences, rural community-based residency programs and Rural Training Track (RTT) programs. The most innovative approach was the 1-2 RTT residency, in which residents typically complete an initial year of training in an urban setting followed by two years in a rural training site. The first RTT model, Family Medicine Spokane RTT, was established in 1986 and offered rural training in Colville, WA.30-32 Since then many RTT programs have been established throughout the nation.32,33 Residents training in rural-centric family medicine programs are more likely to
begin practice in rural communities and more likely to remain in rural practice than graduates of traditional programs.\textsuperscript{14–36}

Despite these successes, we are not training enough rural physicians to meet workforce projections.\textsuperscript{16,33} Although rural training models are effective, they educate only a small and decreasing fraction of the nation’s physician workforce.\textsuperscript{35} Students of rural origin—those most likely to care for rural populations—remain significantly underrepresented in medical schools.\textsuperscript{37} To meet the needs of rural populations, increasing numbers of family medicine programs need to provide comprehensive, rural-focused training and need to attract students interested in rural careers. According to Rural Healthy People 2020, access to quality care is still the most significant priority for rural populations.\textsuperscript{36} While family medicine has been an important contributor to improve rural access to care, much work remains to be done. For both rural and urban underserved settings, training should be team-based and needs to integrate technology, and public and population health.

Urban Underserved Training and Health Care in Family Medicine
Parallel to the growth of undergraduate and residency training in rural health, the early 1970s also saw the development of family medicine residency programs focused on training physicians to work in urban underserved areas. While several of the earliest family medicine programs were located in urban areas, most of these programs did not have curricula that were specifically tailored to care for the underserved. Family medicine programs explicitly designed to focus on underserved populations were first established at Cook County Hospital in Chicago, San Francisco General Hospital, and the family medicine component of Montefiore’s Residency Program in Social Medicine. In the mid 1980s, Sommers and Massad outlined the key components of an urban family medicine program that continue to serve as a blueprint for these programs today. They described key curricular elements of urban-focused residency training including: an orientation to urban family medicine with exposure to family physicians already practicing in urban underserved communities; cross-cultural curriculum that prepares residents to care for a highly diverse patient population; an urban family curriculum focused on the variety of family constellations seen in urban areas; and training in community oriented primary care.\textsuperscript{38}

These early programs understood the importance of the social determinants of health as key contributors to poor health outcomes. Residents learned to utilize a systems approach when working with underserved individuals and families and to examine the role of public and community health in improving the health of the poor. The programs strove to increase the number of underrepresented minority residents in recognition of their increased likelihood to work in underserved settings.\textsuperscript{39}

Given the unfortunate legacy of experimentation, exploitation, and transient relationships by medical institutions in underserved communities, residents also received more focused training to understand the importance of trusting doctor-patient relationships. This education focused on increasing resident understanding of the power differential between patients and physicians, the impact of mistrust on the quality of care, and the importance of building trusting relationships in the exam room, at the bedside, and in the community.\textsuperscript{40}

While the emotional health of patients and families has been a focus of care for years, recently, more attention has been paid to how the pressures of being the lone physician who often struggles to provide emotional support and resources to underserved patients can strain family doctors and affect the care of families. Curricula have been developed that emphasize working effectively in teams,\textsuperscript{41} maintaining personal and professional boundaries, and focusing on satisfaction and meaning in one’s work.\textsuperscript{42}

An added burden faced by family medicine residents training in urban settings can be anti-family medicine attitudes prevalent in many of the nations’ leading academic health centers. These attitudes can undermine resident confidence and adversely impact the production of primary care clinicians. Despite this, in most urban academic settings, family medicine residencies have demonstrated their ability to train physicians to provide high quality care for urban underserved populations. They have also contributed to a body of scholarly work focused on workforce development, interprofessional team-based care, health disparities, and health policy.\textsuperscript{39,43,44}

Since most departments and residency programs have received PHS Title VII funding, there is significant evidence that these trainees are more likely to practice in underserved settings when compared to their counterparts who did not focus on underserved practice.\textsuperscript{45–47}

Family Medicine and Behavioral Science Training in Underserved Settings
Family medicine training programs, especially those focused on care of underserved populations, have also played a key role in the development and implementation of longitudinal behavioral science training. This contribution has undoubtedly been influenced by the integration of these programs within the high-need communities they were designed to serve. Emerging during the era of the civil rights movement, the behavioral science training in underserved family medicine residencies was grounded in a family systems approach grounded in the concept of social justice. This systemic view of behavioral sciences was taught both as a discrete body of knowledge and integrated throughout the entire residency training, informing
the structure and content of all aspects of many programs. Behavioral scientists and family physicians together taught and shaped the curriculum. Faculty gravitated to family therapy approaches that were developed in underserved, economically disadvantaged, multi-racial/multi-ethnic communities, were based in research on illness and families, and emphasized a strength-based rather than a deficit-focused approach.51-66

The realities of underserved communities shaped key aspects of behavioral science training. Early on, encounters with non-traditional family structures required abandoning the idealized “nuclear family” and adopting a curriculum that focused on intimate relationships within and beyond the household. It also considered the dislocation of families forced to move frequently, the homeless, or those acculturating after immigration.68-70

The complexities of life in urban and rural underserved communities required residents to reframe notions of non-compliance and instead consider multiple barriers to compliance (geography, transportation, cost of care, language, psychosocial vulnerabilities and low health literacy) in assessment and treatment planning. Access to mental health care is also limited in underserved areas and stigma often keeps some from psychotherapy. While all family medicine residents learn basic counseling skills, those intending to practice in underserved communities often need intensive and practical training in brief systemic family therapy to better meet their patients’ needs.72,73

In the 1980s, acknowledging the increasing complexity of family culture, behavioral health faculty in urban underserved residencies began to consider multiple factors that influence families (political, historic, spiritual, economic, and previous health care experiences) and examine the culture of biomedicine as well as the physician’s personal culture. Cultural humility and the need for culturally responsive care necessitated training that fostered respect for the individual and families. To improve care for non-English speaking patients, curricula incorporated speaking patients, curricula incorporating guidance on working with professional interpreters,72 and some programs offered or required learning Spanish. In these ways, family medicine’s commitment to rural and urban underserved communities has not only bolstered care for these populations, and reflexively has shaped the discipline of family medicine.

Behavioral science training in underserved residencies will face a number of opportunities and challenges into the future. With increasing emphasis on team-based care, training of all team members in a systemic approach to care is essential to provide a shared perspective. Family physicians will often remain a key—and sometimes, the only—person who will care for mental and emotional needs in underserved urban and rural communities, both due to resources and patient preferences. Residents, therefore, will continue to need robust training in the systemic treatment of patients in the context of relationships, resisting the trend to focus only on the individual.74

**Family Medicine and the Care of People with HIV/AIDS**

In the early 1980s the medical, social, and behavioral aspects of family medicine were put to an extreme test as many of the urban underserved family medicine residencies began caring for the newly emerging population of patients with HIV/AIDS. In 1978, Dr Ronald Goldschmidt from UCSF, created one of the nation’s first family medicine inpatient services in an acute care, publicly funded hospital. There he treated his first patient with AIDS in 1980, a year before the CDC’s initial report on the disease. Soon after, half of the patients on the family medicine service had AIDS. During this pre-AZT era, family physicians, clinical pharmacists, behavioral scientists, and nurses simultaneously grappled with the reality of increasing prevalence and the ensuing stigma and fear that accompanied the AIDS epidemic. Dr Goldschmidt reflects on the unique role of family medicine trainees:

> Because interns and residents were the same age, the identification with the patients was very deep. It was true in all specialties. Because family medicine residents are interested in issues of family, we were particularly struck by the many patients who were admitted to the hospitals whose families did not know. We were oftentimes the first to talk to families not only about the diagnosis of AIDS but that they were gay.75

In 1984 Dr Peter Selwyn, a family physician, became medical director of Montefiore’s Substance Abuse Treatment Program when the South Bronx was in the midst of a growing AIDS epidemic. He recalls,

> From the beginning, what had drawn me to family medicine was the understanding that the family, social, community, and environmental context is fundamental to health and illness. AIDS was a perfect example; this disease affects individuals, family, and communities. Caring for patients with AIDS was affirmation of why I was doing what I was meant to be doing.76

Drs Goldschmidt, Selwyn, and other family physicians emerged as leaders on the frontline in the dissemination of universal precautions and ethical HIV screening and disclosure protocols. In 1995, the Family Health Center at San Francisco General Hospital created a clinical service that focused on caring for those infected with and affected by HIV/AIDS. This service was in contrast to outpatient HIV clinics that treated patients outside of the context of their close relationships; rather it has provided a family systems approach to the health care of both HIV/AIDS patients and their loved ones.
Over the past 30 years, family medicine residents have received focused training in the care of patients with HIV and their families. Early on residents needed skills in such areas as helping patients and families deal with disclosure, building trust with patients who were reluctant to come for care, counseling parents with AIDS about how to plan for their children's future after they die, helping patients and families manage stigma and discrimination, and dealing with the loss of multiple friends. As HIV has moved from a terminal to chronic illness, training has shifted to such issues as helping zero-different couples make decisions about having children, managing issues of trust, helping families deal with emotional and mental health issues related and unrelated to the disease, and managing the other chronic illnesses patients develop as they age.

Family physicians continue to contribute to curtailting the HIV epidemic domestically and internationally. New areas of focus, including integrating pre-exposure prophylaxis and HIV programs into primary care, are supported by family physician's sensitivity to family, social, behavioral, cultural, and environmental contexts. Family medicine’s contextual approach has proven important in addressing the HIV epidemic in rural, suburban, and urban settings in the United States and across the globe.

Family Medicine’s Role in Caring for the Underserved in the Future
Evidence suggests that family medicine residency programs and departments that received PHS Title VII funds are more likely to train physicians who practice in rural and urban underserved settings, however significant gaps in access remain. Furthermore, significant gaps in health outcomes remain for minority, poor, and underserved populations. The efforts of the past have proven insufficient in correcting geographic mal-distribution and in eliminating health and health care disparities. While it is important to continue training family physicians in programs committed to caring for rural and urban underserved communities, additional measures must be taken to become more effective in solving geographic mal-distribution and persistent disparities in outcomes. Some measures to be considered are: (1) improving efforts to attract and retain students from rural, inner-city, underserved, and underrepresented minority backgrounds as they are more likely to provide care in these settings after completing their training, (2) improving reimbursements for primary care, (3) requiring training about social determinants of health in primary care, (4) requiring training about discrimination and implicit bias in health care, (5) increasing emphasis on achieving the “Quadruple Aim”, (6) developing more effective partnerships with patients, communities, public health providers and social service agencies, (7) implementing highly effective collaborative inter-professional teams in primary care, and (8) expanding the use of technology to increase access to specialty care services and support clinicians in low resource areas.

Over the past half-century, family medicine has educated countless family physicians through rigorous residency training to care for rural and urban underserved communities. With its emphasis on valuing people and building on their strengths rather than focusing on their deficits, family medicine is well positioned to continue caring for, partnering with and advocating alongside those individuals and families living in historically under-resourced rural and urban communities to help them achieve equity in their health and their health care.

References
10. Schulze A, BN B, T R. Rural Access to Quality Emergency Services. College Station, TX: Texas A&M University Health Science Center, School of Public Health, Southwest Rural Health Research Center. 2015.
12. Rabinowitz HK, Diamond JJ, Markham FW, Hazelwood CE. A program to increase the number of family physicians in rural and underserved areas: impact after 22 years. JAMA 1999;281(3):255-60.
13. Rabinowitz HK, Diamond JJ, Markham FW, Paynter NP. Critical factors for designing programs to increase the supply and retention of rural primary care physicians. JAMA 2001;288(9):1041-8.


77. Selwyn P. Personal Reflections on the Care of People with HIV/AIDS. In: Mahoney M, ed 2016.


