

# Teaching Primary Care in Community Health Centers: Addressing the Workforce Crisis for the Underserved

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Universal coverage and multiple initiatives to improve health care delivery are crucial components of health care reform. However, the missing link has been a plan to rapidly address the primary care workforce crisis for the underserved. The authors propose a link between primary care graduate medical education and care for the underserved in community health centers, where expansion will be necessary for the anticipated increase in Medicaid and insured patients. This can be achieved by establishing primary care teaching health centers in expanded community health centers, which have established a patient-centered medical home practice environment. Residents would receive their final year of training in these centers,

and then have the incentive of National Health Service Corps debt repayment if they subsequently practice in an underserved area. Primary care residents being trained in this setting would immediately increase the clinical capacity of community health centers and ultimately expand the primary care physician workforce. This proposal addresses the primary care physician workforce crisis and the associated key problems of limited access for the underserved and suboptimal primary care graduate medical education.

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Community health centers are particularly vulnerable to the primary care workforce crisis, especially if they intend to expand after the reform of our health care system. We propose addressing this problem by means of teaching health centers, which would link primary care ambulatory graduate medical education with care for the underserved in community health centers. This proposal simultaneously addresses 2 additional interrelated problems: limited access for the underserved and the suboptimal quality of primary care graduate medical education, both of which present obstacles to health care reform.

fewer primary care physicians will be entering the workforce at a time when more are needed (3, 7).

## LIMITED ACCESS FOR THE UNDERSERVED

At least 65 million people in the United States reside in areas with a shortage of primary care health professionals (8). A progressively decreasing number of physicians provide primary care for uninsured patients, as well as those on Medicare, Medicaid, and the Children’s Health Insurance Plan. This has further exacerbated limited access and often leads to more frequent, less effective, and more expensive care in emergency departments (9). In an attempt to address our inequitable distribution of primary care services, increasing focus has been placed on expanding community health centers in areas of shortage (10).

Twelve hundred federally qualified health centers operate in approximately 6000 urban and rural sites in every U.S. state and territory and serve an estimated 17 million people (10). As the economy has deteriorated, many people have lost their employer-sponsored insurance, which has led to greater demand for services from community health centers. The National Association of Community Health Centers has formulated an aggressive growth strategy, with a goal to serve 30 million people by 2015 and 51 million by 2022 (11). This expansion, however, may be severely curtailed by the difficulty of recruiting primary care physicians (12). A recent Institute of Medicine report (13) has indicated that more than 16 000 additional primary care

## PRIMARY CARE WORKFORCE CRISIS

The United States is facing a serious shortage of primary care physicians, due to a deficient primary care pipeline as well as the growth and aging of the population and the impending retirement of older physicians (1). Medicare funds are provided to teaching hospitals to support graduate medical education without designating the types of physicians they train. The Balanced Budget Act of 1997 capped the number of residents eligible for Medicare support at each existing teaching hospital (2). Because the cap applies to hospitals as a whole and not to individual residency programs, hospitals are free to change the type of residents they train as long as they stay within their overall cap. The trend has been toward more specialty and fellowship positions and fewer primary care positions (3). Compared with 8 years ago, 20% more internal medicine residents are choosing subspecialty training and more general internists are becoming hospitalists (2). Family medicine programs are filling 15% fewer first-year residency positions than they did 10 years ago, and fewer than 50% of these positions are filled by U.S. medical school graduates (4). The decline in primary care graduates is due to deficient reimbursement for primary care, debt, lifestyle preferences, and the current problematic structure of primary care practice (5, 6). These graduate medical education trends indicate that

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physicians are needed to meet the present demand in underserved areas in which community health centers provide access.

### SUBOPTIMAL PRIMARY CARE GRADUATE MEDICAL EDUCATION

Residency training for primary care disciplines increasingly occurs in ambulatory settings. Internal medicine residency training requires a minimum of 33% of time in ambulatory settings (14), whereas family medicine and pediatrics devote an even greater percentage of time to ambulatory training (15). Optimal training requires a greater emphasis on geriatrics, preventive services, coordination of care, and patient education (13). However, several barriers to expanding ambulatory training exist. Many programs have difficulty maintaining an adequate number of ambulatory training sites. Internal medicine residents and medical students often are dissuaded from pursuing a career in primary care because of a negative experience in the disorganized and chaotic environment of the outpatient departments of their training program (16).

### RECENTLY ENACTED AND PROPOSED LEGISLATION THAT ADDRESSES THESE KEY PROBLEMS

Major legislative initiatives designed to address these key problems have already been enacted or introduced in Congress. The enthusiastic and bipartisan support for establishing these initiatives suggests that they will be included in the final health reform legislation.

To reverse the decline in primary care physicians who care for the underserved, the Access for All America Act (17) proposes a major expansion of community health centers and the National Health Service Corps. In addition, the recently enacted American Recovery and Reinvestment Act of 2009 (18) has provided \$1.5 billion in construction, equipment, and health information technology for community health centers and \$500 million for services at these centers. An additional \$300 million has been provided for the National Health Service Corps (19).

The Preserving Patient Access to Primary Care Act of 2009 (20) addresses the critical shortage of primary care providers. This bill creates new residency positions for primary care trainees and more opportunities to train in the ambulatory care setting—particularly in community health centers. It establishes Medicare payments for care coordination services and monthly payments to providers who serve in patient-centered medical homes.

The Resident Physician Shortage Reduction Act of 2009 (21) would expand the number of Medicare-supported physician residency training positions by 15%. This expansion would include preferences for primary care training in community health centers and other community-based training. It would allow Medicare reim-

#### **Key Summary Points: Key Features of Primary Care Teaching Health Centers**

Addresses physician primary care workforce shortage: Replenishes primary care pipeline by attracting residents to a training environment consistent with future practice and providing debt repayment programs through the National Health Service Corps.

Provides access for the underserved: Centers would be located in a certified primary care health professions shortage area and facilitate expansion of community health centers, which face a great increase in demand for patient care.

Improves primary care training in patient-centered medical home environment: Residents could practice in a well-functioning primary care clinic, reflective of their future practice, with close supervision from well-supported teaching faculty who would facilitate development of their team management skills.

bursement for educational activities that occur in clinical nonhospital settings.

### THE TEACHING HEALTH CENTER: A DEFINITIVE APPROACH TO THESE KEY PROBLEMS

By expanding and integrating existing programs and resources, we propose to establish primary care resident ambulatory training programs in community health centers. These programs could begin increasing the output of well-trained primary care physicians, many of whom would be committed to caring for the underserved, as soon as July 2011. Teaching health centers would be required to be located in a community health center in a primary care health professional shortage area as designated by the Health Resources and Services Administration; be affiliated with a residency program in family medicine, internal medicine, or pediatrics and capable of using this setting for primary care resident ambulatory training; be part of an established community health center with the capability to expand and staff the center, as well as be part of a community governance board committed to supporting both the educational and service missions; and have implemented or intend to implement National Committee for Quality Assurance tier-2 requirements for a patient-centered medical home (22). The patient-centered medical home is a practice model that effectively supports the core functions of primary care, uses electronic medical records, and emphasizes prevention and the management of chronic disease (22). Qualification criteria for these programs have been described in detail elsewhere (23).

Primary care residents would be the principal providers of primary care services, in close partnership with appropriate faculty, during a 12-month block of clinic train-

ing as a third-year resident. Ideally, first- and second-year residents would be assigned to the teaching health centers for their continuity clinics. Then, as third-year residents, they would be well grounded in clinic logistics and capable of performing as an effective team leader. Third-year residents would work in a practice that emphasized continuity of care, with robust faculty support for the development of resident team management and ambulatory clinical skills. Continuity of care would be ensured through the close working relationship between the resident and the supervising faculty member. This arrangement would provide the capacity to deliver coordinated, high-quality, and accessible care—with a substantially increased patient volume—because of the efficiencies of the patient-centered medical home and the physician multiplier effect of senior residents. Because this model would deviate from current training guidelines, it would be necessary for sponsoring institutions to obtain waivers from the family medicine, internal medicine, and pediatrics residency review committees.

Program components would be funded as follows:

- 1) Resident salary, benefits, and administrative costs would be supported by Medicare Direct Medical Education funds redirected to teaching health centers by the affiliated institutions, thereby supporting the training time in this setting.

- 2) Patients would be covered by insurance or government programs. Uninsured patients would be covered by community health center resources.

- 3) Faculty would receive a guaranteed salary consistent with an academic position. Salary would be supported by patient fees and Medicare education funds. Faculty would actively participate in the care of all patients.

- 4) Construction of the required increase in examination room and conference space would be supported by federal funds derived from the Recovery Act, if completed within the required time frame.

- 5) Support for personnel who provide relevant infrastructure and care coordination activities, as required by the patient-centered medical home environment, would be provided as proposed in the Preserving Patient Access to Primary Care Act of 2009 (20).

- 6) Support for establishing electronic medical records would be derived from the Recovery Act or, if conversion could not be completed in the required time frame, from legislation as proposed in the Preserving Patient Access to Primary Care Act of 2009 (20).

- 7) As an alternative, a comprehensive direct grant to affiliated institutions could be used to support all the foregoing costs not covered by the Recovery Act. This support would be directed by the affiliated institution to those community health centers best suited for establishment of a teaching health center.

Primary care residents would have substantial incentive to elect the teaching health center for their continuity clinics and their year of block clinic training. Training in

the environment of the future would be a strong inducement. In addition, the opportunity to serve as the leader of the clinic provider team and provide greatly expanded patient services would be a dramatic change from most current ambulatory training environments.

As a major financial incentive, residents would have the opportunity to apply for a position in a revitalized and expanded National Health Service Corps—as candidates with the highest priority for such an appointment. The Corps, established in 1971, focuses on community-based primary care and is the product of legislation and funding intended to place clinicians in underserved areas (24). Joining the Corps as part of the loan repayment program provides a commitment for qualifying medical educational debt repayment of up to \$50 000 in exchange for 2 years of service and includes the opportunity to extend this yearly after the initial 2 years until qualifying loans are repaid. Recent legislation (25) proposes debt repayment of \$50 000 per year until qualified educational debt has been repaid. In addition, physicians are guaranteed a salary at the primary care average reimbursement rate for the region, to be provided by the physician's community health center employer.

Primary care physicians would also have substantial incentive to join the centers as faculty. A competitive primary care academic salary for a full-time or part-time position in this environment would be attractive. A practice with a predominant teaching role would also appeal to many primary care physicians. In selected cases, medical debt repayment provisions could be implemented. In addition, a teaching health center would be an excellent site for clinical research with an emphasis on prevention and population health. Thus, faculty would have an opportunity to develop an academic career.

## IMPLEMENTATION AND PROJECTED OUTCOME

If health care reform legislation that includes the currently proposed community health center and primary care initiatives passes, our proposal is clearly attainable. If successful, it could result in substantial savings from the effects of prevention, effective chronic disease management, and decreases in emergency department use and hospitalizations (26). In 2000, an estimated 5 million admissions to U.S. hospitals, with a resulting cost of more than \$26.5 billion, may have been preventable with high-quality primary and preventive care treatment (27). Teaching health centers would contribute to the restructuring of our health care system by expanding access to the value provided by primary care (28). This new cadre of primary care physicians would be trained in an environment that used electronic medical records and emphasized cost control and the elimination of waste (29). Supervising faculty would insist on evidence-based use of imaging and laboratory studies, as well as the prescription of generic drugs.

Our proposal would also develop the capacity of teaching health centers as sites for undergraduate ambulatory medical education and serve to stimulate medical students to choose primary care as a career. Ambulatory training sites for medical students are greatly needed, especially with the recent expansion of medical school class size. In addition, these clinics would be excellent sites for training nurse clinicians, physician assistants, pharmacists, social workers, and medical assistants.

Teaching health centers could be evaluated by using several readily quantifiable parameters. Affiliated academic institutions could obtain data regarding clinical productivity, trainee satisfaction, recruitment of graduates to underserved areas, cost of care, increased training opportunities for other health professionals, and patient satisfaction. These outcomes could then be used to support legislation for subsequent expansion.

## DISCUSSION

Our proposal is designed to build a primary care workforce that can function effectively in our evolving health care environment and will improve access to care for many Americans. It is based on the development of teaching health centers that will immediately expand the clinical capacity of selected community health centers and replenish the pipeline of primary care physicians.

Because of the similarity between the Massachusetts 2006 Health Reform plan and the types of national reform most likely to be implemented, analysis of the recent Massachusetts experience is of great value in establishing national policy. A recently published report from the Kaiser Commission on Medicaid and the Uninsured (30) emphasizes the critical role of community health centers in health care reform; in Massachusetts in 2007, they served 1 out of every 13 residents. Health insurance expansion led to a great increase in the demand for primary health care, especially in medically underserved, low-income communities. Accommodating this increase in demand requires increased capacity. In that respect, a major problem encountered in Massachusetts was the shortage of qualified primary care providers, which was exacerbated by health care reform. Massachusetts was the first to experience this problem, although it could soon confront many states (31).

Our proposal builds on more than 25 years of experience of family medicine residencies with community health centers. Training family physicians in these sites helps increase the number of physicians caring for the underserved, enhances their recruitment of family physicians, and provides high-quality education for family physicians (32). More than 42% of community health centers already serve as training sites for primary care residency programs, yet most receive no funding to cover the cost of training (33).

Our proposal adds several unique features to the family medicine model. First, it expands training to other primary care disciplines. It also incorporates the patient-

centered medical home model of care, which is highly desirable for residency training for the new health care environment. Primary care resident training should be conducted in an ambulatory setting that represents the future of primary care and is attractive to future primary care residents and faculty. Teaching health centers also provide an ideal setting for residents to interact with advanced practice clinicians. The patient-centered medical home environment provides an excellent opportunity to improve skills in leadership, teamwork, patient education, and communication—all important components of resident education. Finally, our proposal introduces a new major source of financial support for training in community health centers.

Our proposal is directed toward aligning training for the primary care physician with the realities of 21st-century practice. However, the contribution of residency training to the care of the underserved is not a new feature. For most of the 20th century, residents served an important role in providing predominately inpatient care for the underserved. A proposal published in 1986 (34) advocated expanding this role to the community ambulatory setting. However, the association of ambulatory graduate medical education with care for the underserved has been constrained by policy on graduate medical education funding. Current legislative initiatives that are part of health care reform provide a way to achieve this linkage by means of teaching health centers.

Teaching health centers provide an optimal training environment for graduate medical education, given their close faculty supervision and the emphasis on patient-centered care, and represent the future of high-quality medical practice. Primary care residents trained in this setting could immediately increase the clinical capacity of community health centers. In addition, many of the graduates would provide access to low-cost primary care services for the projected increased number of underserved patients. By providing both the leadership to establish teaching health centers—in affiliation and partnership with community health centers—and the expertise to generate data for evaluating multiple parameters to measure success, academic health centers and teaching hospitals can make a major contribution to health care reform. By increasing access to primary care, teaching health centers would be a major step in forging a link between achieving fiscally feasible universal coverage and reforming the health care delivery system; improved primary care access is required to achieve the goals of the medical practice transformation necessary for health care reform. Skeptics will judge health care reform by how it works from day 1—without this missing link, the promising initiatives for reform may not achieve the expected timely resolution to this major public policy problem that affects our nation's future.

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