The National AHEC Program: Review of Its Progress and Considerations for the 1980s

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THE NATIONAL Area Health Education Center (AHEC) Program will soon complete its first decade of operation. AHEC shares with several other public programs the goal of improving access to health care through the redistribution of health professionals. Since its inception in 1972, the AHEC Program has been a successful catalyst in the decentralization of health professions education. As the AHEC Program enters its second decade, it is timely to review its progress and to consider the extent to which its mission should continue to remain exclusively educational and the extent to which it will need to develop linkages with other public programs that are attempting to achieve the same results.

It is also timely—in a period of constricting budgets and close scrutiny from public policy setters—to review the methods by which the AHEC Program makes its intervention, the time frame within which these activities may be expected to produce favorable results, and the applicability of these approaches to other programs. This report provides a forum for the consideration of these issues.

Description and History of the Program

The AHEC Program is part of a national effort to improve access to health services through changes in the education and training of health professionals. The program stimulates the formation of a balanced partnership between university-based health professions training programs (health science centers) and underserved communities. The partnership serves to link the academic resources of the health science centers to community hospitals and other local institutions, thereby addressing the training needs for health professionals in the underserved communities. The goals of the program are to:

- improve the geographic and specialty distribution of health care providers in rural and urban underserved areas;
- improve the retention of health care providers in shortage areas; and
- improve the quality, utilization, and efficiency of health professionals in shortage areas.

The AHEC Program emphasizes primary care and provides support for graduate and undergraduate training programs in medicine, nursing, dentistry, pharmacy, and allied health professions. The program is based on the premise that changes in educational programs and processes can provide effective incentives to encourage practitioners to locate and remain in underserved areas.

The initiation of the AHEC Program was stimulated by a report of the Carnegie Commission on Higher Education in 1970 that recommended changes in the education of health care providers (*1*). Among those recommendations was the decentralization of health professional education with the establishment of 126 centers (AHECs) in rural and urban inner-city areas of need by 1980. In late 1971, Congress passed the Comprehensive Health Manpower Training Act (Public Law 92–157), which in Section 774(a) provided the AHEC Program with legislative authority.

In June 1972, 11 universities were awarded 5-year, incrementally funded, cost-shared contracts. The funded

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programs were diverse in their approach and activities, reflecting the Federal view of the program as "research and demonstration." From 1972 to 1977, these 11 AHEC projects were the only ones supported by the Bureau of Health Professions (formerly the Bureau of Health Manpower). In October 1976, Congress enacted the Health Professions Educational Assistance Act (Public Law 94–484). Unlike the broad authority of the earlier legislation, the language of this act specified the organizational structure, program characteristics, and educational activities required of each project. Since 1977, under Public Law 94–484, 12 new AHECs were started; 11 of these are now approaching full operation. This law, including Section 781 authorizing the AHEC program, expired on September 30, 1980. As Congress drafts legislation to replace Public Law 94–484, the design and authorization level of the AHEC Program will be addressed again.

Program Characteristics and Management

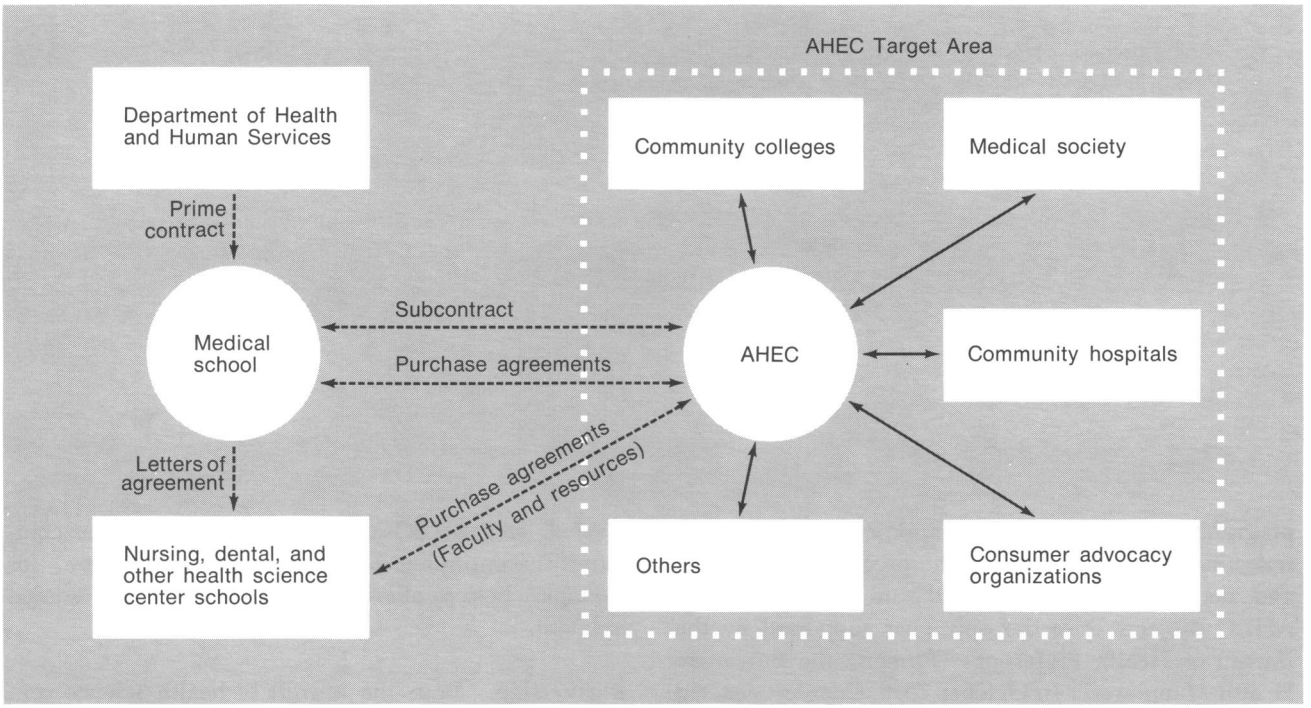
The AHEC Program is administered by the Division of Medicine, Bureau of Health Professions, in the Health Resources Administration. Cost-sharing contracts provide support for planning and development (not to exceed 2 years) and operation of the AHEC Program. Although the federally funded AHEC projects are not intended to be of uniform design, a number of characteristics are consistent throughout the program. These features include the following.

Educational attainment. Health professional students are trained at community sites, rather than at health science center facilities. Such training is designed to foster the development of primary care skills appropriate for practice in underserved areas. The students become familiar with communities where their skills are needed, and AHEC-supported programs in the community (continuing education and consultation, for example) help to alleviate the problems of professional isolation.

Partnership. Both the university health science centers and the participating communities contribute resources to and benefit from the AHEC Program. This balanced partnership represents a long-term, multifaceted effort to meet the needs for primary care providers of all types. AHECs formulated under Public Law 94–484 are required by statute to assure that at least 75 percent of the total funds provided to any school are expended by the community-based centers. This stipulation of the law assures balanced partnerships. The community-based center enjoys administrative independence from the health science center and may contract with other institutions for resources and services.

Flexibility. A strength of the AHEC Program has been its ability to respond appropriately to locally defined needs. AHEC projects may be funded for urban, rural, regional, and statewide programs, so as to target program activities to areas of greatest need. Although the current statute and regulations mandate a wide range of activities (including undergraduate, graduate, and continuing medical education programs; health manpower needs assessment; support services for the National Health Service Corps; programs to encourage the use of nurse practitioners and physician assistants; and others) the relative emphasis and the specific approaches used can be tailored to local context. The AHEC projects also have the option of providing activities in addition to those required by statute, thus responding to the special circumstances of a region (for example, bilingual education programs).

Area Health Education Center (AHEC) linkages with health science centers and communities



The single most important outcome of an AHEC project is the formation of a network of linkages between health science centers and communities, as shown in the chart. These linkages serve to coordinate planning, facilitate the identification and sharing of resources, aid in setting priorities, and provide a mechanism for universities and communities to "talk to" each other. In effect, the legacy of a successful AHEC project is a permanent change in the mission and operation of a health science center and a permanent reduction in the isolation of an underserved community.

Funding

Currently, 21 of the 23 AHEC projects that have received Federal funding remain active. These 21 projects operate 48 regional AHEC centers; 37 additional centers are planned. Participating in the establishment of these centers are 37 medical schools, 27 dental schools, and numerous nursing, pharmacy, public health, and allied health schools. The Federal investment in the AHEC concept represents only a portion of the total endeavor. The amount of cost sharing varies in the AHEC projects, but each medical school (prime contractor) is required to provide a minimum of 25 percent of the total contract costs.

This cost-shared support is provided in a variety of forms, including indirect costs, direct State appropriations for the AHEC Program (North Carolina, North Dakota, Colorado), State appropriations for educational components established under the program (South Carolina, Illinois, Califorina), and private foundation monies (Navajo Nation and West Virginia). By the end of the first 8 years of the AHEC Program (1972–80), the total Federal investment will have reached $126.8 million. This amount represents two-thirds of the total negotiated program costs of $190 million, the rest being provided through cost sharing. In addition, significant non-negotiated support has been provided by States, universities, and communities (for example, faculty time, teaching space, library resources).

AHEC Accomplishments

The results of recent studies of the impact of the original AHECs, first funded in 1972 (*2,3*), indicate that these projects achieved their long-term goal of improving the supply and distribution of health care providers in the AHEC target areas. Preliminary findings of these studies showed that most medical students who participate in AHEC training programs choose primary care residency positions. AHECs have been major providers of continuing education, and they have made diagnostic consultation services available to rural providers on a regular basis. They have assisted in improving library and learning resources in smaller communities.

The Department of Health, Education, and Welfare, in a November 1979 report to Congress on assessment

of the National AHEC Program, presented the following findings for the projects funded in 1972:

- Physician supply in AHEC target counties increased 12.2 percent from 1972 to 1976, compared to an increase of 7.1 percent in similar counties without AHEC activities.
- From 1972 to 1976, a statistically significant increase in dentist-to-population ratios was noted in AHEC target counties compared to counties without AHEC programs, even though not all of the AHEC target counties had specific dental programs.
- Collectively, graduates of medical schools with AHEC programs were more likely to choose primary care residency positions than graduates of medical schools without AHEC programs.
- AHECs provided continuing education programs for health practitioners in medicine (122,750), dentistry (14,140), nursing (96,990), pharmacy (7,730), and allied health (46,630).

The AHEC Program in Context, the 1970s

The National AHEC Program shares with a number of other public efforts a common set of roots and goals. The preamble to Public Law 94–484 states that:

> The Congress finds and declares that . . . the availability of high quality health care for all Americans is a national goal . . . (and) the availability of high quality health care is, to a substantial degree, dependent upon . . . the availability of qualified health professions personnel and . . . the availability of adequate numbers of physicians engaged in the delivery of primary care . . . (and) there are many areas in the U.S. which are unable to attract adequate numbers of health professions personnel to meet their health care needs . . . (and) . . . health professions personnel are a national health resource and the Federal Government shares the responsibility to assure that such qualified personnel are available to meet the health care needs of the American people; . . . it is therefore appropriate to provide support for the education and training of such personnel; and . . . at the same time, it is appropriate to provide such support in a manner which will support the availability of health professions personnel to all of the American people.

This statement, like its predecessors during the 1960s, provides a framework for public policy on health. Congressional support is justified by the presumption that it is in the national interest to use taxpayers' dollars for programs that will ultimately reduce the barriers to high-quality health care. Consequently, a number of programs have been initiated to improve access to high-quality health care. Foremost among them are Medicare and Medicaid, programs supporting the institutions that train health personnel (capitation), primary care residency training programs, nurse practitioner progams, physician assistant programs, the National Health Service Corps (NHSC), and programs for developing community health resources such as the Migrant Health Program, Indian Health Service, the Rural Health Initiative and Urban Health Initiative projects, AHECs, and others.

The AHEC Program approach differs from that of the other Federal health programs in several significant ways. The program changes the relationship between universities and communities so as to provide a context for ongoing interaction and a permanent reduction in the isolation of the underserved community. The program also attempts to change the atmosphere in which health service needs can be addressed by fostering an improved environment for health professionals. Thus, on a short-term basis, the outcomes of the AHEC Program are less visible than those of residency training programs or placement programs, which can point to measurable accomplishments such as numbers of graduates or numbers of health professionals placed in underserved communities. The accomplishments of the AHEC Program have long-term impact and may be less obvious on a short-term basis than those of other Federal health programs with which the AHEC effort shares a common set of goals. Moreover, the AHEC Program relies upon the formation of linkages between existing resources and, therefore, AHEC's achievements are frequently difficult to distinguish from the activities of the programs that it links. The real success of the AHEC Program is seen in improved communication, planning, coordination, and cooperation.

The annual appropriation for the AHEC effort has been modest, reinforcing the need to target support on activities that are unique to the AHEC mandate. AHEC's focus is on the formation of networks of educational linkages. Maintaining this focus has been difficult because of pressure from both educational institutions and communities to expand the AHEC Program into activities in other areas. From the health science centers, pressure is generated to subsidize the training of health professionals, especially in view of the rising cost (and decreasing Federal support) of health professions education. Communities, on the other hand, frequently chafe at the awkward separation of the purely educational intervention supported by the AHEC from their broader service needs. It must be remembered that communities are generally interested in AHEC because of broad needs for improved health service, not for the health professions education programs specifically. Educational programs are generally viewed by communities as a means to an end, not an end in themselves.

The preservation of AHEC's focus on the formation of educational linkages has been a major challenge for AHEC's leaders. The initiation, planning, development, and operation of an AHEC project requires clarity, resolution, and tact in its local leadership and demands close monitoring from Federal AHEC staff.

AHECs and the Future

A number of difficult issues face public health policymakers during the 1980s. With limited funding resources, choices must be made among various approaches to problems, and data that accurately attribute outcomes to one effort or another will be difficult to obtain. For example, if a graduate of a federally supported family medicine program chooses to settle in an underserved, rural community, the decision might be attributed to capitation, the family medicine department program, the family medicine residency program, the NHSC, the AHEC Program, the Rural Health Initiative project, or even the Migrant Health, Medicare and Medicaid, or other programs. In fact, the choice may have occurred as a result of other factors for which no program could accurately assume credit. Attributing outcomes to individual programs is particularly dangerous in an era of shrinking budgets, in that policymakers will be tempted to extend support to those programs that can demonstrate quick results and visible improvements, with relatively less regard given to long-term structural changes in the status and resources of target communities.

In an attempt to assure that the accomplishments of the AHEC Program are visible, measurable, and "attributable to AHEC," the program administrators have had to insist that AHEC's educational activities remain purely educational and separate from any direct provision of health services. The modest appropriation for the AHEC Program could easily be used up by the provision of even a very few health services.

Nevertheless, during the 1980s several changes in the AHEC Program can be anticipated. As has become evident in the "second generation" of AHECs (funded under Public Law 94–484 since 1976), underserved urban areas provide a challenging arena for the application of AHEC principles. Access to health care in urban areas is frequently impeded by social conditions that cannot be altered dramatically by educational interventions alone. In many cases, the educational programs for health professionals must go hand-in-hand with the reorganization of health services. At the local program level, for example, AHEC's impact may be maximized by close coordination with programs that are more directly responsible for health services, such as the NHSC, Neighborhood Health Clinics, Urban Health Initiative projects, and other, non-Federal programs.

Health professions educators have argued that the distinction between service and education is factitious. In the 1980s, the coordination of educational programs (such as AHEC) with programs that support health services may be important for several reasons. Increasingly, we find that the health science centers are major health care providers, as well as educators. Moreover, in the AHEC projects it has been found that educational interventions frequently result in increased demand for and access to services provided by the parent health science centers.

As the National AHEC Program has moved from a predominantly rural set of projects in the early 1970s to a purview that includes many urban projects in the late 1970s, the need for increased flexibility has become apparent. Access to health care is not defined by geographic distribution of health professionals alone nor uniquely by the development of a supportive professional community for health personnel. Access is also influenced by consumer information, public transportation, reimbursement considerations, and the role of institutional providers. In view of the multiplicity and complexity of these factors, and in view of the limited resources available for health programs, it is clear that close coordination—at both the Federal and local levels —will be essential to maximize their effect.

Conclusion

The National AHEC Program has been a successful catalyst for forming educational linkages between health science centers and communities. The balanced partnerships that result are based upon mutual benefit. As the program enters its second decade in the 1980s, it may be appropriate to consider broadening its flexibility. This question deserves serious debate in that the coordinative linkage-building role of the AHEC Program may be a vehicle for the integration of Federal programs directed at common goals. Such coordination may resolve some of the attribution and evaluation problems of these programs and streamline resource allocation in the future, and it also may help to soften some of the distinctions between the education and service missions of the various public programs. Through improved coordination of these programs, the ability to respond to local needs could be greatly enhanced.

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