Statewide Area Health Education Centers Program

Executive Summary

The 2002 Virginia Acts of Assembly, Chapter 899, Item 306 B. 5 requires the Virginia Department of Health to assess the activities of the Statewide AHEC Program and the need for continued state funding for the statewide office and the Centers for the Advancement of Generalist Medicine at the University of Virginia and the Medical College of Virginia.

This study is limited to an assessment of the activities of the Statewide AHEC Program as well as the need for continuing state funding for the statewide office. It provides an exhaustive history of the federal AHEC program as well as the Commonwealth's current program. The study describes each of the individual community AHECs and their programs. The programs are assessed relative to the Code of Virginia program requirements found at section 32.1-122.7. The Virginia AHEC program's historical and present funding is detailed within the report. A comprehensive review of earlier evaluations of both the federal and state AHEC programs in included. Based upon the aforementioned, an assessment of the need for continued funding for the statewide office is made. It finishes with a summary of conclusions and recommendations.

The study recommends that the Virginia General Assembly should continue to fund the AHEC program for the next year yet introduce language into the Code of Virginia requiring the AHEC program to submit a detailed programmatic annual report. This report should include, but not be limited to a program needs assessment, a summary of the federal AHEC program peer review evaluation and any other Virginia AHEC program evaluation prepared by the federal government, a description of how the Virginia AHEC program compares to the programs of neighboring states, and a summary of the Virginia statewide AHEC program's ability to secure grant funds. The final recommendation is that the Code of Virginia be amended to allow for community AHECs to exercise creative programmatic approaches to address the issue of health care access.

The 2002 budget included a reduction in AHEC funding from $1,158,139 to $1,058,139 in fiscal year '03 and $950,000 in fiscal year '04 and, as mentioned above, a directive to the Virginia Department of Health to study the need for continued state funding.

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I. Authority

Item 306 B. 5. of the Virginia 2002-2003 budget directs the Department of Health to assess AHEC activities. Specifically, it states:

"The Department of Health shall assess the activities of the Statewide AHEC Programs and the need for continued state funding for the statewide office and the Centers for the Advancement of Generalist Medicine at the University of Virginia and the Medical College of Virginia. The Department shall report its findings and recommendations to the Governor and Chairmen of the House Appropriations and Senate Finance Committees by October 15, 2002."

A copy of Item 306 B. 5. is included as Appendix A to this report.

II. Organization

The report is organized into ten major sections. The first provides an overview of the authority for the report. This second section describes the research undertaken to prepare this report as well as its organizational structure. The third and fourth sections describe the history of Area Health Education Centers (AHECs) nationally as well as the methodologies and outcomes of several evaluative efforts. The national and state AHEC history sections are very detailed because the assessment is based upon identifying the goals of the proposed Virginia AHEC program and determining whether the program has satisfied those goals. The fifth and sixth sections provide a general history of the Virginia AHECs. The seventh section provides a detailed description of the Virginia Statewide AHEC Office as well as the eight local community AHECs. The eighth section describes the financial and budgetary status of the Virginia AHEC program. The ninth section considers the need for continued funding for the statewide AHEC office. The tenth section summarizes the report's conclusions and recommendations, and discusses policy options that the General Assembly may wish to consider with regard to the Virginia statewide AHEC program. The final section contains the Appendix.

Several research methods were used to prepare this report. First, the statewide AHEC program office and each of the eight community AHEC centers were asked to provide the Virginia Department of Health (VDH) with detailed information regarding its history, programs, challenges, financial status, and proposed future activities. Second, a survey was distributed to partners of the Virginia AHEC program partners to determine whether the expectations upon which the statewide AHEC program were formed were generally met. As part of the research for this assessment, the VDH staff met with people who were very involved in the formation and early history of the AHECs as well as former and current partners of the program. Finally, VDH staff reviewed previous reports concerning the Virginia AHEC program prepared by the General Assembly's Joint Commission on Health Care (JCHC) and other entities.

Although the authorizing language mandates a study of the Centers for the Advancement of Generalist Medicine at the University of Virginia and the Medical College of Virginia, that report is being issued as a separate document.

III. History of AHECs Nationally

In 1970 the Carnegie Commission on Higher Education issued a document entitled *Higher Education and the Nation's Health,* that documented severe shortages in access to health care in the United States, especially for the poor and for racial and ethnic minorities. In response, several significant recommendations were made to remedy the identified barriers to accessing adequate health care:

- the provision of more and appropriately placed health care personnel;
- a better geographic distribution of health care personnel and educational facilities, particularly for the central city and rural areas;
- more equality of opportunity for women and members of minority groups to enter healthcare professions;
- more appropriate training for the health care workforce;
- more effective relationship between health care education and health care delivery;
- a more equitable distribution of the financial burden between the federal government and the states, and among several states; and
- the limitation of costs to the greatest possible extent.[1]

The Carnegie Commission report suggested federal funds be appropriated to support the development of area health education centers in rural and inner-city areas. These centers would be affiliated with university health centers and would perform all the functions of those centers with the exception of the basic education of M.D. and D.O. candidates. The Commission advocated a degree of decentralization of medical education away from university settings in favor of community settings as a strategy for addressing geographic as well as specialty maldistribution.[2] Finally, the Commission's report highlighted the need for a national strategy to address problems of the shortage of primary care physicians.

Following the release of the report, then-President Nixon provided Congress with his vision of the AHEC program:

"These centers would be satellites of existing medical and other health science schools; typically they would be built around a community hospital, a clinic, or an HMO that is already in existence. Each would provide a valuable teaching center for new health professionals, a focal point for the continuing education of experienced personnel and a basis for providing sophisticated medical care services which would not otherwise be available in these areas."[3]

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[1] Odegaard, Charles E., Area Health Education Centers: The Pioneering Years, 1972-1978. Carnegie Council on Policy Studies in Higher Education.

[2] Odegaard, Charles E.,

[3] Ibid.

This vision was echoed by Secretary Richardson of the federal Department of Health, Education and Welfare (now Department of Health and Human Services) who stated, "[AHECs] would be responsive to the health manpower needs of the service area in which they are located. . . . These centers will expose students, interns, residents, and other health professionals to the health-care problems in their surrounding communities. They would tend to encourage such individuals who received their training in that area to remain there to practice."

It appears that Congress was listening intently to the President's description of his vision. The Comprehensive Health Manpower Training Act of 1971 included $270 million over the ensuing three fiscal years to support a new program of health manpower initiative awards. The awards would be made to improve the distribution, supply, quality, utilization and efficiency of health personnel and the health services delivery system[4] by:

- training or retraining personnel in shortage areas;
- providing training programs leading to the more efficient use of health personnel;
- establishing area health education centers and other units to assist in the training of health personnel; and
- training personnel in the use of the team approach.

Thus, both the Executive Branch and Congress envisioned that AHECs would provide clinical training opportunities for medical students, interns, residents, and other health professionals in community-based hospitals, clinics, and other places where primary care services were delivered. They had a shared vision that health professionals would have a broad clinical experience that would include the primary care service offered in community hospitals and clinics.

The Comprehensive Health Manpower Training Act of 1971 embodied the spirit of the Carnegie Commission Report and reflected the executive and legislative branch consensus. The Act authorized a federal financing program directed at increasing the supply and improving the distribution of critically needed health care practitioners. The Act included a program description of the AHECs but did not include a specific reference to AHECs by name. It established a program that would involve training programs and educational activities directly associated with or involving one or more key educational institutions and related to the health manpower needs of a defined service area.

Specifically, section 774(a)(1) of the Act stated:

> For the purpose of improving the distribution, supply, quality, utilization, and efficiency of health personnel and the health services delivery system, the Secretary may make grants to public or nonprofit private health or educational entities, and may enter into contracts with public or private health or educational entities, for projects-

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4 House Report No. 92-258.

(1) to encourage the establishment or maintenance of programs to alleviate shortages of health personnel in areas designated by the Secretary through training or retraining such personnel in facilities located in such areas or to otherwise improve the distribution of health personnel by area or by specialty group;
(2) to provide training programs leading to more efficient utilization of health personnel;
(3) to initiate new types and patterns or improve existing patterns of training, retraining, continuing education, and advanced training of health personnel, including teachers, administrators, specialists, and paraprofessionals (particularly physicians' assistants, dental therapists, and pediatric nurse practitioners);
(4) to encourage new or more effective approaches to the organization and delivery of health services through training individuals in the use of the team approach to delivery of health services and otherwise; or
(5) to assist state, local, or other regional arrangements among schools and related organizations and institutions to carry out the purpose of this subsection.

First Generation AHECs

On June 12, 1972, the Bureau of Health Manpower Education, now known as the federal Health Resources and Services Administration (HRSA), announced the first federal program for the support of AHECs. The "Health Manpower Initiative Awards" of The Comprehensive Health Manpower Training Act of 1971 required participants to "describe the major features of the proposed AHEC, the extent to which collaborative relationships could be assured, and the ways in which the proposal responds to the underlying theme of manpower shortage and medically underserved geographic area." Of the 85 health institutions submitting letters of intent, 27 were selected to receive Requests For Proposals (RFPs) that outlined the objectives for an AHEC program. Three months later HRSA entered into five-year contracts with 11 university health science centers or their parent universities.

These original 11 AHEC programs are referred to as First Generation AHECs and are characterized as a highly diverse group. These AHEC projects, located in predominantly rural areas, focused on problems that resulted from the geographic maldistribution of health professionals- most notably the lack of primary care physicians in rural areas. These AHEC programs developed education programs for health professionals, students, and practitioners that were designed to influence the geographic distribution of health professionals and to improve access to and quality of health care for underserved populations.[5] While they conducted a variety of different types of educational activities, their main focus was on medical education- family practice and other primary care residency training, undergraduate rotations in ambulatory care

5 Gessert, Charles, Clark Jones "Urban AHECs: A Comparison With Rural AHECs" 1986 U.S. Department of Health and Human Services; Public Health Reports, Public Health Rep 1986; 101: 637-643

settings, and continuing medical education (CME) for community physicians.[6]

Among the eleven First Generation AHECs were academic health centers located in two states bordering Virginia. AHECs at both the University of North Carolina at Chapel Hill and West Virginia University were created under the Comprehensive Health Manpower Training Act of 1971 before it was amended to include more restrictive language. As will become evident later in this report, it is very difficult and somewhat inappropriate to compare the Virginia AHEC program with the AHECs created under different legislative mandates and at a different stage of development in clinical education in the medical school setting.

Second Generation AHECs

By the time the second generation AHECs were legislated, the health care climate had different, but no less important, challenges. While acute shortages of medical, dental, nursing and allied health personnel remained pervasive, there were additional burdens. Shortages of family physicians, closure of rural hospitals, and increased attrition of National Health Service Corps (NHSC) physicians from Community Health Centers were prevalent. There were increases in the proportion of minority, elderly, or destitute patients. In some areas, there was increasing pressure by governors and legislators for federally supported remedies to these problems.[7]

In 1975, hearings regarding the AHECs were held by the House Committee on Interstate and Foreign Commerce and by the Senate Committee on Labor and Public Welfare. Both Committees expressed dissatisfaction that none of the original 11 AHECs addressed the health problems of inner-city urban areas. In addition, Senate Committee members advocated for a decentralized AHEC program distinct from the medical or osteopathic schools. Ultimately the legislators wanted AHEC control to rest with the local community and for the medical schools to assume the role of one of many partners guiding the development of the AHEC program. It is noteworthy that the emphasis on local control of AHEC programs resulted from evaluative reports acknowledging community-based control as a distinctive characteristic of the most successful first generation AHEC programs.

After reconciliation by a conference committee, the bill was passed by both houses as the Health Professions Educational Assistance Act[8] in October of 1976. The law authorized the development of a new generation of AHECs. It not only specified that the Secretary should award a significant portion of funds to develop urban AHECs, but also emphasized the role of community agencies in allocating resources and enumerated specific program areas to be addressed by each AHEC. The emphasis on community-based control of AHEC activities was based upon the consensus that this was a distinctive characteristic of the most successful first generation AHEC projects.

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6 Fowkes, Virginia Kliner , Peggie Campeau and Sandra R.Wilson, The Evolution and Impact of the National AHEC Program over Two Decades, (see citation)

7 Fowkes, 1991

8 Public Law 94-484

Section 781 of the Health Manpower Education Initiative Awards of the Comprehensive Health Manpower Training Act, entitled "Area Health Education Centers" defined an AHEC as "a cooperative program of one or more medical or osteopathic schools and one or more nonprofit private or public area health education centers." Section 781 superceded section 774, Health Manpower Education Initiative Awards, of the Comprehensive Health Manpower Training Act of 1971. The Health Professions Educational Assistance Act required the second generation AHECs to:

1) provide for active participation by individuals in departments of internal medicine, pediatrics, obstetrics and gynecology, surgery, psychiatry and family medicine;

2) provide that no less than 10 percent of all undergraduate medical or osteopathic clinical education be conducted in an AHEC center;

3) conduct or be responsible for the training of nurse practitioners or physician assistants, giving special consideration to enrolling individuals from the AHEC target area, or individuals intending to practice in the target area; and

4) provide for active participation of at least two schools or programs of other health professions in the target area, for which schools must include a school of dentistry if one is affiliated with the university in question.

Each AHEC program office or center was also required to designate a specific geographic area and/or a specific medically underserved population to be served. Health care services were to be provided to this area or population at a site other than the teaching facilities of the school or its extension. In addition, the AHEC was now required to:

1) provide for or conduct training in health education services, including nutrition;

2) assess the health manpower needs of its area and assist in the planning and development of training programs to meet those needs;

3) provide for or conduct a residency training program in family medicine, general pediatrics, or general internal medicine in which no fewer than six individuals were enrolled in first-year positions;

4) provide opportunities for continuing medical education (CME) to all physicians and other health professionals in its area;

5) provide CME and other support services to the National Health Service Corp members in its area;

6) encourage the use of nurse practitioners and physician assistants within its service area

and encourage the recruitment by participating schools of individuals for training those professions;

7) arrange and support educational opportunities for medical and other students at health facilities, ambulatory care centers, and health agencies in its area; and

8) have an advisory board of which at least 75 percent of the members shall be individuals (both consumers and health providers) from the AHEC's service area.

The foregoing demonstrates the inherent differences between the first and second generation AHECs. While first generation AHECS were free to define their type of work, designate collaborators, and require a financial contribution from participating schools, second generation AHECs had to adhere to the prescriptive amended language of section 781 of the Health Manpower Education Initiative Awards of the Comprehensive Health Manpower Training Act. In contrast, the second generation AHECs "had a shortened time span for federal financial assistance within which to plan, develop, and operate an AHEC program, and the program was expected to continue operation without further federal assistance after the sixth year."[9][10] Second generation AHECs had to focus on midlevel training programs for allied health personnel and the development of residency training programs in family medicine. The diversity in the differences in the authorizing legislation, the preconditions or needs in project target areas at the time of inception, and the abilities of projects and centers to align their development with local, state, and regional priorities make valid assessments across different AHEC generations difficult.

The Request for Proposal (RFP) that HRSA developed for second-generation AHECs called for additional caveats. HRSA reiterated its interest in inner-city AHECs and announced its intent to provide sustaining support for a minimum of three years and a maximum of five, but on an annual basis subject to the project's success and availability of funds. The structure of the AHEC had to include two separate entities, a medical or osteopathic school as the prime contractor, and one or more free-standing autonomous AHECs. The free-standing AHECs could not be schools of medicine or osteopathy, the parent institution of such a school, a branch campus or other subunit of the school, or a consortium of schools. The center had to appoint an advisory board, the composition of such was detailed in the RFP. The board was to be composed of at least one physician, dentist, nurse, and allied health professional actively engaged in the practice of their profession in the AHEC's geographic area, as well as other health care providers

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9 Area Health Centers: The Pioneering Years, 1972-1978 pg. 100

10 An attempt by Congress to "grandfather" the original 11 AHECs from the new requirements by crafting such language in the Nurse Training Act proved to be unsuccessful when President Carter vetoed the Act.

and educators. It was to include consumers who were residents of the population served by the AHEC. The board had to have appropriate bylaws and was to meet at least quarterly. Finally, it was to advise the center director on all major policies concerning the operation of the center, the establishment of program priorities, and other activities.

It was against this legislative backdrop that the first Virginia AHEC program, located at the Eastern Virginia Medical School (EVMS) formerly the Medical College of Hampton Roads was established in 1979. The Eastern Virginia Medical School is unique among Virginia's academic health centers because it is publicly chartered yet privately financed, although it does receive some state funds. The EVMS was awarded a federal contract to plan the development of AHECs in Hampton Roads. By 1982, EVMS had met its original charge to establish three community AHECs. The rural Western Tidewater AHEC was incorporated in July 1980, to serve the cities of Chesapeake, Franklin, and Suffolk; the counties of Isle of Wight and Southampton; a small rural area of Virginia Beach called Pungo; and the non-adjacent counties of Accomack and Northampton on the Eastern Shore. The Peninsula AHEC was incorporated in 1981 to serve the cities of Hampton, Newport News, Poquoson, and Williamsburg, and the counties of James City and York. The urban Norfolk AHEC was incorporated in April 1982, to serve the City of Norfolk.

Third Generation

The remaining Virginia local AHECs were established as third generation AHECs. These AHECs were expected to adhere to the restrictions of the second-generation AHECS[11]. In addition, they face stricter scrutiny of their programs by the federal government through cooperative agreements. Third generation AHEC project activities focus on complementing or extending existing primary care education programs rather than establishing new residencies.

Regulations promulgated by the Department of Health and Human Services concerning third generation AHECs charged HRSA with being responsible for:

1) reviewing and approving plans, upon which continuation of the cooperative agreement was contingent, to permit appropriate direction and conduct of activities;

2) reviewing and approving all contracts between the cooperating school of medicine, other health professions schools, and area health education centers;

3) participating with project staff in the development of funding projections;

4) developing, with project staff, data collection systems and procedures; and

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[11] The 11 original AHECs were unable to adhere to the new restrictions imposed by the Health Educational Assistance Act. Attempts by Congress to "grandfather" them from these restrictions were vetoed by President Carter.

5) participating with project staff in the design of project evaluation protocols and methodologies.

Nationally, there were 11 first-generation AHEC projects funded from 1972 to 1982, and 12 second-generation projects funded from 1978 to 1988. The remaining have been third-generation projects. All three generations have engaged in a wide range of activities. They have identified educational strategies directed at all points along the pathway of preprofessional (high school and college, also referred to as the educational "pipeline" in AHEC parlance), professional, postgraduate, and continuing education. They have been responsible for initiating new programs; carrying out needs assessments, planning and preparation related to the start-up of new activities; coordinating or convening those involved in planning programs; providing technical assistance to others in program development; and operating programs.

IV. History of AHECs in Virginia

As previously mentioned, the Medical College of Hampton Roads established an AHEC in Hampton Roads in 1979. The federal contract awarded did not contemplate a statewide program, rather, it was limited to the creation of three community AHECs all of which were to be located in southeastern Virginia. From 1979-1987, these community AHECs, operating under the acronym EVAHEC, worked cooperatively with five regional universities (Eastern Virginia Medical School, Hampton University, Norfolk State University, Old Dominion University, and Virginia Commonwealth University) to establish community-based educational experiences for students from multiple disciplines.

The amount of federal core funding that this AHEC was able to secure until September 30, 1985 was considerably more than the amount of funding the EVAHEC was able to secure from the state. With the loss of federal funding, and the gradual loss of state funding, the Eastern Virginia AHEC Program was forced to consolidate its three centers into one Norfolk-based center and to scale down programmatic activities during the period 1985 to 1990. The Area Health Education Center of Hampton Roads served as the one regional AHEC, and encompassed all localities previously served by the three community AHECs.

In 1988, the Virginia Board of Health, the Statewide Health Coordinating Council, the Virginia Association of Health Systems Agencies, the Virginia Primary Care Association, the Virginia Association of Counties, the Virginia Association of Area Agencies on Aging, the University of Virginia Medical School, the Medical College of Virginia, the Eastern Virginia Medical School, and the Secretariat of Health and Human Resources partnered to host a Primary Health Care Policy Forum. Forum participants hoped to identify a number of programmatic solutions to the Commonwealth's many health resource challenges.

At that time, Virginia faced a number of health resource issues. It lacked 261 primary care physicians necessary to achieve the optimal primary care physician-to- population ratio of one physician for every 2,000 people. Fifty-two of Virginia's 136 counties and independent cities were designated by the federal government as medically underserved areas (MUAs) and/or health professional shortage areas (HPSAs). The HPSA designation is based upon a national standard of 1 primary care physician for every 3,500 people or 1 for every 3,000 people in areas having unusually high needs such as, among other criteria, high infant mortality rates or high poverty rates. An average of only 58 doctors graduating form Virginia's primary care residency programs each year remained in Virginia. Fewer than 11% of all those remaining in Virginia practiced in underserved areas.[12] Thus, the task to strengthen the primary health care system in Virginia was an ambitious one.

The Forum was designed to improve Virginia's primary health care educational and delivery systems by contributing to the development of a primary health care plan for the

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12 Primary Health Care in Virginia, A Five Point Plan for Strengthening the System

Commonwealth.[13] Its purpose was to gather the necessary stakeholders together to consider the *Five Point Plan* for strengthening the primary health care system in Virginia.

The *Five Point Plan* was a proposal developed by the Forum's sponsors that advocated five programmatic initiatives necessary to strengthen the system of primary health care service delivery throughout the Commonwealth. This was to be accomplished through the provision of a series of effective public incentives for health provider development and placement, as well as provision of support in medically underserved areas and health professional shortage areas. These five initiatives were: the development of a physician loan repayment program; strengthening of the state medical scholarship program; the provision of extra Medicaid payments for primary care physicians; the establishment of a primary care center construction fund; and the development of a statewide AHEC program. Although, as mentioned above, there was a regional AHEC program that had existed in southeastern Virginia since 1979 and had received state support, it was envisioned that a statewide AHEC program would be a critical element of the infrastructure for attracting and retaining medical care practitioners in underserved areas. The establishment of the statewide AHEC program was characterized in the *Five Point Plan* as the one initiative that addressed more of the goals and objectives than any other element of the plan.

It is clear the AHEC program was to play an important role in the Commonwealth's effort to strengthen the primary health care system. Pursuant to the terms of the *Five Point Plan*, the Virginia AHEC program would assist in the Commonwealth's efforts to:

1. anticipate and avoid critical physician shortages;

2. establish professional practice support systems;

3. expand family practice preceptorship, clerkship and residency opportunities and thereby

4. encourage current students to consider family practice as a career alternative; and

5. recruit students with high motivation to practice in settings with disadvantaged patients.

The terms of the *Five Point Plan* made it clear Virginia's healthcare leaders hoped a Virginia state AHEC program would yield some of the successes identified by other states. Those successes include:

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13 Proceedings of the Primary Care Policy Forum: Increasing Access to Primary Health Care for Virginia's Underserved Populations, December 5 and 6, 1988.

- decentralized education for primary care physicians and for other health care professionals;
- active affiliations between community providers and medical schools;
- improved recruitment and retention of primary care providers in medically underserved areas;
- improved quality, utilization, and efficiency of community providers, and
- improved primary care access and health status for underserved populations.

Finally, as noted by then-Secretary of Health and Human Resources Eva Tieg, the Five Point Plan's focus was "not solely on short term improvement of access by getting physicians into areas of need, but also on the development of an infrastructure that will retain medical manpower to serve rural and inner city populations and sustain a statewide primary health care delivery system."[14]

Participants in the Primary Care Policy Forum were assigned to discussion groups. The groups were responsible for identifying strategies for carrying out each objective in the *Five Point Plan*. The discussion group that addressed the objective concerning the creation of a statewide AHEC program understood an AHEC to be "a community-based educational outreach program that links the resources of health science universities, health professionals and health care institutions to facilitate the training of health professions students, particularly in underserved areas." The group was then tasked with defining how the AHEC program would address certain challenges faced by the medical schools, health care communities, and the Commonwealth in general.

The group envisioned an AHEC program to be helpful to medical schools by achieving the following goals:

- attract funding for primary care education at the graduate and undergraduate levels;
- facilitate collaboration among all three medical schools;
- facilitate collaboration among all primary care departments within each medical school (family medicine, pediatrics, obstetrics, and internal medicine);
- develop community-based, real-world training sites; and

[14] Proceedings of the Primary Care Policy Forum- page 2

- develop a statewide data base for research in the special needs of primary care.[15]

The group believed the AHECs were to help communities:

- recruit and retain health care providers;
- provide resources for the enhancement of professional prestige and satisfaction of health care providers;
- provide resources for continuing professional education;
- utilize alternative health care providers, i.e. nurse practitioners, nurse midwives, and physician assistants into the health care setting; and
- create career opportunities and promote career development for allied health professionals.

Finally, the AHECs were to assist the Commonwealth:

- establish an effective means for addressing recruitment and retention of health care manpower in medically underserved areas of the state;
- establish a statewide network for strategic planning and coordination of effort in the development of a primary health care delivery system;
- create an infrastructure in which medical schools and communities cooperate in the implementation of state programs, e.g. medical scholarship, loan repayment, manpower recruitment programs;
- develop the capability to deliver quality primary health care services in appropriate settings in the communities in need;
- create a statewide primary health care needs assessment capability to assure appropriate designation of medically underserved and health manpower shortage areas.

The important role the AHEC program was to play in the Commonwealth's solution to strengthen the primary health care system had significant depth and breadth. The success of other parts of the Five Point Plan was largely dependent upon the success of getting the AHEC program funded. Without an AHEC program serving to interest people to pursue health care careers and practice in underserved areas, there was no need for part one of the *Five Point Plan* providing a loan repayment program for primary care physicians serving in underserved areas, nor part two of the *Plan* which provided funds for the development of primary care centers in underserved areas, nor part three of the *Plan* which would provide financial assistance in the form of contracts, grants, and loans to primary health care providers serving medically underserved areas, nor part four of the *Plan* which provided for scholarships to qualified medical students expressing a desire to enter primary care practice. In essence, the development of a statewide AHEC proposal was the keystone of the *Five Point Plan*.

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[15] Ibid.

In 1989 the Virginia Department of Health put forth a proposal entitled *A Plan to Make Primary Health Care Available* to the General Assembly that recommended funding for the Five Point Plan. This report documented the chronic and widespread maldistribution of health care providers within the Commonwealth:

- Approximately 66% of Virginia's designated medically underserved population resided in a non-metropolitan area; 34% in metropolitan areas.
- Compared to the state, medically underserved areas of Virginia were generally, rural, poorer, older, served by fewer primary care physicians, experienced greater unemployment, and had a greater dependence on Medicaid as a source of financing health care services.
- Although 21% of the state's 1980 population resided in areas that were designated as medically underserved, 30% of all persons living below poverty resided in medically underserved areas.
- A study of residency graduates from the state's three medical schools over a ten year period indicated that 47% remained in Virginia and 53% had left the state. Of the graduates from Virginia medical school residency programs in the primary care specialties then practicing in Virginia, 80% practiced in a metropolitan area.

The proposal requested, among other programs identified in the *Five Point Plan*, funds for the development of a statewide AHEC program. The proposal promised the AHEC program would extend education and training activities of the health sciences centers (medical, dental, nursing, pharmacy, allied health, etc.) into medically underserved areas of Virginia. It highlighted added benefits of an AHEC program such as cost containment, support of local health care providers and organizations, and patient management along the array of health care services and levels.

In the latter part of 1990, Virginia Commonwealth University/ Medical College of Virginia,(MCV/VCU), the Health Sciences Center of the University of Virginia, and the Eastern Virginia Medical School of the Medical College of Hampton Roads, (now the Medical College of Hampton Roads) jointly submitted a grant application to the United States Department of Health and Human Services[16]. The application requested three years of funding and promised that six AHEC centers would be planned and developed by representatives of local communities in largely medically underserved areas. In addition, the application stated special programs relating to the educational needs of health professions students and practitioners would be developed on

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16 An application for AHEC funding was submitted a year earlier to the federal government but it was rejected for several reasons. First, the application requested a large budget but did not sufficiently specify outcomes. Second, there was a failure to identify the service area geographic boundaries and the number of proposed AHEC centers. The proposal suggested there was a lack of hard matching dollars available from the Commonwealth. It did not adequately describe the program's organizational structure. Finally, the Virginia Department of Health was not an eligible entity to apply for the grant under the grant guidelines. A subsequent application, prepared in 1991 by the Eastern Virginia Program staff and others, was submitted and funded in October 1991.

such topics as AIDS education, aging, and infant mortality. Specific emphasis was to be placed on minority student recruitment into health science training programs. Finally, it promised substantial involvement by the Virginia Primary Care Association and the Virginia Department of Health.

Pursuant to the terms of the grant application, the Virginia Statewide AHEC program's mission was to "improve the distribution, supply, quality, utilization, and efficiency of health personnel in the health services delivery system, by encouraging the regionalization and decentralization of educational responsibilities of health professional schools." The statewide AHEC program objectives were listed as follows:

1. Provide community-based clinical training opportunities to health professions students from multiple disciplines, including but not limited to medicine, nursing, dentistry, pharmacy, and allied health.

2. Strengthen and support existing primary care medical residency training rotations.

3. Develop a library and learning resource program that will provide assistance to health professions students, residents, and practitioners.

4. Provide continuing education and technical assistance to practicing health professionals, including National Health Service Corps physicians.

5. Establish programs designed to increase the number of minorities in the health professions.

6. Develop health promotion and disease prevention training programs for health professions students and practitioners.

7. Monitor the status of health professionals in each AHEC region, and develop strategies to ensure an appropriate supply and distribution of practitioners.

8. Develop areas of special focus based on current and projected health care and educational needs, including programs dealing with geriatrics, HIV, AIDS, quality assurance and infant mortality.

Most of the AHECs have these objectives reflected in their mission statement and bylaws.

The grant application was unique in that it advocated a proposed organizational structure that adhered to the suggestions in the Program Guide issued by HRSA with one notable exception. The application suggested the creation of a separate, non-profit corporation to provide direction across institutions that would be run by the central office staff that would oversee the implementation of the programmatic objectives.

V. General Description of Virginia AHECs.

Today, the Virginia AHEC program is administered through a statewide office and community AHECs located throughout the Commonwealth. At the helm of the Virginia statewide AHEC program is the Statewide Area Health Education Center, Inc. As noted above, the statewide office is unique in its structure. Most state programs do not have a statewide office. Their programs are carried out in a number of ways described in a later section of this report. However, in Virginia the statewide office is a separate non-profit corporation carries out the programmatic functions.

There is currently a system comprised of eight community AHECs, each committed to developing educational programs that will improve the supply, distribution, quality, and utilization of Virginia's health professional workforce. The eight operational community AHECs in Virginia are as follows: Blue Ridge AHEC, Southside AHEC, Southwest Virginia AHEC, Greater Richmond AHEC, South Central AHEC, Rappahannock AHEC, Northern Virginia AHEC, and Eastern Virginia AHEC.

These eight community AHECs provide a broad spectrum of health-related educational programs and other services in their communities. Many of them have focused upon improving the math, science and related skills of secondary students necessary to attain success in the health professions. Several AHECs also are providing educational programs to elementary and middle school students. The AHECs sponsor learning activities such as summer camps, job shadowing, and health profession student and resident training. Their commitment to minority and disadvantaged students is well demonstrated- the AHECs collectively provided services to many such students in the past year. One last important AHEC activity is the student and resident training. The AHECs have taken the lead in identifying community preceptors and partners with the academic health centers to support student training.

The community AHECs not only assist students but also perform a number of other important functions in very innovative ways. For example, they offer courses in cultural competency to improve the quality of health training. They overcome problems of maldistribution of health manpower by updating databases with primary care practice opportunities. They encourage training for primary care by providing free annual physicals for student athletes. Finally, they partner with other community groups to make the most of their limited funds.

The AHEC governing structure consists of not-for-profit, tax-exempt corporation created in July 1991 to provide broad policy direction for the AHEC program. As was proposed in the initial grant, the Virginia Statewide AHEC, Inc. includes a 17-member Board of Directors comprised of the senior administrative officers (vice presidents) from each of the three sponsoring health science centers; three additional members from the health sciences centers designated by the vice-presidents; the State Health Commissioner of the VDH; one representative from the Virginia Primary Care Association; two at-large representatives; and one representative from each of the community AHECs. The Virginia AHEC Program Director

serves as an ex-officio, non-voting member. The Board's standing committees include statewide office and community AHEC directors, whose membership enhances policy development and implementation

Each community AHEC has a governing or advisory board comprised of representatives of the community. Typically the community members include health providers, educators, consumers and business representatives. An Executive Director for each AHEC is responsible for developing and implementing programs that respond to identified local and regional health workforce needs. Policy guidance is provided by a statewide board of directors whose members represent the three medical schools, the VDH, the Virginia Primary Care Association, the community AHECs and others.[19]

The community AHECs are similar organizationally. Their mission statement and bylaws reflect language provided to the federal government in the grant application. Essentially, most community AHECs state their mission is to: ". . . improve the distribution, supply, quality utilization, and efficiency of health personnel in the health services delivery system, by encouraging the regionalization and decentralization of education activities and programs of health professions schools within the Commonwealth of Virginia. . . ." Their goals are to:

(1) provide community-based clinical training opportunities to health professions students from multiple disciplines, including but not limited to, allied health, dentistry, medicine, nursing, and pharmacy;

(2) establish programs designed to increase the numbers of minorities and disadvantaged students in the health professions;

(3) strengthen and support existing primary care medical residency training rotations;

(4) develop a library and learning resource program that will provide assistance to health professions students, residents, and practitioners;

(5) provide continuing education and technical assistance to practicing health professionals, including National Health Service Corps physicians;

(6) develop health promotion and disease prevention training programs for health professions students and practitioners;

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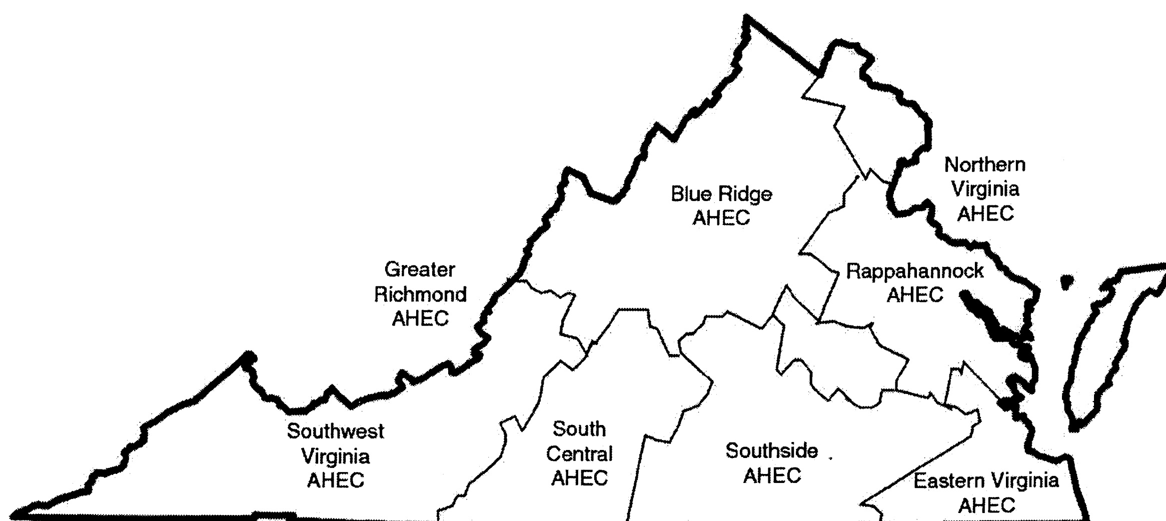
[19] Study of a Centralized Planning and Funding Mechanism for Health Workforce Activities Pursuant to Item 12 of the 1998 Appropriation Act" Report of the Joint Commission on Health Care House Document No. 49 Commonwealth of Virginia 1999

(7) monitor the supply and distribution of health professions in the Southwest AHEC region and develop strategies to promote the availability of, and access to, primary health care services; and

(8) promote areas of special focus based on current and projected health care and educational needs, including programs dealing with geriatrics, HIV/AIDS, quality assessment, and infant mortality.

The eight community AHECs operate in affiliation with one of the three sponsoring academic health science centers: the Blue Ridge, Southwest, and South Central AHECs were established by and are linked to the University of Virginia; the Southside, Greater Richmond, Rappahannock, and Northern Virginia AHECs were affiliated with Virginia Commonwealth University; and the Eastern Virginia AHEC works in cooperation with the Eastern Virginia Medical School.



The UVA-affiliated AHECs comprise a vast area (63% of the state) that is predominantly rural. Portions of the Blue Ridge and Allegheny Mountains are included in this area. The Blue Ridge, Southwest and South Central AHECS collectively have a service area that includes about two million people, or 33 percent of Virginia's total population. The AHECs affiliated with VCU are responsible for a smaller area, characterized by both rural and urban areas. Their population base is 43 percent of the population and 29 percent of the state's land mass. Finally, the Eastern Virginia AHEC service region encompasses both urban, suburban, and rural settings. While the service area covers only 9 percent of Virginia's land mass, it is responsible for AHEC services for 23 percent of the Commonwealth's population.

General Information Regarding Virginia's Community AHECs.

Community AHEC	Date Established	Affiliated University	Population
Eastern Virginia AHEC	October 1979	EVMS	1,570,360
Blue Ridge AHEC	April 1992	UVA	766,761
Southside AHEC	May 1992	VCU	325,490
Southwest Virginia AHEC	April 1993	UVA	806,561
Greater Richmond AHEC	May 1993	VCU	744,012
South Central AHEC	March 1994	UVA	464,086
Rappahannock AHEC	April 1994	VCU	498,625
Northern Virginia AHEC	September 1995	VCU	1,737,110

Funding for the AHECs comes from three primary sources: the federal government, state government, and local/university match amounts. Section 751 (a) (1) of the Public Health Services Act[20] grants HRSA the authority to award grants to and enter into contracts with schools of medicine for the operation of AHECs that:

1. improve the recruitment, distribution, supply, quality and efficiency of personnel providing health services in underserved rural and urban areas and personnel providing health services to populations having demonstrated serious unmet health care needs;

2. increase the number of primary care physicians and other primary care providers who provide services in underserved areas through the offering of an educational continuum of health career recruitment through clinical education concerning underserved areas in a comprehensive health workforce strategy;

3. carry out recruitment and health career awareness programs to recruit individuals from underserved areas and under-represented populations, including minority and other elementary or secondary students, into the health professions;

4. prepare individuals to more effectively provide health services to underserved areas or underserved populations through field placements, preceptorships, the conduct of or support of community-based primary care residency programs, and agreements with

[20] 42 U.S.C. 294a

community-based organizations such as community health centers, migrant health centers, Indian health centers, public health departments and others;

5. conduct health professions education and training activities for students of health professions schools and medical residents;

6. conduct at least 10 percent of medical student required clinical education at sites remote to the primary teaching facility of the contracting institution; and

7. provide information dissemination and educational support to reduce professional isolation, increase retention, enhance the practice environment, and improve health care through the timely dissemination of research finding using relevant resources.

As is evidenced by the above language, the scope of services eligible for federal funding is more expansive than the range of current Virginia AHEC programs. There are two main types of funding. "Core" federal funding is available to state AHECs for six years. Core funding requires a 25% state match which can be made in cash or in-kind contributions. Once the six years of funding is complete, the AHEC is then eligible for federal "Model AHEC" funds. Model AHEC federal funding requires a dollar for dollar match and the maximum amount allowed is $250,000 per center with a maximum of eight AHECs in a state being eligible. Federal AHEC funding is capped at $2 million per state. Virginia Commonwealth University is the primary grantee of federal funds for Virginia under Section 751 (a) (1) of the Public Health Services Act.

Last year the AHECs received $880,744 in federal funding. All of the eight AHECs are receiving core funding. As the amount of federal funding decreases, AHEC reliance on state funds, federal grants, as well as local/university funds increases if they are to maintain stable funding. The local/university match amounts may include cash, faculty and administrators at affiliate health science centers, volunteer board and advisory board members, in-kind contributions, grants, etc. A more detailed discussion of funding for the is found in the following section.

VI. Assessments of Individual AHECs

As noted above, the individual community AHECs are designed to meet the needs of the communities in which they reside. As might be expected, their programs vary greatly. In the words of one AHEC leader concerning the difficulty of generalizing AHEC programs, "if you have seen one AHEC program, you have seen one AHEC program." The following description of the individual AHECs demonstrates the unique character of the individual programs[21].

The following community AHEC descriptions are structured to provide the reader with an understanding of the past, present and future of the community AHECs. Each community AHEC is described in terms of its history, socio-economic and health status indicators, achievements, and goals and objectives. The health status indicator information compares the state rate for the top five leading causes of death in Virginia with the community AHEC service area rate for those same five causes of death. The top five leading causes of death in Virginia are heart disease, cancer, unintentional injury, cerebrovascular disease, and coronary obstructive pulmonary disease. Counties that have rates double the state rate are identified. The community AHEC's programs are reviewed to determine whether it has identified any opportunities to design programs to assist area primary care practitioners in their attempt to address these health disparities.

The community AHECs are also described in terms of their respective health shortage designations within their service areas. The purpose of the federal shortage designations is to identify areas of greatest need so limited resources can be prioritized and directed to people in those areas. The designation is often the first step in addressing an area's health access challenges. A primary care Health Professional Shortage Area (HPSA) is required for areas or facilities to recruit National Health Service Corps (NHSC) scholars or foreign educated J-1 visa waiver physicians, to receive Medicare incentive payments, or to establish rural health clinics. In general, an area may be designated if it can show, among other criteria, that its physician to population ratio exceeds 1:3500. Federal Mental HPSA (MHPSA) designations allow for mental health trained health professionals such as NHSC scholars or foreign educated J-1 visa waiver physicians to be placed in to MHPSAs. Likewise, a Dental HPSA designation allows for NHSC dentists to be placed. Any type of HPSA designation is an indicator that the area lacks an appropriate number of health care providers. A Medically Underserved Area (MUA) or Medically Underserved Population (MUP) designation allows providers who serve the people in these areas to participate in certain federal programs such as section 330 of the Public Health Service Act funding.

In addition to the above federal designations of underserved areas, Virginia has its own designation. Virginia Medically Underserved Areas or VMUAs represent areas of the state in which Virginia scholars and recipients of the Virginia loan repayment program can be placed.

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[21] The level of detail in the description of the AHEC programs is reflective of the amount of information provided by the respective AHEC.

In general, community AHECs that have a number of health shortage designations are likely to engage in traditional AHEC activities regarding recruitment and retention. The community AHECs should be engaged in activities that respond to the information they have regarding designations in their service area. For example, a community AHEC that has a significant part of its service area designated as a Dental HPSA should engage in some activities that address the lack of dental professionals. However, a lack of health shortage designations in an AHEC's service area does not necessarily indicate the people in its service area have no problems with health care access. Such an absence of health shortage designations may merely indicate this traditional approach of health shortage designation to identify health access challenges may not be adequately refined to detect specific types of health care access challenges. The leaders of community AHECs in these areas must first perform a health care access needs assessment and then tailor programs to address any identified problems.

The community AHECs are also assessed by the manner in which they will help Virginia achieve the four goals that the statewide AHEC office identified in the federal AHEC grant. The future activities described later in this document represent the activities that each community AHEC promised to conduct in support of the four AHEC goals. However, these activities may or may not be in process at this time. Nevertheless, these four goals mirror the language concerning AHEC programmatic goals found at section 32.1-122.7 of the Code of Virginia. The federal programmatic goals chosen by the Virginia AHEC program in its grant submission and the state legislative requirements for Virginia's AHECs are the same.[22]

The diverse manner in which the community AHECs hope to achieve the same goals underscores their unique character. While their communities may appear to have similar needs, no two community AHECs have the exact same programs. This diversity makes a fair assessment challenging. However, the consistent federal and state requirements do provide a consistent criterion upon which to compare and contrast the community AHECs.

As previously mentioned, the first Virginia AHEC goal is to "develop health careers recruitment programs for Virginia's students, especially under-represented and disadvantaged youth." The second goal is to "support community-based training of primary health care professions students in Virginia's underserved communities. The third goal is to "provide educational and practice support systems for the Commonwealth's primary care providers." The final goal is to "provide educational and practice support systems for the Commonwealth's primary care providers." With few exceptions, each community AHEC has identified at least one objective to meet these four goals[23].

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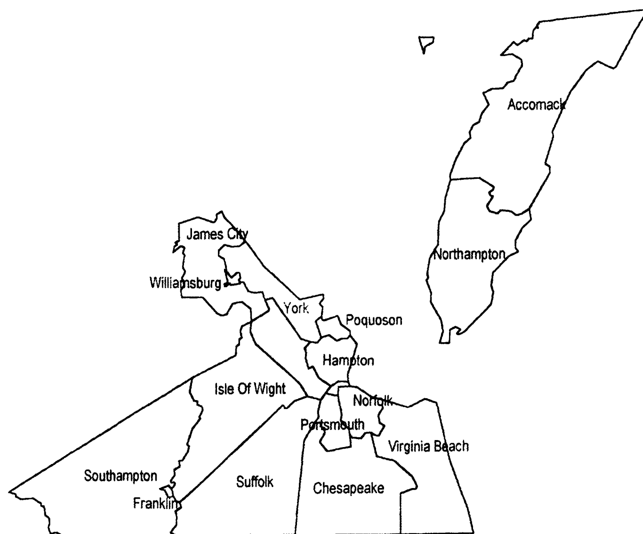
[22] This assessment recognizes that there exist other requirements to which the AHECs must abide such as requirements from other funding sources.

[23] A reasonable interpretation of section 32.2-122.7 of the Code of Virginia suggests that while the statewide AHEC program must seek to accomplish these four programmatic activities, the individual community AHECs are not required to accomplish all four goals.

This report summarizes the activities of each community AHEC in relation to the four program activity functions. This assessment recognizes there will be instances whereby some AHECs will have greater programmatic activities in one area than another. The four program activities were chosen as criteria upon which to compare and contrast the community AHECs for three reasons. First, the language of the Code puts all AHECs, whenever formed or incorporated, on notice as to the state's expectations of its programs. Second, the criteria provide a consistent vehicle upon which to make these comparisons. Third, they comprise both federal and state requirements.

Eastern Virginia AHEC



History and Purpose

As noted earlier, the Eastern Virginia AHEC was the first AHEC to be introduced in the Commonwealth. It will begin its 24th year of service on October 1, 2002. When the first federal application for a statewide AHEC program was submitted to the federal government, was not funded. The staff of the Eastern Virginia AHEC Program and others submitted a subsequent application in October 1991 that was funded. The Eastern Virginia AHEC Program, although not eligible for any additional federal basic/core AHEC funds through the new statewide AHEC program, and now under the direct auspices of the Eastern Virginia Medical School while no longer an independent 501(c)(3) organization, partnered with the Virginia Statewide AHEC Program office so as to ensure statewide coverage and statewide governance for the Program.

Since 1991, the Eastern Virginia AHEC Program has operated as what is known as a "hosted" AHEC program. In this case, the Eastern Virginia AHEC program is hosted by and under the direct auspices of EVMS in Norfolk, Virginia. The Eastern Virginia AHEC program does not have its own state Charter, Articles of Incorporation, or corporate by-laws. In addition, The Eastern Virginia AHEC program does not file an annual IRS Form 990. EVMS, as a private,

not-for-profit institution, however, does file this document annually on behalf of the entire institution, which includes the Eastern Virginia AHEC program.

The Eastern Virginia AHEC Program Director is responsible for the overall operation of the Eastern Virginia AHEC Program. He also serves as Vice President for Planning and Program Development for EVMS. The Program Director serves as Chair and consults with a six-person Eastern Virginia AHEC Program Advisory Committee for assistance in developing short-term and long-term goals and objectives for the Eastern Virginia AHEC Program. He negotiates contracts with the appropriate organizations and individuals in support of Eastern Virginia AHEC-sponsored activities, represents the program on local, state, and/or federal legislative issues, serves on the Virginia Statewide AHEC Program Board of Directors, directs subordinate staff in the operation of the program, and performs other duties as necessary to ensure the successful operation of the program.

The Program Director is assisted by an administrative director, a program coordinator and a student placement coordinator/ program administrative assistant. The Administrative Director reports to the Program Director and is responsible for the day-to-day implementation of the Eastern Virginia AHEC's educational activities. In addition he participates in designated meetings called by the statewide and Eastern Virginia AHEC program directors and provides necessary support to the Virginia statewide AHEC program by participation in the statewide AHEC program advisory group and on statewide AHEC task forces. The Administrative Director evaluates educational and program support needs of preceptors, and undertakes regular evaluation of program activities with program and statewide staff to assess their impact. The Administrative Director also serves as Producer for the Eastern Virginia Telemedicine Network, an Eastern Virginia outreach program.

The Program Coordinator plans and implements activities for the range of programmatic areas under the purview of the Eastern Virginia AHEC, manages the AHEC office staff and college interns, manages the financial aspects of the AHEC grants and coordinates conferences and special AHEC events.

Eastern Virginia Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Accomack	32,121	18.8	$19,032	6.4	18.4	4,422	70.0
Isle of Wright	29,632	11.8	$24,637	2.7	13.6	2,414	66.7
James City	45,945	14.8	$31,499	2.0	5.9	1,726	82.7
Northampton	12,810	21.0	$18,992	4.5	28.1	2,452	70.5
Southampton	17,678	14.8	$21,776	3.3	15.0	1,915	75.5
York	58,433	9.2	$25,030	2.0	6.7	1,379	84.9
Chesapeake	202,759	8.7	$23,606	2.6	10.5	12,504	76.8
Franklin	8,139	15.0	$21,776	4.2	18.7	1,535	77.9
Hampton	137,193	11.2	$21,646	4.0	12.6	11,746	70.7

Newport News	179,138	10.0	$21,415	4.0	16.5	19,537	74.1
Norfolk	225,875	11.2	$20,967	5.5	18.9	30,237	69.6
Poquoson	11,571	6.7	$25,030	2.2	5.7	238	87.1
Portsmouth	98,305	14.2	$20,502	4.9	21.3	14,598	66.0
Suffolk	64,805	11.3	$21,786	3.5	20.2	8,088	58.1
Va. Beach	433,461	8.1	$26,967	2.6	6.2	19,092	74.2
Williamsburg	12,495	16.5	$31,499	5.9	11.6	489	82.7
EVAHEC	1,570,360	12.7	$23,510	3.8	14.4	8.2%	74.2
State	6,872,912	11.2	$28,063	2.8	10.5	7.1%	73.0

Data source: 2000 Census

The Student Placement Coordinator/Program Assistant is responsible for serving as the liaison between health professions students, the Eastern Virginia AHEC program and the offices of the preceptors assigned to the students. She coordinates the assignment and rotation of health professions students/medical residents in the Eastern Virginia service area as well as identifies health care providers willing and able to serve as preceptors for health professions students and medical residents.

The Eastern Virginia AHEC serves a geographically diverse service area consisting of urban, suburban, and rural settings. Comprised of 10 designated cities (Norfolk, Portsmouth, Virginia Beach, Suffolk, Chesapeake, Franklin, Newport News, Hampton, Williamsburg and Poquoson) and 6 designated counties (York, James City, Isle of Wight, Southampton, Accomack, and Northampton), the region stretches from Franklin City to the west, to Williamsburg City in the north, to the Atlantic Ocean on the east, and to the North Carolina border of the south, while also including Accomack and Northampton Counties on the rural Eastern Shore of Virginia. Although this region only encompasses only 8% of the Commonwealth's total land area, it is home to nearly 23% of the state's population, resulting in a population density nearly three times the state average.

Socio-economic and health status indicators

Generally, the service area reflects state averages with regard to socio-economic indicators. Its percentage of population over age 65, unemployment rate and percentage of students attending college is consistent with state average. It has a slightly lower per capita income as well as a slightly higher percentage of its population with incomes below 100% of the federal poverty level (FPL).

Four counties in the Eastern Virginia AHEC service area have rates that double the state rate for the five leading causes of death in Virginia. The five leading causes of death are heart disease, cancer, unintentional injury, cerebrovascular disease and coronary obstructive pulmonary disease. The state rate for unintentional injury is 27 per 1,000 residents. Accomack (61.9) and Northampton (63.5) Counties and the Cities of Williamsburg (114.6) and Franklin (99.4) had rates double the state rate. Franklin also had double the state rate for heart disease (257.7 per thousand as compared to the state rate of 127 per thousand) and cancer (272.3 per thousand as compared to the state rate of 125.7 per thousand).

All but one of the counties/independent cites in the Eastern Virginia AHEC service area have some sort of healthcare shortage designation. The City of Poquoson has no designation. Eight of the counties or independent cities have been designated as primary care HPSAs, five of them have been designated as medically underserved areas (MUAs), two have been designated as Virginia MUAs (VMUAs), six of them have been designated as having a medically underserved population (MUP), five have been designated as dental HPSAs and two have been designated as mental health HPSAs. Some areas, such as Northampton County have several designations. As the above chart demonstrates, a fair percentage of the Eastern Virginia AHEC service area has some sort of health care shortage designation. The chart illustrates that the first Virginia AHEC program goal to "develop health careers recruitment programs for Virginia's students, especially under-represented and disadvantaged youth" and the second goal to "support community-based training of primary health care professions students in Virginia's underserved communities is of great importance in this service area.

Eastern Virginia Area Health Education Center Health Shortage Designations

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Accomack	X		X	X	X		X
Isle of Wright		X			X		
James City						X	
Northampton		X	X	X	X		X
Southampton		X			X		
York						X	
Chesapeake		X			X		
Franklin					X		
Hampton						X	
Newport NWT.		X	X		X		
Norfolk							
Poquoson							
Portsmouth		X	X			X	
Suffolk		X	X		X		
Va. Beach						X	
Williamsburg						X	

Because a significant percentage of the service area is underserved, the Eastern Virginia AHEC has concentrated its efforts on increasing primary care capacity in the region. It has been instrumental in the establishment of three Community Health Centers- the Suffolk Community Health Center, Inc., the Portsmouth Community Health Center, Inc. and the soon-to-open Park Place Medical Center in Norfolk, which is an expansion site of the Portsmouth Community Health Center.

Eastern Virginia AHEC Programs

The mission of the Eastern Virginia Area Health Education Center is to improve the distribution, supply, quality, utilization and efficiency of health provider personnel in the health care services delivery system in eastern Virginia by encouraging the regionalization and decentralization of health professional education programs and activities.

The following programs are the vehicles by which the Eastern Virginia AHEC fulfilled its mission:

- Co-sponsored the activities of the Eastern Virginia Medical School/Norfolk Public School System Magnet High School for the Sciences and Health Professions for 50 tenth through twelfth grade students. This is the only high school program of its type in the nation located on a medical school campus.
- Sponsored and coordinated training of EVMS medical students and medical residents at the EVAHEC Park Place Clinic to sensitize them to the health care needs of the indigent, medically underserved populations. A total of 164 health professions students/medical residents were trained in the clinic. Participating were 7 advanced practice nurses, 38 allied health workers, 102 medical students, 1 undergraduate nursing student, 11 physician assistant students, and 5 family medicine residents.
- Helped plan and facilitate the four-week summer enrichment program for MCAT preparation and exposure to generalist medicine for 30 college students with pre-medical majors from underrepresented minority and disadvantaged backgrounds.
- Collaborated on the establishment of the Norfolk Community Health Center as an expansion of the Portsmouth Community Health Center. Eastern Virginia AHEC plans to utilize the proposed site as a community-based clinical teaching site for students and medical residents.
- Placed 302 health professions students in clinical rotations at AHEC community-based sites in the eastern Virginia region.
- Developed and continues to operate the Eastern Virginia Telemedicine Network (EVTN), which provided 970 hours of category 1 CME credit to 204 Hampton Roads health care professionals.
- Partnered with the Eastern Virginia Medical School Office of Minority Affairs to offer a four-week program during the summer for college students with pre-medical majors from under-represented minority and disadvantaged backgrounds to help improve their acceptance rate into medical schools and to familiarize them with generalist careers and the rewards of working as a physician in a medically underserved area.
- Distributed over 2,000 *Virginia Health Careers* publication throughout eastern Virginia and Eastern Virginia AHEC staff are available to make health careers presentations throughout the service area.
- Sponsored and coordinated training of EVMS medical students and medical residents and other health professions students at this clinic to sensitize them to the health care needs of the indigent, medically underserved populations and the career satisfaction that can be

obtained from working in such an environment.

- Helped locate and pay for housing and assist with travel costs for various health professions students and medical residents who seek to work on the medically underserved Eastern Shore in clinical rotations with practicing health professionals. Participating were 12 medical students, 6 physician assistant students and 2 family medicine residents.
- Worked closely with eastern Virginia's Community Health Centers, the local health departments, other community health providers and health and human services agencies in the region to build primary care capacity.
- Supported and coordinated computer training of primary health care providers in the region to better enable them to access health care information online. Sponsored hands-on training in MS PowerPoint and on the use of the Internet to 45 eastern Virginia primary health care professionals, awarding a total of 180 hours of category 1 continuing medical education credits.
- Served as the local contact agency for the Virginia AHEC Program's "Primary Practice Opportunities" web site on the Internet by responding to inquiries of prospective applicants for primary health care positions in eastern Virginia health care facilities and by working with regional health care entities to assist them in recruiting primary health care providers. Responded to the inquiries of twelve primary health care providers concerning practice opportunities in eastern Virginia through follow-up form the Primary Practice Opportunities website or from other sources.
- Sponsored interdisciplinary teams of EVMS medical and physician assistant students and Old Dominion University physical therapy students to provide 438 free pre-participation sports physicals to middle and secondary school athletes attending public schools in the rural, medically underserved western Tidewater portion of the service area.
- Helped meet the need for radiation therapy services on the Eastern Shore by applying for a grant from the United States Department of Agriculture Rural Utilities Service for a grant to provide Radiation Therapy services telemedically from the Norfolk campus of the Eastern Virginia Medical School and the Sentara Norfolk General Hospital. The grant application for $51,226 was funded and this project is underway with an anticipated service delivery start date of January 2003.
- Administered the Virginia Youth Tobacco Survey Instrument to over 3,000 students in 30 area middle and high schools.
- Responded to the anthrax-related bioterrorism attacks in the fall of 2001 by down-linking and retransmitting via the Eastern Virginia Telemedicine Network numerous Centers for Disease Control satellite videoconferences on anthrax, smallpox and other bioterrorism agents and providing VHS videotape copies of this programming to over 20 health care facilities in eastern Virginia for staff training.

Eastern Virginia AHEC Future Plans

As noted above, each community AHEC will be described in relation to its efforts to assist the overall program achieve the four statewide programmatic goals listed in the 2001 AHEC grant application. The first Virginia statewide AHEC goal is to prepare and recruit local

students for enrollment in health careers training programs. The Eastern Virginia AHEC will prepare and recruit local students for enrollment in health careers training programs to support this goal. It will evaluate its success based upon whether contact information is entered into databases for students enrolled in the Magnet High School for the Sciences and Health Professions, the Enrichment Program for MCAT Preparation and Exposure to Generalist Medicine, and the "Young Women in Medicine" programs so that their educational progress can be tracked from year to year. Although not highlighted in the federal grant application, the Eastern Virginia AHEC has numerous programs described in the preceding section, that will assist the state achieve its goals. An indicator for success is that 50% of the high school students who attend the Eastern Virginia Medical School- Norfolk Public Schools Magnet High School for the Sciences and Health Professions will enroll in health professions training programs.

Virginia's second AHEC goal is to support community-based training of primary health care professions students in Virginia's underserved communities. The Eastern Virginia AHEC will support undergraduate and graduate level training for health professions students in community-based clinical settings to support this effort. Success of the Eastern Virginia approach will be determined by tracking the number of students and/or residents in clinical training programs who are supported by funds administered by the Eastern Virginia AHEC. It will also track the number of students and faculty involved and patients treated in the Eastern Virginia AHEC Park Place Evening Free Clinic. An indicator of success will be 500 undergraduate medical students, medical residents and /or other health professions students who will benefit from community-based training experiences supported by Eastern Virginia AHEC funds in its service area.

The third Virginia AHEC goal is to provide educational and practice support systems for Virginia's primary care providers. Support will be given to the statewide goal by the Eastern Virginia AHEC. It will assist the work of practicing health professionals. Success will be gauged by evaluation of all continuing education activities by the Accreditation Council for Continuing Medical Education criteria for both program content and the effectiveness of the distance learning methodology. Demand for the Eastern Virginia Telemedicine Network services both in terms of the number of sites participating and the number of individuals served will be the best indicator of success.

The fourth Virginia AHEC goal is to collaborate with health, education, and human service organizations to achieve the shared goal of improved health and disease prevention for the citizens of the Commonwealth. The Eastern Virginia AHEC will participate in partnerships for improved health and disease prevention. Specifically, it will partner with the Eastern Virginia Medical School and Old Dominion University to have medical students, medical residents, physician assistant students and physical therapy students travel to the rural western Tidewater region of southeastern Virginia to provide pre-participation sports physicals to students in Suffolk City Public Schools, Southampton County Public Schools and Franklin City Public Schools. This effort will be evaluated by the number of sports physicals completed as well as the number of participating health professions students and residents.

Another way in which the Eastern Virginia AHEC hopes to assist the statewide AHEC program in achieving this fourth goal is to have its staff members learn more about the health care needs in the region and by making contributions to address those needs. Eastern Virginia AHEC staff members will serve as Board members and/or advisors for health care providers, councils and committees across its service area to promote health and wellness, disease prevention, and access to health care. No staff member will serve on less than 3 or more than 5 boards, councils, or committees simultaneously.

Eastern Virginia AHEC Assessment

It is clear efforts by the Eastern Virginia AHEC to support the statewide AHEC goals will likely prove to be fundamental to the statewide AHEC program's ability to achieve them. The Eastern Virginia AHEC has a myriad of programs that reflect the needs of its community. Its focus on increasing primary care capacity is indicative of its ability to design programs reflective of community need. The participation by health professions students in a statutorily-mandated function regarding health examinations for all school athletes represents a very creative approach to assuring participants in AHEC activities. It provides the health professions students with a "captured audience" and likewise provides the student athletes with necessary health screenings. This approach is an AHEC "best practice" that can be easily copied by other community AHECs.

Another Eastern Virginia AHEC attribute is its strong community ties. It is viewed as a necessary partner in its service area. These ties serve as a fertile ground for future collaboration, a prerequisite first step in leveraging funds. It has a record of collaborating with community leaders on many health care initiatives, such as the proliferation of community health centers. This expertise will prove invaluable as Virginia competes with other states to secure funds that the federal government has appropriated for the President's Initiative to Expand Health Centers, a program that seeks to add or expand health center sites over a five-year period. In response to the President's Initiative, the Virginia Primary Care Association plans to add 27 new access sties to its existing community health center organizations. It predicts the new sites will serve 74,000 new users and will require recruiting approximately 80 new providers and 220 new support staff. The Virginia Primary Care Association intend to work closely with its partners to satisfy the health workforce recruitment that this initiative will require. Although the Virginia AHEC statewide program plans to play a role in this effort, it could easily play a major role if it were to adopt some of the successful strategies utilized by the Eastern Virginia AHEC in community health center development.

The Eastern Virginia AHEC has set realistic, yet aggressive indicators for success of its initiatives. The best example is the indicator that 50% of the Science Magnet school will enroll in health professions programs. It identification of appropriate goals and objectives demonstrates a clear understanding of program evaluation principles, a skill that HRSA has identified as being crucial to continued federal funding. These evaluative skills represent another community AHEC "best practice" that should be shared with other community AHECs. Other community AHECs should be strongly encouraged to utilize the Eastern Virginia AHEC program evaluation expertise. The Eastern Virginia AHEC program personnel should be encouraged to provide

program evaluation classes to other community AHECs.

The Eastern Virginia AHEC has a number of programs that are well-respected within the Virginia health care community. It reputation expands beyond the geographic borders of Virginia. Its program with the Norfolk Public School System's Magnet High School for the Sciences and Health Professions is the only high school program of its type in the nation. The success of this program resonates favorably upon the entire Virginia AHEC program.

Not only are the Eastern Virginia AHEC programs well-respected within the Virginia health care community but its leadership is likewise respected. As noted earlier, the Eastern Virginia AHEC program has a long history. Its leaders were instrumental in bringing forth the Virginia AHEC program. It leaders also have a long history of community collaboration. The remaining community AHECs could easily benefit from the sharing of the AHEC history and knowledge that resides within the Eastern Virginia AHEC.

In summary, the Eastern Virginia proposed contributions to the statewide AHEC goals are solid ones that serve as one of the keystones to the success of the entire statewide AHEC program. Its own history serves to substantiate this claim.

<u>Blue Ridge AHEC</u>

<u>History and Purpose</u>

The Blue Ridge AHEC was incorporated in 1992- shortly after the Commonwealth's statewide AHEC program was established by the General Assembly. It is staffed by three positions- an Executive Director, an Associate Director and a Cross-Cultural Programs Coordinator. The Executive Director is responsible for the overall development, management and evaluation of the Blue Ridge AHEC. This includes, in cooperation with the board of directors, establishing program areas, resource development, and strategic direction. It is important to note that in 1996, the Blue Ridge AHEC entered into a partnership with James Madison University to expand the AHEC's capacity to meet its mission while expanding JMU's opportunities for student education and training through community outreach.

The Associate Director provides consultation to community groups and academic departments in development of community based health promotion programs, health careers recruitment programs and the James Madison University (JMU) interdisciplinary rural health care course. This position also provides consultation to the Promotoras de Salud Lay Health Promoter Program. She is responsible for the operational directorship of the Virginia Center for Health Outreach (VCHO). The VCHO is a federally funded initiative to support Community Health Workers (CHW) in Virginia. She is the primary liaison between the VCHO and the CHW programs across Virginia for issues related to sustainability, education, coordination, research, and policies that affect the Community Health Workers and the programs that utilize them.

Blue Ridge Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Albemarle	80,145	10.3	$30,947	1.1	6.4	2,985	79.4
Augusta	61,166	11.5	$22,526	2.3	9.7	2,893	59.5
Bath	4,296	15.9	$22,020	4.7	15.7	312	56.3
Clarke	12,838	14.8	$27,607	1.5	9.8	533	75.6
Culpeper	33,562	11.4	$25,589	2.0	13.8	2,055	64.6
Fauquier	55,206	10.0	$35,104	1.5	5.1	1,998	71.0
Frederick	56,555	10.0	$24,362	2.1	8.3	2,006	71.5
Greene	14,685	9.1	$18,978	1.5	18.0	869	46.2
Highland	2,480	17.9	$22,141	2.6	14.7	168	43.5
Loudoun	156,284	5.8	$34,495	1.2	3.4	2,586	79.4
Louisa	25,029	12.2	$21,778	3.5	15.4	1,753	60.1
Madison	12,627	15.4	$19,014	1.8	16.8	838	56.9
Nelson	14,186	16.9	$19,659	2.1	15.6	1,207	52.1
Orange	25,759	16.8	$20,988	2.5	10.7	1,816	61.4
Page	23,165	15.9	$18,285	3.9	15.4	1,949	38.3
Rappahannock	7,664	13.8	$25,170	2.0	10.1	357	66.1
Rockbridge	19,542	15.1	$19,701	2.1	14.1	1,468	64.2
Shenandoah	35,141	17.1	$20,896	2.8	14.5	1,982	59.4
Warren	30,620	12.5	$23,857	2.6	12.9	1,931	71.1
Buena Vista	6,467	18.1	$19,701	2.7	13.9	624	57.1

Charlottesville	36,815	15.2	$30,947	1.7	16.3	3,866	78.3
Harrisonburg	34,129	9.9	$22,072	1.3	12.4	2,357	72.3
Lexington	7,359	16.0	$19,701	1.4	17.3	325	83.2
Staunton	24,496	19.3	$22,526	2.4	11.9	1,973	67.2
Waynesboro	19,274	18.6	$22,526	2.9	11.0	1,986	53.2
Winchester	22,477	17.7	$24,362	2.5	11.6	1,874	76.1
Blue Ridge	766,761	14.1	$23,652	2.3	13.7	5.6%	64.0
State	6,872,912	11.2	$28,063	2.8	10.5	7.1%	73.0

Data source: 2000 Census

The Cross Cultural Program Coordinator position is a staff position within the Blue Ridge AHEC at JMU. The incumbent works closely with community health and human service providers in development of community based health promotion and health access programs among the rapidly expanding immigrant population in the Shenandoah Valley and Piedmont regions of Virginia. The position oversees the Community Health Interpreter Service (CHIS). The CHIS trains bilingual persons to serve as health care interpreters for the Limited English Proficient (LEP) population in the service region as well as schedules interpreters for health care providers in the Harrisonburg – Rockingham County area. The position also directs the Promotoras de Salud program through the recruitment of program participants, development of curricula, arrangement of faculty, coordination of continuing education programs and oversight of the evaluative process.

The Blue Ridge AHEC serves a predominantly rural area comprised of 20 counties and 7 cities located in the northwest and north central regions of Virginia. Although this AHEC covers the largest land mass, it represents the smallest percentage (11%) of Virginia's population as compared to the other AHECs. Eleven percent of the Blue Ridge AHEC population is non-white, and it is experiencing problems regarding health care access because of the presence of a rapidly increasing Limited English Proficient (LEP) population in the region. Specifically, there are significant challenges in the provision of accessible and culturally competent health care to this population. The Blue Ridge is recognized as one of the AHEC leaders in designing and implementing programs that educate providers on the importance of providing language assistance and culturally competent health care to LEP populations.

Socio-economic indicators

Fourteen percent of the population served by the Blue Ridge AHEC is age 65 and older as compared to the Virginia statewide percentage of 11.2%. The 2000 US Census data revealed fourteen of the twenty-seven counties/independent cities in this region had higher poverty rates than the overall state rate of 10.5%. In particular, Greene County came close to almost doubling the statewide rate.

The demand for health professionals is acute in the geographic area served by the Blue Ridge AHEC. In the near future, 2003-2005, the Virginia Employment Commission projects the need for 97 physicians, 24 dentists, 51 pharmacists, 705 registered nurses, 30 physician assistants and 159 therapists.

The Blue Ridge AHEC has several programmatic initiatives to help solve the projected health care workforce deficit. In 2001 it helped to secure federal funding to establish the Virginia Center for Health Outreach (VCHO) at James Madison University. The premise of the program is that community health workers will help to facilitate access to health care information and resources.

The Blue Ridge AHEC's service area has few counties or independent cities that have rates of the leading causes of death in Virginia that double the state rate. Four areas have rates that double the state rate of 27.0 per thousand persons for unintentional injuries. Orange (63.5), Rockbridge (53.7), Buena Vista (85), and Lexington (75.5) all greatly exceed the state rate. It is unclear whether the Blue Ridge has any programs that assist its primary care providers in addressing this challenge that faces its community. However, these numbers represent yet another opportunity for the Blue Ridge AHEC to serve the people in its service area. For example, information regarding injury prevention could be translated in Spanish in an effort to assist primary care providers in their attempt to address this problem.

Unlike the Eastern Virginia service area, the Blue Ridge AHEC service area has a significant number of counties or independent cities that do not have any health care shortage designation. Twelve of its twenty-six counties/independent cities have no designation. Seven areas are designated as HPSAs, twelve are designated as MUAs, five areas are dental HPSAs, and four areas are mental health HPSAs. A number of the counties- Bath, Greene, Highland, Louisa, Nelson , Page, and Rappahannock, have multiple designations. The predominant designation is the medically underserved area designation. In summary, while the Blue Ridge AHEC service area has a number of geographic areas that have no designation, the areas with designations are likely to have many designation indicating a great amount of health care need in those areas.

Blue Ridge Area Health Education Center Health Shortage Designations

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Albemarle				X			
Augusta							
Bath	X				X		X
Clarke					X		
Culpeper					X		
Fauquier					X		
Frederick							
Greene	X		X		X		X
Highland	X				X		X
Loudoun					X		
Louisa		X	X	X	X		X

Madison							
Nelson		X	X	X	X		
Orange					X		
Page	X		X	X	X		X
Rappahannock			X		X		
Rockbridge		X					
Shenandoah							
Warren							
Buena Vista							
Charlottesville							
Harrisonburg							
Lexington							
Staunton							
Waynesboro							
Winchester							

A snapshot of its major accomplishments for the period September 30, 2000 - September 29, 2001[24], include:

- Trained 33 Hispanic women to be lay health promoters with a general health promotion/disease prevention curriculum including an overview of local health care delivery system;
- Trained 47 bilingual persons utilizing a 40-hour "Bridging the Gap" interpreter education curriculum;
- Initiated the Community Health Interpreter Service in Harrisonburg and Rockingham county;
- Secured federal special initiative funding creating the Virginia Center for Health Outreach at James Madison University;
- Maintained an effective web-based resource for matching interested primary care providers with practices seeking providers.
- Funded the training of 7 migrant workers in basic health promotion and disease prevention (40 hours) including knowledge of the local health care delivery system.
- Involved numerous health professions students in education and training experiences associated with "The Health Place," a multi disciplinary health and human services delivery site co-founded by James Madison University and the Blue Ridge AHEC.
- Provided patient education resource to Bath Community Hospital, which serves an underserved area.
- Conducted four continuing education programs for 37 Hispanic lay health promoters
- Supported research describing the health care needs and perceptions of the Hispanic

[24] This period reflects information provided in the latest federal AHEC grant application submission. It is provided for all community AHECs.

community in Rockingham and Harrisonburg

- Provided In-Service training to local health department providers for proper way to schedule and utilize interpreters

Future Plans

The Blue Ridge AHEC is participating with James Madison University in development of JMU's Center for Innovation in Health and Human Services (CIHHS). The Center is designed to facilitate innovation, linkages, and coordination within and among existing health and human service programs and structures at JMU and within the broader community. The CIHHS will further increase the capacity of the Blue Ridge AHEC – JMU partnership to address gaps in community health services by combining its resources with those of health and human service programs at JMU.

The Blue Ridge AHEC has identified one objective to help the state meet its goal to develop health careers recruitment for Virginia's students. It will expand partnerships with workforce groups to emphasize and disseminate information regarding health care professions, combining the resources and strengths of each agency/organization to develop an effective health care workforce information strategy. An indicator noted as a sign of success is that as a result of the partnerships, there will be multiple access points for sources of comprehensive and consistent information regarding health careers. The Blue Ridge AHEC will evaluate its success based upon the number of health career manuals and CDs distributed.

Virginia's second AHEC goal is to support community-based training of primary health care professions students in Virginia's underserved communities. The Blue Ridge AHEC hopes to assist the state in reaching that goal by expanding health profession student rotations in conjunction with "The Health Place". Specifically, it will prepare a list of learning opportunities available in conjunction with activities taking place in association with The Health Place and share them with health professional program directors. Its indicator of success will be an increase in the number of health professions student rotations occurring at or in conjunction with "The Health Place" activities. Likewise, it plans to evaluate its success based upon the amount of health professions student evaluations or materials presented.

The third[25] Virginia AHEC goal is to furnish educational and practice support systems for Virginia's primary care providers. The Blue Ridge AHEC hopes to support this goal by maintaining its contractual agreement with the Virginia Department of Health to manage a recruitment website for primary care physicians, nurse practitioners, and physician assistants.[26] It hopes to do this by maintaining and compiling evaluative information of the website on a regular basis. The next step will be to expand marketing of the website to in-state and out-of-state

[25] Although there are four Virginia goals, the Blue Ridge AHEC did not list objectives to assist in the achievement of the fourth goal, although it did offer seven objectives for the third goal.

[26] A Memorandum of Agreement was signed with the Virginia Department of Health for the next fiscal year.

professional associations, workforce groups, and the health care provider community. Finally, it hopes to demonstrate the value of the website to state policy-makers through placement facilitation information. An indicator of success will be that the website will continue to be regarded as Virginia's most comprehensive web resources for locating primary care practitioners and primary care practice opportunities. It will evaluate it success based upon the website utilization data, number of practice opportunity postings, number of provider curriculum vitas on file as well as number communicated to potential employers, number of facilitated placements, and continued agreements with the Virginia Department of Health.

Another way that the Blue Ridge AHEC hopes to support the third Virginia AHEC goal is by recruiting existing bilingual persons working in the health care professions into the "Bridging the Gap" interpreter-training program. The identified indicator of success is that there will be improved communication between health care providers and language barrier patients. By the use of pre and post-tests it hopes to determine enrollee improvement. It then plans to conduct a follow-up survey with the enrollee and practice administration to determine the effectiveness and efficiency of the interpretation services provided by the enrollee.

The final[27] manner the Blue Ridge AHEC hopes to support the third Virginia AHEC goal is to offer health care providers training on the most effective use of trained interpreters. Success will be indicated when trained health care providers understand the mechanics of how to most effectively utilize trained interpreters. It plans to evaluate success by the number of providers attending workshops.

Blue Ridge AHEC Assessment

The Blue Ridge AHEC has many programs that are appropriately tailored to the needs of its community. Because it is experiencing an increase in the number of Hispanics in its service area, it has positioned itself as one of the AHEC leaders involved in activities to assist the Limited English Proficient population. Its leadership has leveraged AHEC experience by consulting with the Northern Virginia AHEC to assist in its efforts to serve the rapidly-growing Hispanic community.

It enjoys a great reputation in its community for collaborating on health care projects. For example, it will assist in supporting The Health Place, a community-supported effort to house health care activities in one building. The student rotations within the service area are likely to encourage students to remain in the community. Its efforts with the statewide primary care practice website allows practitioners to have real-time access to practice opportunities in Virginia. The growing Hispanic population in its service area is likely to greatly benefit from the "Bridging the Gap" interpreter-training program.

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27 As noted earlier, only three community AHEC objectives in support of each Virginia AHEC goal will be described, although there may be additional objectives described in the grant document.

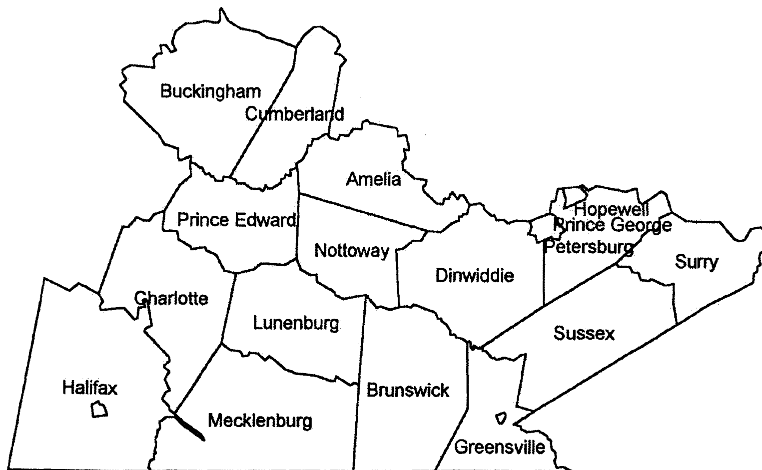
As stated previously, the community AHECs need not satisfy each state and federal programmatic objective. It is noted that the Blue Ridge AHEC offers no objectives in support of the fourth goal, which is to collaborate with health, education, and human service organizations to facilitate and promote improved health education and disease prevention among citizens of the Commonwealth, although it is recognized in the community for its willingness to collaborate on projects. This goal is an important one, for it provides opportunities for the community AHECs to both learn more about the communities that they serve, as well as opportunities to gain valuable information regarding health workforce and other healthcare access issues. Collaborating together on joint activities allows both parties to maximize limited resources. It is noted that the Blue Ridge AHEC is considering expanding existing partnerships to achieve the first goal and that effort is recognized. However, a separate activity emphasizing the expansion of partnerships as well as the performance of activities with partners will likely result in greater leveraging of state and federal funds.

Although the Blue Ridge AHEC offers no objectives in support of the fourth goal, it has entered into a beneficial collaboration with the Virginia Department of Health to maintain the primary care recruitment website, www.ppova.org. This website assists the Virginia Department of Health in its many recruitment efforts. The medium is particularly well-suited to the mode of information gathering exercised by most medical students. It has positioned Virginia well in its attempt to compete with other states in the recruitment of primary care professionals. It is unfortunate that HRSA was not made aware by the AHEC of how essential this project is to the Virginia Department of Health. Although the project is not a traditional form of health education or disease prevention, it represents a first step toward that effort.

The Blue Ridge AHEC may want to focus a greater number of activities on health careers recruitment. As noted earlier, the Virginia Employment Commission predicts a great need for health professionals in the Blue Ridge service area. However, the grant application lists only one Blue Ridge AHEC program designed to achieve the objectives of the first goal.

Finally, it appears the inability of the statewide AHEC grant proposal to adequately reflect the Blue Ridge AHEC's strengths in collaboration is symptomatic of a larger problem. Because it appears there are a number of places where the grant proposal could have been improved by greater coordination between the community AHEC and the statewide office, it is suggested all parties pay greater attention to the accuracy of the HRSA grant information. Omissions such as this one should be avoided in the future because federal funds may not as readily available and the competition for those funds will be greater. The quality of the AHEC program federal grant proposal must be improved if it is to compete under these conditions.

Southside AHEC



History and Purpose

The Southside Area Health Education Center was also incorporated in 1992, shortly after the creation of the statewide office. There are currently three employees- an executive director, a cross-cultural programs coordinator, and a preceptor coordinator.

The Executive Director works with the Southside AHEC Board of Directors to implement the scope of educational activities in areas that will strengthen the primary care system in the Southside Virginia region. He also evaluates education needs and other program support for preceptors and undertakes regular evaluation of program activities and its impact in cooperation with the Statewide AHEC staff. He attends appropriate statewide meetings, such as the Generalist Physician Initiative Statewide Task Force on Admissions and Recruitment to insure effective coordination of related projects. He is also involved in a wide variety of state and local activities such as the statewide VA-AHEC Board of Directors, Program Advisory Group member to the VA-AHEC program, Central Virginia Health Planning Agency Board of Directors, the Tobacco Settlement Foundation Regional Advisory Board, and other entities in serving the needs of Southside Virginia's residents.

The Program Coordinator/Office Manager assists the Director in conducting all activities, communications and meetings involving the planning and operation of the Southside AHEC program. She coordinates, manages and maintains budgetary data in concert with the Longwood University Finance Department, local auditor and VCU. She maintains and updates systems for recording student clinical rotations, health careers activities, and continuing education programs. She is involved in a wide variety of state and local activities including the VA-AHEC state

program advisory group meetings, Central Piedmont Action Council Health Advisory Board, the Piedmont Health District Task Force on Youth Obesity, the Smoke Free Heart of Virginia Coalition, and other programs as appropriate.

The Cross-Cultural Programs Coordinator manages all aspects related to the Virginia Rural Minority Health website in support of the Virginia Health Access Network in partnership with the Virginia Department of Health. She is responsible for managing all aspects of the Teens Against Tobacco Use (TATU) program conducted in rural school communities in the region, under the auspices of the Virginia Tobacco Settlement Foundation. She is involved with a variety of predominantly minority youth education programs within the Southside AHEC region and provides program support for the "As We Age" conference sponsored by the local Extension Office. She provides expertise in the development of outside funding sources, and has been trained by the American Cancer Society as a Master Trainer in the Power of Choice – Tobacco Community of Excellence, and Healthy Kids programs.

Southside Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Amelia	10,601	13.2	$19,687	2.5	14.8	907	54.2
Brunswick	18,340	13.3	$15,439	4.0	23.2	2,356	52.5
Buckingham	14,754	13.2	$15,698	4.1	23.1	1,864	46.8
Charlotte	12,414	19.1	$17,206	3.2	20.1	1,585	75.7
Cumberland	7,786	14.2	$18,363	2.0	19.7	1,221	54.7
Dinwiddie	25,663	12.4	$23,931	2.6	13.6	2,130	47.6
Greensville	11,332	10.1	$17,615	3.0	23.7	1,190	46.5
Halifax	36,920	16.2	$17,989	6.3	21.1	4,612	68.9
Lunenburg	11,789	15.9	$16,121	4.8	23.1	1,647	65.4
Mecklenburg	30,991	17.5	$19,449	5.3	18.2	3,399	58.0
Nottoway	15,291	17.4	$18,522	2.8	18.6	2,084	63.6
Prince Edward	19,245	13.8	$15,237	3.5	18.5	2,011	70.9
Prince George	28,812	6.3	$21,846	2.7	5.9	1,267	65.6
Surry	6,484	14.4	$17,682	7.7	18.2	618	53.8
Sussex	12,345	13.2	$21,030	2.9	18.5	1,443	63.8
Emporia	5,662	19.9	$17,615	4.8	21.4	1,011	46.5
Hopewell	22,663	14.4	$21,846	4.1	13.0	3,333	65.7
Petersburg	34,398	17.1	$23,931	5.2	22.4	6,862	63.6
Southside	325,490	14.5	$18,845	4.0	18.7	12.2 %	59.1
State	6,872,912	11.2	$28,063	2.8	10.5	7.1 %	73.0

Data source: 2000 Census

The Preceptor Coordinator is responsible for the overall management of the medical, dental, nursing and allied health student rotations within the Southside AHEC region. Based upon federal Model funding, the student rotation program continues to expand into additional areas/sites. Additionally, she continues to implement a comprehensive health careers promotion

summer program for the Southside AHEC regions. She coordinates its BioQuest program for middle school students. BioQuest is a one-week summer program that provides an opportunity for about 50 middle school students annually to identify and explore the possibilities of pursing a medical education. She likewise coordinates with the Blue Ridge AHEC in overseeing the Madison Health Careers Institute, a two-week residential high school program.

The Southside AHEC was created to serve the predominantly rural area comprised of 15 counties and 3 cities. The service area has since been enlarged to incorporate two additional rural counties. The counties served include Amelia, Brunswick, Charlotte, Dinwiddie, Greensville, Halifax, Lunenburg, Mecklenburg, Nottoway, Prince Edward, Prince George, Surry, and Sussex. The cities served are Emporia, Hopewell, and Petersburg. Collectively, it represents less than five percent of the total statewide population. Almost half (47%) of that population is non-white, which represents a larger percentage than the state percentage of non-whites (27.7%).

The mission of the Southside AHEC is to "promote access to quality health care through community-educational partnerships that emphasize primary health care to underserved southside populations." Its goals are to "(1) inspire and support individuals to pursue health careers with special emphasis on those who are rural, minority and disadvantaged students; (2) support the community-based training of primary care and allied health professional students and residents in southside Virginia's underserved areas; (3) provide practice support to health care professionals, including access to continuing education and information through modern technology; and (4) create partnerships with community businesses, health, education, and human service organizations to achieve the shared goal of improved health and disease prevention for the citizens of southside Virginia." Hence, its mission and goals are unique because they are specific to southside Virginia.

Socio-economic indicators

The Southside AHEC's service area's socio-economic indicators represent the greatest challenges of all the Virginia AHEC service areas. The statewide percentage of residents with incomes under 100% of the FPL is 10.5, while the Southside AHEC service area's rate at 18.7% comes close to doubling the statewide percentage. The Commonwealth's income per capita is $28,063, but it is only $18,845 for Southside Virginia. The Southside AHEC's service area has a higher percentage of elderly people (14.5%) than the Commonwealth rate of 11.2%. A significant number of counties and independent cities in this service area have percentages of their population over the age of 65 that are almost double the state percentage. While this population group provides a great resource to many communities, it is also the age cohort most likely to be in need of health care services. While the overwhelming majority of state students planning to attend college is 73%, that same figure for this service area is 59%- slightly over half. This statistic presents a great challenge for the Southside AHEC's goal to encourage students to pursue health careers while in college. These indicators are unlikely to change in the near future.

As previously mentioned, the top five leading causes of death in Virginia are heart

disease, cancer, unintentional injury, cerebrovascular disease, and coronary obstructive pulmonary disease. Unintentional injury rates per thousand persons in Amelia, Halifax, Brunswick, and Lunenburg are double the statewide rate. While the state rate is 27 per thousand persons, the rate in Amelia is 113.6, in Halifax it is 61.8, in Brunswick it is 64.8, and in Lunenberg it is 88. The Southside Area AHEC may want to design programs concerning health promotion for the primary care providers in its service area. Three counties have significantly higher rates of cerebrovascular disease. The statewide rate per thousand persons is 27 as compared to 61.8 in Mecklenburg, 53.3 in Nottoway, and 53.2 in Sussex. The City of Emporia has higher rates for heart disease (337.3 per thousand as compared to the state rate of 127 per thousand) and for cancer (253.9 per thousand as compared to the state rate of 125.7).

Southside Area Health Education Center Health Shortage Designation

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Amelia	X		X	X	X		
Brunswick	X		X	X	X		X
Buckingham	X		X	X	X		
Charlotte	X		X	X	X		X
Cumberland	X		X	X	X		
Dinwiddie		X	X	X	X		
Greensville	X				X		X
Halifax			X	X	X		X
Lunenburg	X		X	X	X		X
Mecklenburg		X	X	X	X		X
Nottoway	X		X	X	X		X
Prince Edward			X	X	X		
Prince George							X
Surry	X		X		X		X
Sussex	X		X		X		X
Emporia		X					
Hopewell			X		X		
Petersburg		X					

The overwhelming majority of the Southside AHEC's service area has some type of health shortage designation. The only areas with no designation are Prince George County, and the City of Hopewell. The remaining areas have multiple designations. All of the remaining areas have some sort of primary care HPSA designation. Thirteen areas have dental HPSA designations, eleven areas have mental health HPSA designations, twelve areas have MUA designations, and ten areas have been designated as VMUAs. It has the greatest percentage of its counties designated as a Dental HPSA of all the community AHEC service areas. The above chart illustrates that the first Virginia AHEC program goal to "develop health careers recruitment programs for Virginia's students, especially under-represented and disadvantaged youth" and the second goal to "support community-based training of primary health care professions students in

Virginia's underserved communities is of great importance in this service area.

Southside AHEC Programs

A representative sample of the Southside AHEC programs include:

- Participation in career days/college days in area middle and high schools;
- Distribution of *Virginia Health Career* manuals as well as *270 Ways to Put Your Talent to Work in the Health Care Field* to middle school, high school, community college and university students in the service area;
- Distribution of health and career information at local health/wellness fairs;
- Providing health information and career information at local health/wellness fairs;
- Providing housing support and identifying rotation sites/preceptors for students enrolled in health professions programs;
- Disseminating information on CME programs or topics of interest to physicians practicing in the service area;
- Serving on and working in conjunction with local health advisory boards;
- Participating in or conducting health assessment surveys (e.g. the Youth Tobacco Use Survey (YTS), and the Youth Risk Behavior Survey;
- Encouraging wellness in the service area through participation in local coalitions such as the Smoke Free Heart of Virginia Coalition.

Future Plans

To continue addressing the healthcare needs of the Southside AHEC service area, and to meet the goals of the Statewide AHEC program, Southside AHEC plans to:

- Continue to provide and expand support for students enrolled in physician and allied health programs who are completing their clinical rotations in the Southside AHEC service area;
- Provide practice support as identified by physicians and healthcare providers in the region;
- Update the database of individuals supported by Southside AHEC who have returned to practice in the service area;
- Continue collaborative efforts at improving the health, and access to healthcare, of the residents of its region;
- Identify potential funding opportunities and develop or assist in the development of grant proposals for both Southside AHEC and local/regional projects.

The first Virginia AHEC goal is to "develop health careers recruitment programs for Virginia's students, especially under-represented and disadvantaged youth." The Southside AHEC hopes to help the state achieve that goal by providing students with an introduction to health careers and the opportunities available in healthcare and related fields. An indicator of

success will be to have at least 6 career days conducted in regional schools annually. It will be evaluated in terms of the number of career day occasions annually.

Another programmatic attempt by the Southside AHEC to achieve this first goal is the continued promotion of the one-week in-residence summer program called BioQuest conducted at Longwood University. It provides an opportunity for 30 to 45 middle school students annually to identify and explore the possibilities of pursuing a healthcare education. One indicator of success as well as how it will evaluate success is the number of middle school students from its service area enrolling in and satisfactorily completing the BioQuest program annually.

The final program is aimed at high school students. The program provides an opportunity for a two-week shadowing/mentoring experience for 6-8 students annually in an in-residence program at James Madison University. The indicators of success and evaluation process will be similar to the one described in the preceding paragraph.

The second Virginia AHEC goal is to support community-based training of primary care health professions students in Virginia's underserved areas. The Southside AHEC plans to identify means of support for the community based training programs of primary care and allied health professional students and resident physicians, dentists and nurses in southside Virginia's underserved areas in an effort to support this goal. An indicator of success is identified as the number of students supported by and completing rotations. It plans to evaluate the program in terms of the number of student rotations completed.

Another effort to support this statewide AHEC goal by the Southside AHEC is to increase the number of medical students training in its service area with the goal of increasing the number of primary care physicians by 10% over the next 36 months. An indicator of success will be an increase in the number of new training sites incorporated into existing program through collaboration with the various primary care departments in the Virginia medical schools. The Southside AHEC will evaluate its success by the number of new medical training sites established.

The third Virginia AHEC goal is to provide educational and practice support systems for Virginia's primary care providers. The Southside AHEC will support this effort by exploring and assisting in the development of user-friendly technology. An indicator of success will be that at least 150 healthcare providers will be identified who are interested in being included on an informational list serve addressing health information or access issues. The number of interested healthcare providers will serve as the evaluation criterion.

Another way in which the Southside AHEC hopes to help the Virginia AHEC program achieve its goal is by assisting physician offices in the development of office websites. It hopes to be able to assist at least 5 offices and will evaluate its success based upon the number of offices assisted. One last supportive program will be the expansion of physician office access to teleconference programs. The program will be evaluated based upon the number of physician/physician offices interested in participating in a regional healthcare teleconference

program in the Southside AHEC region.

The fourth Virginia AHEC goal is to collaborate with health, education, and human services organizations to achieve the shared goal of improved health and disease prevention for the citizens of the Commonwealth. The Southside AHEC aspires to create partnerships with community businesses, healthcare, hospitals, education and human service organizations. It will evaluate its success based upon the number of wellness programs in which it participates. The Southside AHEC also hopes to participate in at least one health fair sponsored by local businesses annually. It will evaluate its program based upon the number of health fairs conducted annually. Finally, the Southside AHEC will assist with data gathering through community needs assessments that will help to identify current and future needs in the service area in an effort to achieve the fourth AHEC goal.

In addition to assisting the statewide AHEC program in meeting its goals, the Southside AHEC has identified its own goals and objectives. Its first goal is to identify means of support for the community based training programs of primary care and allied health professional students and resident physicians in southside Virginia's underserved areas. It hopes to achieve this goal by increasing the number of medical students training in its service area by 10% over the next 36 months. Another objective to help it meet this goal is to provide practice support to healthcare professionals, matching graduates to practice sites, and disseminating information through modern technology. Finally, it hopes to develop strategies for addressing the nursing shortage and geriatric care needs.

Its second community goal is to provide students with an introduction to health careers and to the opportunities available. The BioQuest program, described above, will be one vehicle by which is goal is achieved. The Southside Virginia AHEC hopes to provide an opportunity for a two-week shadowing/mentoring experience for 6 - 8 students annually. Another way it hopes to achieve this goal is by encouraging high school girls to participate in the "Young Women in Medicine Day" sponsored by VCU/MCV. It will continue to distribute the Virginia Health Careers manual in addition to the booklet entitled "270 Ways to Put Your Talent to Work in the Health Field."

The Southside Virginia AHEC has as its third goal the creation of partnerships with community businesses, healthcare, hospitals, education and human service organizations to achieve the shared goal of improved health and disease prevention for residents of its service area. It hopes to accomplish this goal by participating in at least one health fair sponsored by local businesses annually, assisting in data gathering through community needs assessments to identify current and future needs, continuing to address the "no tobacco use" concept directed at area teenagers, and by becoming members of local community service boards.

In addition, the Southside Virginia AHEC will strive to provide practice support to healthcare professionals, matching graduates to practice sites, and disseminating information through modern technology. To accomplish this goal it will explore and assist in the development in user-friendly technology, assist physician offices in the development of office

websites, and expand physician office access to teleconference programs.

Its final two goals are to promote a broad-based concept of wellness for southside Virginians and to enhance and expand relationships with health training institutions. At the current time, neither of these goals have identified objectives.

Southside AHEC Assessment

It is clear that the Southside AHEC has a wealth of opportunities for health career exposure for young students as well as supportive programs for extant health profession students. Its activities in support of the statewide goals as well as those performed in support of its own goals are consistent with the four state and federal programmatic goals. The majority of its programs tend to focus on the first three objectives as an indirect way of meeting the fourth objective. In other words, by increasing the number of health care providers serving the area, and assisting the existing providers, its collaboration with other entities to assist in health education and disease prevention efforts in the community are likely to increase.

The Southside AHEC should be encouraged to aggressively create and expand partnerships with community businesses, hospitals, education and human service organizations. These partnerships can be forged and its activities need not be limited to health fairs. Other community AHECs, such as the Eastern Virginia AHEC should be called upon to offer advice regarding the creation of opportunities for creative community collaboration. Such collaborative efforts are likely to have a positive impact on the poor health status indicators identified above.

Its goals and objectives identified in the AHEC grant proposal are well-written and almost all have identifiable benchmarks. It is likely this part of the application will be looked upon favorably by HRSA. As mentioned above, HRSA reviewers are often reluctant to fund projects that list as goals mere continued activities. Rather, they strongly suggest to applicants that they include information representing a true goal as the Southside AHEC has done- (E.g. "Increase the numbers of medical students training in the [service area] with the goal of increasing the number of primary care physicians by over 10% over the next 36 months).

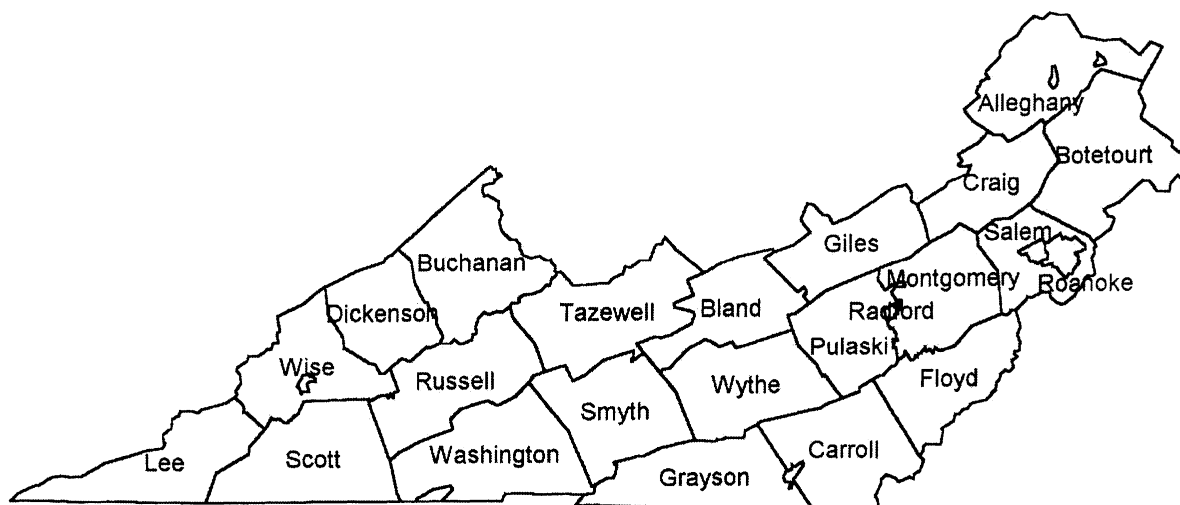
In addition to being well-written, the goals are reflective of the needs identified in the service area. As mentioned above, the service area has great socio-economic challenges. It is actively trying to identify means of support for the community based training programs of, among other health care professionals, dentists. As noted earlier, the Southside AHEC has the greatest number of Dental HPSAs of all the community AHECs. This program is reflective of Southside AHEC's ability to respond to community needs.

One disappointing statistic is the low number of students who plan to attend college. The Southside AHEC lists many programs that will assist with the first statewide AHEC goal of developing health careers recruitment programs for Virginia's students. These various programs are appropriately tailored to the need of encouraging students to pursue higher education and reversing the above statistic that indicates a mere 59% of students plan to attend college. Almost

every health career involves training at above the high-school level.

Overall, the Southside Virginia AHEC represents a community AHEC in touch with its service area. Its programs are appropriately tailored to community need. It has measurable objectives to meet Virginia AHEC goals. The Southside Virginia AHEC will be encouraged to continue with its current course of business, and to establish greater community ties so as to leverage community resources.

Southwest Virginia AHEC (Southwest AHEC)



History and Purpose

The next AHEC to be incorporated was the Southwest AHEC, which was incorporated in April of 1993. Its efforts are directed by the executive director. The executive director maintains overall responsibility for financial and personnel management and program development and implementation. The director develops strong community relationships and provides leadership in health access issues on both regional and state levels. The executive director is assisted by a program coordinator who works out of the AHEC's Marion office and an administrative coordinator in its Norton office. They provide services to the 21- county region. Both report to the executive director.

The program coordinator has much of the responsibility for managing student and resident clinical training projects throughout its service area. She works closely with academic health centers and local health care providers to arrange clinical training experiences for medical, nurse practitioner, physician assistant, and allied health students within the service area. She evaluates the need for educational and other support for community preceptors and participates in the evaluation of program services and overall impact. In addition to many other duties, she plans and conducts the Health Careers Summer Institute held at UVA-Wise and is the primary point of contact for the Southwest Virginia Alliance for Telemedicine.

The administrative coordinator bears primary responsibility for a multitude of organizational tasks, including helping to arrange practice support and continuing professional education programs for the Southwest Virginia AHEC and locating and authorizing payment for housing for health professions students completing rural rotations in the area. She works closely with educational institutions, community-based agencies and health care providers in housing

support and the planning and implementation of workshops, conferences, and other learning activities.

Southwest Virginia Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Alleghany	12,152	13.3	$21,940	5.9	10.2	932	76.4
Bland	6,795	14.1	$16,357	4.6	19.1	539	67.9
Botetourt	29,184	13.7	$23,859	1.8	9.1	1,003	64.7
Buchanan	28,477	11.6	$17,274	13.9	27.8	4,939	70.7
Carroll	27,808	16.5	$18,395	6.9	17.3	3,012	67.7
Craig	4,942	13.3	$19,697	4.4	11.8	334	72.2
Dickenson	16,716	13.8	$15,107	11.9	28.3	3,189	61.0
Floyd	13,260	15.6	$16,709	4.4	20.3	1,150	51.1
Giles	16,315	17.5	$19,176	6.1	14.2	1,451	55.5
Grayson	16,451	17.7	$16,738	5.9	17.3	1,923	59.7
Lee	23,821	14.6	$15,853	8.8	27.9	5,488	66.7
Montgomery	76,997	8.7	$18,506	1.9	16.3	4,296	70.0
Pulaski	34,401	15.9	$19,244	4.5	14.5	3,209	59.7
Roanoke	81,163	13.5	$24,218	1.3	5.9	3,031	80.9
Russell	28,728	11.7	$16,855	8.1	24.6	4,678	68.1
Scott	22,506	17.4	$16,119	6.6	26.9	3,381	69.5
Smyth	32,692	16.1	$18,360	6.1	18.0	3,571	68.8
Tazwell	46,343	14.8	$17,766	7.0	21.8	6,073	78.8
Washington	49,791	14.4	$20,877	4.7	16.8	4,346	64.7
Wise	40,194	13.6	$18,277	9.2	23.5	7,310	62.8
Wythe	26,511	15.9	$19,523	4.1	16.9	2,900	65.0
Bristol	16,709	22.7	$20,877	3.4	21.9	2,269	73.3
Clifton Forge	4,205	24.3	$21,940	5.0	14.8	782	76.4
Covington	6,846	21.4	$21,940	7.5	11.9	768	56.5
Galax	6,484	22.1	$18,395	4.3	16.3	1,157	76.1
Norton	4,008	15.0	$18,277	7.1	29.3	881	84.7
Radford	15,668	9.9	$18,506	2.8	22.6	817	78.5
Roanoke City	93,357	17.9	$31,675	2.6	16.5	12,208	69.6
Salem	24,037	16.3	$31,675	1.6	7.3	556	83.2
Southwest VA	806,561	15.6	$19,798	5.6%	18.2	10.7 %	69.0
State	6,872,9 12	11.2	$28,063	2.8	10.5	7.1 %	73.0

Data source: 2000 Census

The Southwest AHEC serves 21 counties and 7 cities most of which is within the mountainous territory in the Central Appalachians. The counties served are as follows: Allegheny, Bland, Botetort, Buchanan, Carroll, Craig, Dickenson, Floyd, Grayson, Giles, Lee, Montgomery, Pulaski, Roanoke, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe. The cities served include Covington, Galax, Radford, Roanoke, Salem, Norton, and Bristol.

The above area covers 9,086 square miles in which 806,500 people reside. The population density is the lowest of all the AHECs with only 89 persons per square mile, as compared to an average of 174 persons per square miles for all of Virginia. The service area is characterized by a slightly higher percentage of persons over the age of 65 (16%) as compared to the state average of 11%. However, the cities of Bristol, Clifton Forge, and Galax have double the statewide average percentage of persons over 65. There are considerably fewer non-whites in this region, (7%) as compared to a state average of 28%.

Socio-economic and health status indicators

The socio-economic indicators portray a population in great need. While only 10.5% of Virginians live on incomes less than 100% of the FPL, 18.2% live below the FPL in this area. This datum may be related to the high unemployment rate. While the Commonwealth enjoys a low unemployment rate of 2.8%, the rate for this service area is 5.6%. The per capita income of this region is $19,798, significantly less thanVirginia's $28,063. The overall percentage of Virginians enrolled in Medicaid is 7%, but in the area served by the Southwest AHEC, 11% are enrolled. Residents of southwest Virginia die at a rate that is 12 percentage points higher than the overall death rate in Virginia. For adults aged 35 - 54 the death rate is 24 percentage points higher than the state as a whole.

Despite the above data regarding the federal poverty level percentage, 69% of the southwest Virginia residents plan to attend college, which compares favorably to the statewide rate of 73%.

The Southwest Virginia AHEC's service area has a number of challenges regarding the top five leading causes of death in Virginia which are heart disease, cancer, unintentional injury, cerebrovascular disease, and coronary obstructive pulmonary disease. Five localities have rates that double the state rate of 20.7 per thousand persons for coronary obstructive pulmonary disease. In Bland, the rate is 42.3, in Buchanan the rate is 64.8, in Bristol it is 41.6, in Galax it is 60.3 and in Salem the rate is 41.3. The state rate for unintentional injury is 27 per thousand persons. In Lee that figure is 65.5 and in Norton it is 84.3. Finally, the state rate for heart disease is 127 per thousand persons while the rate in Norton is 257.8. These figures represent areas of opportunity in health care promotion and disease prevention for the Southwest AHEC.

As will be noted later in this report, the Southwest AHEC has many programs designed to provide educational and practice support systems for the area's primary care providers. Because these data represent challenges for the area's primary care providers, the Southwest AHEC may want to incorporate some of this health data information into its next health screening. It should likewise be integrated into its many educational programs.

The majority of geographic areas in southwest Virginia have some sort of health shortage designation. There are twenty areas that have been designated as a MUA and fifteen areas that have been designated as a HPSA. There are a greater number of areas with mental health HPSA designations (16) than dental HPSA designations (9). The only areas with no designation are

Montgomery, Roanoke, Radford and Salem. The above table indicates a need for the recruitment of mental health professionals as well as other health professionals. Because of the great number of medically underserved area designations, the Southwest Virginia AHEC may want to educate its existing providers of the benefits of this designation. It is strongly encouraged to partner with the Virginia Department of Health in this endeavor.

Southwest Virginia Area Health Education Center Health Shortage Designation

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Alleghany					X		X
Bland	X			X	X		X
Botetourt		X			X		
Buchanan	X		X	X	X		X
Carroll		X		X	X		
Craig	X		X		X		
Dickenson	X		X	X	X		X
Floyd	X		X	X	X		
Giles				X	X		
Grayson	X				X		
Lee	X		X	X	X		X
Montgomery							
Pulaski				X	X		
Roanoke							
Russell	X		X	X	X		X
Scott	X		X	X	X		X
Smyth		X		X	X		
Tazwell			X	X	X		X
Washington		X			X		X
Wise			X	X	X		X
Wythe				X	X		X
Bristol					X		X
Clifton Forge							X
Covington							X
Galax		X					X
Norton				X			
Radford							X
Roanoke City		X		X			
Salem						X	

Southwest AHEC Programs

The Southwest AHEC has been very aggressive in promoting its activities. It has prepared a well-designed brochure describing its activities and accomplishments. That brochure was given to members of the General Assembly in an effort to educate members about its

programs. Much of the information contained in this section has been taken from that brochure. It lists programmatic functions and describes them.

Clinical Rotations - The Southwest Virginia AHEC helps locate and pay for housing for students who come to the region for clinical rotations with practicing professionals. Medical students, physician assistant students, and nurse practitioner students are eligible for financial assistance with housing costs. It also pays travel expenses while students are in clinical rotations.

Health Careers Summer Institutes - Each summer, the Southwest Virginia AHEC organizes and conducts summer institutes at Radford University and the University of Virginia's College at Wise for high school students interested in the health professions. Students spend a week on campus, engaging in hands-on learning activities that spur interest in health careers. They attend lectures on anatomy and ethics, shadow professionals at work, visit health science centers, and tour regional healthcare facilities.

Health Careers Fairs - The Southwest Virginia AHEC participates in the annual Rural Health Careers Fair at East Tennessee State University (ETSU). Hundreds of high school students spend the day at ETSU, hearing presentations and attending workshops staffed by professionals from the different health-related colleges. Approximately 50% of the students who attend the fair are from southwest Virginia. The Southwest Virginia AHEC also displays and makes presentations at high school and college career days throughout the region.

Health Fairs and Clinics- By partnering with the Department of Family Medicine at ETSU, the Southwest Virginia AHEC organized health fairs in remote locations within the service area. While attending the fairs, health professions students experienced the healing arts while patients received a range of free or low-cost screenings for chronic and acute diseases. The Southwest Virginia AHEC partnered with a number of agencies to improve access for low-income people to medical, dental, and vision-care through the Remote Area Medical (RAM) clinics held annually in Wise County.

Telemedicine - The Southwest Virginia AHEC is the official point of contact for seven service sites in the Southwest Virginia Alliance for Telemedicine. This alliance represents a collaborative effort between the University of Virginia Health System, the Southwest Virginia AHEC, and healthcare providers throughout its service area. The alliance allows rural hospitals and health centers to be equipped for real-time telecommunications between local physicians and medical specialists at the University of Virginia. The service is available for conferences and education programs as well.

VIP Program - In association with the Alleghany Foundation and Alleghany Regional Hospital, the Southwest Virginia AHEC offers a Youth Volunteers in Partnership Program (VIP) for high school students from three local high schools. Students spend 6 weeks working as hospital volunteers, developing community service projects, learning about college admissions and financial aid, and touring institutions of higher education.

Behavioral Health - The VDH Office of Health Policy and Planning provided funds for the Southwest Virginia AHEC to develop a training program for primary care providers and mental health specialists to improve access to mental health services in Giles County.

Clinical Rotations for PCSOM Students - Norton Community Hospital contracts with the Southwest AHEC to coordinate clinical rotations of medical students from the Pikesville College School of Osteopathic Medicine who are assigned to the hospital for clerkships in their third and fourth years of training. The Southwest Virginia AHEC also develops clinical rotation schedules, recruits local preceptors, administers tests, provides guidance and counseling, and orients students and their families to the local community.

Mini-Grant Program - The Southwest Virginia AHEC administers mini-grants to educational institutions to promote the training of local students in the health professions and to organizations to assist with the professional development of current health practitioners in southwest Virginia. The source of funds for these grants is the federal Model AHEC Program. Grants range from $250 to $2,000.

Medical Spanish -The Southwest Virginia AHEC offers courses in medical Spanish to enable health professionals to communicate more effectively with Spanish-speaking patients. Providers who complete the course are better equipped to handle patient intake and offer basic medical interventions. The course includes a section regarding the importance of cultural differences affect health care.

PALS Curriculum - The Southwest Virginia AHEC has developed a curriculum called Health PALS ("Practitioners Adopt Local Schools") that provides hands-on training in the health sciences and exposure to health careers to children in the fifth grade. Physician Assistant students from the College of Health Sciences in Roanoke teach the curriculum while on rotation in Norton and Saltville.

Southwest Virginia AHEC Accomplishments

From January 2001 to January 2002, the Southwest Virginia AHEC:

- Placed 49 health professions students in clinical rotations in its service area. Of the 49 students, 26 were medical students, 12 were physician assistant students, 5 were nurse practitioner students, 5 were pre-med college students and 1 was a dietetic intern;
- Piloted a medical Spanish course in Smyth County for 9 health care professionals;
- Provided Summer Health Careers Institutes for 39 high school students at UVA's College at Wise and Radford University;
- Administered mini-grants for 12 health professions programs, benefiting an estimated 330 students;
- Held a six-week Youth Volunteers in Partnership Program for 21 high school students at Alleghany Regional Hospital in Low Moor;

- Completed a behavioral health project in Giles County, updating 10 physicians on mental health services available to insured versus uninsured patients and describing how doctors can enhance patient access to inpatient, ambulatory, and emergency care.
- Distributed a directory of available mental health services to 110 primary care physicians in the New River Valley;
- Developed and maintained a new web site for the Southwest Virginia AHEC, www.swvahec.org;
- Organized and facilitated a Rural Health Careers Fair at ETSU for about 200 high school students. Of these 200 students, 103 students from 15 high schools in southwest Virginia attended the event;
- Helped plan and facilitate a rural health fair at the Saltville Medical Center in Smyth County. Center physicians supervised 8 medical students from ETSU over a period of three days, providing free physical exams and health screenings for 275 patients;
- Helped plan and facilitate another rural health fair at the Bland County Medical Clinic in Bastian. Clinical providers supervised 8 medical students from ETSU as they provided medical care and health screenings for 80 patients;
- Helped facilitate the RAM clinic in Wise County. Free medical, dental, vision, and mental health services were provided to 2,072 low- income patients.
- Encountered 830 secondary students on high school career days to promote study in the health professions;
- Facilitated a Centers for Disease Control video conference called "Anthrax: What Every Clinician Should Know". Through teleconferencing, 67 healthcare professionals "attended" the training session;
- Sponsored the Western Virginia Mental Health Conference at Virginia Tech whereby 40 primary care and mental health professionals identified and described mental health issues in western Virginia;
- Interviewed 12 primary care physicians as preceptors and drafted profiles of their practices;
- Researched and developed orientation packets for nine rural communities that often host medical residents for rotations through southwest Virginia GMEC;
- Administered the Youth Tobacco Survey to 1,500 students on behalf of the Virginia Tobacco Settlement Foundation;
- Identified 53 students from the service area who are currently enrolled in medical school in an effort to encourage them to return for clinical rotations;
- Organized four training sessions for medical preceptors through a contract with the Southwest Virginia GMEC. A total of 35 providers attended these sessions on enhanced mentoring skills and revenue maintenance.
- Matched 21 Pikeville College medical students with 25 preceptors for 62 clinical rotations in/near Norton;
- Initiated a count of primary care physicians, physician assistants and nurse practitioners in the eastern part of the service area;
- Served as official point of contact for 7 telemedicine installations at hospitals and health centers thereby enabling 65 patients to consult with UVA specialists; and
- Arranged for physician assistant students to use its PALS curriculum to make 6

presentations on scientific subjects to 118 fifth graders in Norton and Saltville;

Future Activities

The Southwest Virginia AHEC Board of Directors has approved a work plan for the upcoming year. The plan's objectives are to:

- Prepare and recruit local students for enrollment in health careers training programs,
- Support undergraduate and graduate level training for health professions students in community-based clinical settings,
- Support the work of practicing health professionals,
- Participate in partnerships for improved health and disease prevention,
- Participate in on-going assessment of the primary care workforce needs in its service area,
- Generate an annual report to the Virginia General Assembly.

In addition to the aforementioned future plans, the Southwest Virginia AHEC will assist the Virginia AHEC program meet its first goal which is to develop health careers recruitment programs for Virginia's students by preparing and recruiting local students for enrollment in health careers training programs. It proposes a detailed methodology with seven parts that defines how this objective will be accomplished. The methodology proposed is as follows:

- Enroll 20-25 high school students in a Health Careers Summer Institute at Radford University or the University of Virginia's College at Wise. Students will live on campus for one week, engaging in a hands-on curriculum designed to stimulate interest in medicine, nursing, dentistry, pharmacy, and other health professions.
- Recruit and refer promising high school students to summer programs offered by colleges and universities in the region, e.g. governor's schools at the University of Virginia's College at Wise, Mountain Empire Community College, Southwest Virginia Community College, and Virginia Highlands Community College and Eastern Tennessee State University's new summer program for high school students interested in health careers.
- Facilitate the use of lessons from the Practitioners Adopt Local Schools (PALS) curriculum for 5th graders in two middle schools. Physician Assistant students from the College of Health Sciences in Roanoke will teach the lessons.
- Co-sponsor an annual rural health careers fair at East Tennessee State University to be attended by 100 high school juniors and seniors from Southwest Virginia. Students will visit campus and will engage in hands-on activities to learn more about various health professions.
- Sponsor the participation of college students in "A Day at the Medical Center" at the University of Virginia and "Young Women in Medicine" on the Medical College of Virginia campus at Virginia Commonwealth University.
- Make six or more presentations about health career opportunities to students and pre-professional clubs at high schools and colleges in the region.
- Maintain a teaching materials loan library so that anatomical models, videotapes, books,

etc. are available to teachers throughout the region. Loan materials to teachers upon request.

It will evaluate its efforts by entering contact information into databases for students enrolled in the programs so that their educational progress can be tracked from year to year. High school students will be contacted upon graduation to determine whether they have decided to pursue training in the health professions.

The second goal of the Virginia statewide program is to support community-based training of primary health professions students, residents, and other health professions students in Virginia's underserved communities. The Southwest AHEC will support undergraduate and graduate level training for health professions students in community-based clinical settings. One indicator of success will be the placement of 30-40 health professions students in rural rotations in its service area. The evaluation of the success of this objective will be to perform a number of tracking methodologies. It will track the number of students in clinical training programs who are supported by its funds. The Southwest AHEC will track the number of rotations arranged and other services provided for osteopathic medical students at Norton Community Hospital. It will also track the number of students and faculty involved and patients treated in free clinics that it partly sponsors.

Virginia AHEC's third goal is to provide educational and practice support systems for the Commonwealth's primary health care providers. The Southwest AHEC hopes to support that initiative by supporting the work of practicing professionals. Indicators for success are very specific and aggressive. The Southwest AHEC will contract with Migrant Health Outreach Workers to train 20-25 providers in communities with substantial numbers of Hispanic residents. These providers will become proficient in Spanish. Proficiency will be measured by the ability to communicate effectively with patients. Access to high quality, culturally sensitive specialty medical services will be increased for 75 patients of 15 primary care providers who work in isolated rural communities. A total of 20 area preceptors will demonstrate enhanced mentoring skills and sensitivity to local culture. The program will be evaluated by those who attend the medical Spanish courses. The litmus test of success will be an increased demand for the services the program provides.

In addition, through contract with the University of Virginia's Office on Telemedicine, 20-30 rural physicians will access grand rounds or other continuing education through telemedicine equipment during the course of the year. In addition, this same system will be used to increase medical specialty access by 50 patients. Finally, the Southwest AHEC will collaborate with other organizations to execute 2-4 continuing education sessions on topics of current interest to clinicians in the program's service area. These services will be evaluated by continuation of the contract and by those who attend the sessions.

The fourth Virginia AHEC goal is to collaborate with health, education, and human service organizations to achieve the shared goal of improved health and disease prevention for the citizens of the Commonwealth. The Southwest AHEC will participate in partnerships that

will address health and disease prevention in an effort to achieve that goal. Its efforts will be evaluated by tracking member participation in committees and councils and submitting weekly reports to the executive director and in quarterly oral reports to the board of directors.

Another effort by the Southwest AHEC to assist the Virginia AHEC in achieving its fourth goal will be to participate in an on-going assessment of the healthcare workforce needs in its service area. It will accomplish this objective by requesting information from related organizations, using local sources to identify primary care physicians, nurse practitioners, physician assistants, and certified nurse midwives, and by updating the AHEC survey of primary care providers identified to ascertain data elements used by the VDH's Office of Health Policy and Planning when designating geographic areas, populations, or facilities as health professional shortage areas. Its indicator success will be publishing data for the benefit of the public for use in planning and developing health care delivery systems through the mountain region.

Southwest AHEC Assessment

The Southwest AHEC is to be commended for its pro-active efforts to communicate its activities not only within its service area, but to other interested parties such as the Virginia legislature. This activity represents a Virginia AHEC program best practice. Other community AHECs should be strongly encouraged to adopt the strategies utilized by the Southwest AHEC when attempting to market their services.

As the preceding pages illustrate, the Southwest AHEC has large number of programs designed to support the many AHEC goals. In the past year, its programs have been attended by an impressive number of people. This high attendance is noteworthy as the Southwest AHEC serves a rural part of the state. The programs also reflect a considerable amount of community collaboration- thereby satisfying the fourth Virginia AHEC program goal.

The methodology that it has designed to help it achieve it goals is likewise impressive. The level of detail that is described regarding how it hopes to achieve its goals is consistent with the principles of good planning. The detail is indicative of a thoughtful planning process. This community AHEC is likely to continue to achieve success in its many programs because they are well planned.

Another "best practice" utilized by the Southwest AHEC is its practice of recording participants in events. While most community AHECs can list the programs that they have conducted in the past year, few do so with the specificity of the Southwest AHEC. Tracking data concerning participation in their programs will allow the AHECs to identify trends, thereby improving the data upon which good planning decisions are made.

Another sound planning principle demonstrated is the use of specific target numbers as helpful indicators of success. While a number of the AHECs list as indicators of success activities that may be attained with little to no effort, the Southwest AHEC is careful to identify specific measures to quantify the relative success or lack thereof of a proposed activity. This

level of specificity is looked upon favorably by the HRSA when awarding funds to grantees. This practice is likely to position the Southwest AHEC well when applying for a competitive grant. The final indicator of good planning principles worthy of mention is that it has developed a work plan for the coming year.

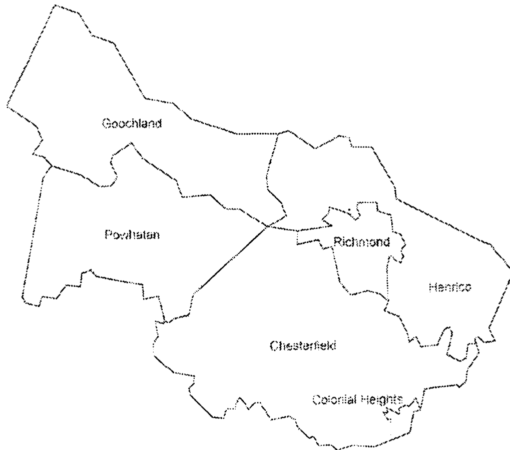
The substance of the Southwest Virginia AHEC programs is worthy of mention. Its activities demonstrate strong partnerships with several entities. The activities are appropriate for its rural service area, which is rural. For example, it has successfully utilized telemedicine conferencing, which is a technology that has shown great promise in rural areas.

The Southwest Virginia AHEC program has many activities that support the four Virginia AHEC program goals and it appears its many programs are carried out throughout its geographically vast service areas. The Southwest Virginia AHEC has personnel dedicated to specific parts of its service areas. This allows the program a greater opportunity for success in addressing community needs. It also allows for the coordination of a number of activities with area colleges such as Radford University, University of Virginia, East Tennessee State University as well as distant colleges such as the Virginia Commonwealth University.

The Southwest Virginia AHEC serves an area with great socio-economic needs. Its average of residents with incomes under the federal poverty level is almost double that of the state. The positive correlation between low- income status and poor health status is well documented. Therefore, the need for health care services and health care providers is likely to be great in its service area. The Southwest AHEC appears to have responded to this need with its many programs that support the community-based training of primary health professional students. The Southwest Virginia AHEC should be encouraged to continue these programs because health student exposure to its service area is likely to be an important method by which to recruit health care professionals. Unfortunately, these programs are described well in the Southwest Virginia AHEC's brochure but that specificity did not transfer to the HRSA grant application.

Like the Eastern Virginia AHEC, the Southwest AHEC has many strengths that could be useful to other community AHECs. In addition to marketing expertise, it practices good planning, and has a wide range of health activities designed to improve the quality of healthcare training. It should be encouraged to share its expertise with other community AHECs.

Greater Richmond AHEC (GRAHEC)



Incorporated in 1993, the Greater Richmond AHEC (GRAHEC) serves the cities of Richmond and Colonial Heights, the largely suburban counties of Chesterfield and Henrico, as well as the rural counties of Goochland and Powhatan. Its activities are directed by an executive director who is assisted by a business manager. The GRAHEC utilizes the services of several consultants to remain in compliance with fiscal/accounting, legal, and programmatic standards.

Greater Richmond Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Chesterfield	253,365	5.6	$30,288	2.0	4.9	9,215	74.1
Goochland	17,651	12.4	$32,265	1.7	9.2	720	83.3
Henrico	244,652	12.2	$30,761	1.9	6.4	11,691	71.0
Powhatan	22,409	8.2	$20,942	1.6	7.7	648	63.7
Richmond	189,700	17.5	$29,439	3.4	20.7	35,932	59.9
Colonial Hts.	16,235	16.9	$23,931	2.4	7.1	643	76.1
Greater Rich	744,012	12.1	$27,937	2.2	9.3	7.9%	71.4
State	6,872,912	11.2	$28,063	2.8	10.5	7.1%	73.0

Data source: 2000 Census

The GRAHEC's Articles of Incorporation give it authority to conduct business outside of its market area and it exercises that authority. Many of its activities occur outside the geographic boundaries of the market area. The GRAHEC Bylaws state its mission is to "improve the distribution, supply, quality, utilization, and efficiency of health personnel in the health services delivery system, by encouraging the regionalization and decentralization of education activities and programs of health professions schools within the Commonwealth of Virginia. Emphasis, as appropriate, will be placed upon conducting such activities in areas defined as medically underserved areas ("MUAs") or health professional shortage areas ("HPSAs"). To the extent that resources are available, the GRAHEC will apply such resources so as to achieve the[se] specific

goals..." The GRAHEC goals reflect the goals of the other AHECS. However, they are prioritized in a different manner. For example, its goal to establish programs designed to increase the number of minorities and disadvantaged students in the health professions is ranked second instead of fifth.

The GRAHEC's service area encompasses 1,277 square miles and serves approximately 744,012 Virginians, which constitutes 11% of the Virginia population. As noted earlier, the GRAHEC has the authority to conduct business outside of its service area.

Socio-economic indicators

The socio-economic indicators for the service area served by the GRAHEC reflects the statewide data. The percentage of students planning to attend college, Medicaid recipients, unemployment rate, percentage of residents 65 and over, and percentage of residents with incomes below 100% of the FPL approximate the statewide averages.

The non-white percentage of the population is higher (33.1%) than the state average of 28%, and there is a growing Limited English Proficient (LEP) population, residing primarily in the suburban counties. There is a substantial income disparity among localities in this service area. For example, in Chesterfield County only 4.9% of the population lives at or below the federal poverty level while in Richmond that percentage is 20.7%.

Greater Richmond Area Health Education Center Health Shortage Designation

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Chesterfield					X		
Goochland		X			X		
Henrico							
Powhatan					X		
Richmond		X				X	
Colonial Hts.							

The top five leading causes of death in Virginia are heart disease, cancer, unintentional injury, cerebrovascular disease and coronary obstructive pulmonary disease. In general, the rates for these leading causes of death in the Greater Richmond AHEC's service area are comparable to the state rates. However, Goochland County and the City of Richmond have unintentional injury death rates that are more than double the state rate of 27 per thousand residents. In Goochland the rate is 64.2 and in Richmond it is 69. Because the majority of the Greater Richmond AHEC's programs are educational, it may want to incorporate this information into its educational programs.

Relatively few geographic areas in the GRAHEC have been designated as having a healthcare shortage. The GRAHEC service area and the Northern Virginia service area described later are the only two community AHECs that have none of their counties designated as a entire county HPSA. Two localities, Goochland and Richmond, have no health shortage designations. Because its service area does not have traditional barriers to access, its programs should reflect the unique needs of its service area in terms of health care accesss.

Present Activities

The initial programmatic efforts of the GRAHEC focused on "traditional" AHEC activities with less than stellar results. Efforts to provide clinical training for medical and other health professions students proved challenging for a number of reasons, but mainly because the Medical College of Virginia had developed an extensive network of clinical practice sites for its students. The GRAHEC efforts were largely duplicative of existing programs.

In response, the staff of the GRAHEC and its Board of Directors decided to concentrate their efforts on health career promotion activities. The Board and staff identified a significant number of minority students interested in health careers. However, these same students lacked the academic background necessary for success. Therefore, the GRAHEC leadership decided to concentrate their health career promotion activities on high school minority students. In researching the best way to carry out this program, they learned that concentrating their efforts on high school students would not yield the greatest results. A conference sponsored by the Association of American Medical Colleges (AAMC) explored the best way to introduce minorities to health careers. The conference was entitled, "Project 3000 x 2000" and its goal was to explore ways to increase the number of minority medical school applicants to 3,000 by the year 2000. One of its notable findings was that the best way to increase the number of minority applicants to medical and other health professions programs was to provide educational opportunities in science, mathematics, and technology (SMT) for all grade levels, all the way down to pre-kindergarten. In essence, the prior GRAHEC approach of focusing its efforts on high school students would not yield the best results of its limited financial resources.

Information gathered by the GRAHEC concerning the student population revealed its service area experienced many academic challenges. Between 1998-2001, the Richmond Public Schools (RPS) served over 29,000 students annually. Ninety percent of the students served were African American. The City of Richmond has the highest concentration of youth living in poverty in the Commonwealth. Approximately 13% of students aged 16-19 are not enrolled in school.

The GRAHEC developed a series of programs that were designed to meet the many academic needs experienced by residents of its service area. Its health careers promotions program began as a summer enrichment program that became the SMT Academy- an integral component of the after-school and summer school program in local school districts. It is now the Science, Mathematics, Engineering, Technology, and Healthcare (SMETH) Academy, an academically-rigorous college preparatory program for middle and high school students from the

GRAHEC service area and beyond. Programs are offered in collaboration with public and private school systems, institutions of higher education, and public and private agencies and organizations.

Each SMETH Academy course consists of three key components:

SMT Instruction

Course curriculum focuses on core topics in physics, geoscience, biology, and chemistry that 1) correlates to the Virginia Standards of Learning (SOLs) in science, mathematics, and technology; 2) relies upon "inquiry-based, hands-on" instructional activities; and 3) enhances critical-thinking and scientific research skills.

College Preparation

Comprehensive college preparation activities include 1) PSAT/SAT as well as other test-taking and study skills development; 2) Academic and financial aid counseling with high school guidance counselors and admissions and financial aid counselors for students and parents; and 3) Residential and non-residential experiences at numerous universities across the Commonwealth of Virginia, including but not limited to: The University of Richmond, Virginia Commonwealth University. Eastern Virginia Medical School, Virginia Polytechnic Institute and State University, James Madison University, Old Dominion University, Christopher Newport University, and Hampton University.

Career Development

Career development components include 1) SMETH career development activities correlated to the course curriculum; 2) Presentations by SMETH professionals who share their experiences with students and parents; and 3) Interactive experiences at SMETH research sites and industries/businesses within the public, private, and non-profit sectors.

The GRAHEC's focus on the above programs allows it to concentrate its efforts where they are most needed. Each of its programs address, in a systemic fashion, the challenge of increasing the number of qualified students, particularly minority and disadvantaged students, who pursue and successfully complete the health professions programs. Its programs are undertaken in collaboration with public and private school systems, institutions of higher education, and public and private agencies and organizations. This collaboration allows the GRAHEC to combine its limited resources with those of its collaborators in order to make a significant and positive impact in the academic and career pursuits of students throughout the region.

The GRAHEC has great visibility in the national AHEC community. Each year HRSA holds a symposium where the most innovative and successful AHEC projects from around the nation are highlighted. The Executive Director is a frequent speaker at these symposia. For example, last year her program "Kids Into HealthCare" was featured. This program was heralded by HRSA as a great example of health careers promotion project.

The GRAHEC Executive Director is also recognized by HRSA for her skills in program evaluation. She was one of the few AHEC directors selected to participate in a assessment of HRSA's new evaluative program for the AHEC program. Her selection was particularly noteworthy because Virginia was not selected as a state to participate in this endeavor.

A snapshot of the GRAHEC's activities for the past year is listed below:

- Provided professional development in SMT for teachers, parents and guardians.
- Provided medical students with teaching experience at SMT activities.
- Continued ongoing outreach and collaboration with community partners such as J. Sargent Reynolds Community College, Virginia Union University, Virginia State University, Fan Free Clinic, Cross-Over Health Center, and St. Joseph's Villa.
- Supported nurse practitioner and dental preceptors for students to complete their rotations.
- Began developing a plan exploring the local needs for establishing Health Care Interpreter Service, Training and Consultation.

Future Activities

The statewide Virginia AHEC office lists the development of health careers recruitment programs for Virginia's students, especially under-represented and disadvantaged youth as the first goal it hopes to achieve this year. The GRAHEC offers one objective to support this goal. The GRAHEC will use three methods to achieve this objective. First, it will distribute 6,000 (2,000 annually) health careers manuals to area students, teachers, parents, youth and church organizations, community colleges, libraries and hospitals. Success will be evaluated by the number of manuals distributed. Another method offered by the GRAHEC to support the objective of increasing awareness of health careers among students from diverse populations is to support the Medical Explorer Posts at several area hospitals. This effort will be evaluated by the matriculation of participants in the Medical Explorer into the SMETH Academy. The third and fourth methods for objective fulfillment are related. First, the GRAHEC will sponsor Hands on Science, Mathematics and Technology (SMT) for 192 students. It will also sponsor the previously described Science, Mathematics, Engineering, Technology and Healthcare (SMETH) Academy annually.

The GRAHEC proposes an aggressive evaluation process for the SMETH Academy project. It will consist of several key components including, but not limited to: participant evaluation by students, instructors and parents; course evaluations including curriculum development, implementation and revision as well as pre- and post-test evaluations; high school graduation rates; college enrollment rates; frequency of declaring majors in bioscience and biomedical areas; frequency of matriculation into graduate bioscience programs; and frequency of matriculation into health professions programs.

The second statewide AHEC program goal is the support of community-based training of primary care health professions students and other health profession students in Virginia's

underserved areas. The GRAHEC will support this goal by supporting community-based training of primary health profession students, residents, and other health profession students in Virginia's underserved communities. Success will be determined by the number of student rotation completions. Another way the GRAHEC hopes to help the statewide program meet this goal is by providing community-based experiences for health professions students. Evaluations completed by the Course Director and number of students completing the summer experience will serve as the overall measures of program performance.

The third goal the Virginia AHEC program identified for itself is to provide educational and practice support systems for the Commonwealth's primary care providers. The GRAHEC will support that goal by evaluating its capacity to provide continuing education in cultural competence. The evaluation will consist of tracking the results of strategic planning and needs assessment and, if necessary, tracking participants in cultural competency workshops and training programs.

The Greater Richmond AHEC offers no objectives in support of the fourth Virginia AHEC Program goal, which is to collaborate with health, education, and human service organizations to facilitate and promote improved health education and disease prevention among the citizens of the Commonwealth.

In addition to the above activities, the GRAHEC intends to collaborate with the Northern Virginia AHEC to conduct a needs assessment to determine whether there is a challenge in health care access by persons for whom English is a second language. If such a need is demonstrated, the GRAHEC plans to investigate developing an interpreter service program.

Greater Richmond AHEC Assessment

The GRAHEC offers the best example of the type of AHEC that HRSA was advocating when it designed its Request for Proposals for second-generation AHECs. It is an AHEC that serves an inner-city population, although it also serves suburban and rural counties. It has struggled to develop programmatic initiatives that are true to both the purposes of the state and national AHEC program and to the constituency it serves. This goal has not been an easy one because the traditional AHEC program generally occurs in rural, medically underserved settings where clinical training opportunities for health professions students, particularly medical students, are not generally available. The AHECs can then fill that gap. However, the GRAHEC's service area is primarily urban and the clinical training opportunities are largely fulfilled by the Medical College of Virginia/Virginia Commonwealth University. Therefore, the predominant program offered by the GRAHEC is health careers promotion.

The GRAHEC should be commended for its ability to acknowledge that its needs regarding health care access are unique yet important. The concentration of its resources into health careers promotion is appropriate for its service area. It is also successful in leveraging existing funds because others in its service area recognize the need for health careers promotion. However, when comparing the GRAHEC's activities to those of other community AHECs the

GRAHEC appears to fall short because it is concentrating its resources into programs that satisfy the greatest health care access void found in its service area, and not on all four traditional AHEC program activities.

However the area of health careers promotion is an important one for Virginia. Its importance was noted in an observation made by the Joint Commission on Health Care in its "Study of Health Workforce Initiatives Pursuant to SJR 308 of 1995." In that document the Joint Commission states, "One of the most unique and potentially important functions of the local AHECs is their work in developing health career promotions programs in schools."

Experience in the area of health careers promotion is important if the Commonwealth is to address its challenges with health care workforce adequacy. The projected shortages both within the state and nationally for nurses, pharmacists, dentists and other health care providers render the GRAHEC's activities to have greater significance. This is an area of expertise few AHEC partners possess.

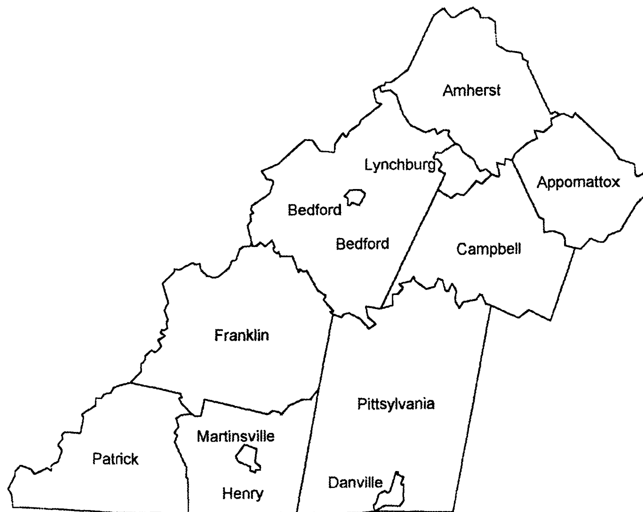
The GRAHEC's programs in health careers promotion for minority students is to be noted. As described in an earlier section, the AHEC grant proposal that was funded promised special emphasis would be placed on minority student recruitment into health science training programs. The GRAHEC fulfills a disproportionate share of this promise on behalf of the Virginia AHEC program.

As is noted above, the Richmond area is experiencing an increase in the number of Spanish-speaking immigrants. The Greater Richmond AHEC should be encouraged to continue with its efforts to evaluate its capacity to provide continuing education in cultural competency. Ideally, it should continue its dialogue with the Northern Virginia AHEC as this collaboration is likely to not only result in a greater awareness of cultural competency issues, but it is likely to serve as a model for collaboration within Virginia's AHEC community. Few Virginia community AHECs listed such collaboration in the HRSA grant application.

Like other community AHECs, the Greater Richmond AHEC did not support the fourth AHEC goal, which emphasizes community collaboration. As noted earlier, this goal is a very important one. Among other benefits, it offers an opportunity for leveraging existing funds. This activity will likely be of greater importance in the coming years.

In summary, the Greater Richmond AHEC offers programs uniquely tailored to its service area. Its programs are nationally recognized and will likely be emulated in other states. The Greater Richmond AHEC will be encouraged to continue its evaluative process for it represents an important way for it to document its successes. Finally, the Greater Richmond AHEC leadership and the leadership of the statewide AHEC office should collaborate together to ensure the Greater Richmond AHEC's program activities are described in greater detail in the AHEC grant application. While many people within HRSA leadership are familiar with the Greater Richmond AHEC and its many accomplishments, those evaluating the AHEC Model grant application may not share that familiarity.

South Central AHEC



History and Purpose

The South Central AHEC was incorporated in February 1994 and began providing services in October 1994. It serves eight counties and four cities. The counties include Amherst, Appomatox, Bedford, Campbell, Franklin, Henry, Patrick, and Pittsylvania and the cities include Bedford, Danville, Lynchburg, and Martinsville.

The South Central AHEC currently has three full-time staff. Leading its activities is an executive director, who is assisted by a deputy director and training coordinator. The executive director implements the strategic goals and objectives of the South Central AHEC and with the board chair, enables its board to fulfill its governance function. He also provides direction and leadership toward the achievement of the organization's philosophy, mission, strategy, and annual goals and objectives. Major position functions include board administration and support, oversite of program service and delivery, financial management, human resource management and community and public relations.

The deputy director works with the executive director to oversee the work of the South Central AHEC. She is responsible for ensuring that programs are consistent and accountable to the mission and goals of the South Central AHEC. The deputy director also assists the executive director in ensuring the administration and financial health of the organization. Major responsibilities include program development, strategic planning, operational procedures, annual goals and objectives identification, strategic planning, operational procedures, budget development and evaluation, managing and supervising programs including administration, personnel and funding, and providing support for other organizational functions as needed.

The training coordinator is the newest of the three positions. She is responsible for providing practice support and community education programs, and working with the executive director and deputy director to meet South Central AHEC mission and goals. Some of her major responsibilities include developing and implementing in-services for certified nurse assistants, coordinating medically oriented community service and continuing education programs, maintaining the patient education library, conducting monthly blood pressure screenings, participating in career fairs and programs as requested by the deputy director, and participating in other programs as requested by the executive director.

South Central Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Amherst	30,351	13.6	$17,866	1.8	13.8	2,438	55.4
Appomattox	13,317	14.1	$19,093	3.9	15.3	1,456	63.7
Bedford	57,537	11.4	$24,279	2.1	9.9	3,572	69.7
Campbell	50,345	13.1	$22,308	2.2	13.6	4,427	80.0
Franklin	45,220	14.0	$19,787	4.1	14.2	3,196	61.8
Henry	55,634	14.1	$20,483	6.4	14.1	4,843	67.4
Patrick	18,529	18.4	$17,945	5.4	19.0	2,213	59.6
Pittsylvania	56,760	13.6	$19,738	5.8	17.4	5,192	68.8
Bedford Cty.	6,676	24.5	$24,279	2.2	19.9	3,572	69.7
Danville	50,795	20.3	$19,738	6.6	22.5	8,068	77.4
Lynchburg	63,926	19.3	$22,308	2.1	18.4	6,967	71.1
Martinsville	14,996	23.2	$20,483	9.8	18.2	2,054	69.6
South Central	464,086	16.6	$20,692	5.9	16.3	10.4 %	67.9
State	6,872,912	11.2	$28,063	2.8	10.5	7.1 %	73.0

Data source: 2000 Census

Socio-economic and health status indicators

Generally, the socio-economic data concerning the South Central AHEC's service area closely reflect those of the state with the exception of its unemployment rate, which is slightly more than double the statewide average. Its income per capita is slightly lower than the statewide average. The percentage of persons over the age of 65 is also somewhat higher than the statewide average with the Cities of Martinsville and Bedford having percentages that are more than double the Commonwealth's average.

The top five leading causes of death in Virginia are heart disease, cancer, unintentional injury, cerebrovascular disease, and coronary obstructive pulmonary disease. The greatest challenge the South Central AHEC service faces with regard to these leading causes of death is its unintentional injury rate. The rate in Virginia is 27 per thousand. This rate in Franklin is 64.5, in Henry it is 63.8, in Patrick it is 65, in Bedford City it is 62.4, and in Martinsville it is 53.9- all of these rates are double the state rate. Bedford City also has a death rate that is double the state

rate (27 per thousand) due to cerebrovascular disease (71.9. per thousand.) Finally, the state death rate due to coronary obstructive pulmonary disease is 20.7 per thousand while the rate in Appomattox is 40.9 per thousand.

South Central Area Health Education Center Health Shortage Designations

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Amherst					X		
Appomattox	X		X		X		
Bedford		X	X				
Campbell		X					
Franklin		X		X	X		X
Henry	X			X			X
Patrick	X		X	X	X		X
Pittsylvania		X	X	X	X		X
Bedford Cty.			X				
Danville		X					
Lynchburg		X	X			X	
Martinsville		X					X

The South Central AHEC is the only community AHEC to have all of its independent cities or counties in its service area designated as having a health shortage of some kind. Most have multiple designations. Ten areas are designated as either a whole or partial area primary care HPSA. Six areas have dental care HPSA designations. Four areas have mental health HPSA designations. Five areas have VMUA designations and five have MUA designations. The South Central AHEC service area therefore provides fertile ground for programs that support the first Virginia AHEC program goal to "develop health careers recruitment programs for Virginia's students, especially under-represented and disadvantaged youth" and the second goal to "support community-based training of primary health care professions students in Virginia's underserved communities."

The South Central AHEC's service area faces a number of health challenges. According to the HRSA's Community Health Status Reports 2000, the localities served by the South Central AHEC have significant unfavorable health indicators. For example, it has a high low birth weight, high infant mortality rate, high number of motor vehicle injuries, and a high incidence of stroke and suicide. In addition, some areas have the highest incidence in the United States for sexually transmitted diseases.

A snapshot of South Central AHEC activities in the past year include:

- Distributed more than 1,000 Virginia Health Careers manuals. In addition, several middle schools used the publication as a textbook for career exploration classes.

- Participated in Career Fairs held at middle and high schools
- Continued the Health Careers Exploration program. This program provides a week-long inspection into various health careers and opportunities for students to experience careers of their choosing as well as anatomy, chemistry, physics, team building and college preparation.
- Established a program called STAT! Ref Electronic that enables practitioners to access on-line medical resources and information.
- Sponsored continuing education programs twice a year.

Future Activities

The first Virginia AHEC program goal is to develop health careers recruitment programs for Virginia's students, especially underrepresented and disadvantaged students. The South Central AHEC will increase awareness of health careers among students through sharing of resources and materials about health careers in support of that goal. This will be accomplished by participating in career fairs, presentations, and exploration classes, incorporating the Kids into Health Careers program. The first contact South Central AHEC has with many students is through career fairs, presentations and exploration classes.

The Health Careers Exploration program is one example of a health exploration class identified above. It is perhaps the best known of the South Central AHEC programs. This program has been offered for six years. The week-long program includes three mornings of job shadowing health careers of the student's choosing as well as team-building activities, college level anatomy, chemistry, biology and physics. Rising high school juniors and seniors are eligible to participate. Students are selected by a competitive application that includes an essay about the student's interest in the health field, two letters of recommendation, and a personal interview. A maximum of 16 students are accepted into each program to allow for individual instruction.

The next step in this effort will include continuing to build and market the Health Careers Library to students and guidance counselors. The South Central AHEC maintains an extensive library of health information in print and in videos. It has over 100 resources available to students, guidance counselors, and other individuals interested in health careers.

Another effort will be to maintain routine contact with guidance counselors. Each year it contacts schools to update its list of counselors so that it can send information to them individually. The process of evaluation will include the number of contacts and the number of students applying to summer programs.

The second way it hopes to foster the health careers recruitment goal is to continue to distribute the Virginia Health Careers Manuals. Three hundred and seventy nine manuals have been distributed by the South Central AHEC since January 2002. The manuals are used in Health Occupations classes and as a textbook in Career Exploration classes. The South Central AHEC believes that a print resource is needed despite student access to computers because local Internet

access is still not available in some remote rural areas. To assure the project is worthy of continuation, the South Central AHEC will track the number of manuals and CDs distributed and solicit feedback from users.

A final effort to support this first goal will be to provide an opportunity for middle school students to explore health careers. Camp AHEC is a program open to sixth through eighth grade students. These students will be provided with hands-on science activities coordinated with Virginia's Standards of Learning. Students will be taught to recognize the relationship between science and health careers. They will also be encouraged to apply to the Health Careers Exploration Program. Two weeklong day programs are sponsored, one at Lynchburg College for students in Amherst, Appomattox, Bedford and Campbell counties, and the Cities of Bedford and Lynchburg. Last summer 18 students participated in the program. The second weeklong day program was offered at Patrick Henry Community College. Students from Franklin, Henry, Patrick, and Pittsylvania counties and the Cities of Danville and Martinsville attended that program. Eleven students participated. Both programs offer dissection, chemistry, biology, team-building, first aid and Introduction to Health Careers classes. Participants are targeted for the Health Careers Exploration Program. Through the use of student evaluation forms, the South Central AHEC will determine whether the program is effective. It will also track the number of students applying to the Health Careers Exploration Program. An indicator of success will be the number of students participating in the two Camp AHEC programs, as compared to the target number of 32.

The second South Central AHEC program that supports the health careers recruitment goal is the Dino Contis Memorial Scholarship. High school seniors as well as other students enrolled in a health professions program are eligible to compete for one of the three $500 scholarship awards. The scholarship fund is created from profits from fundraising events. It is named to honor the memory of Dino Contis, a founder of the South Central AHEC program.

The second Virginia AHEC program goal is to support community based training of primary care health profession students, residents and other health profession students in Virginia's underserved areas. The South Central AHEC will develop and distribute a Resource Handbook to potential practitioners in support of this goal. The Resource Handbook will include the south central area of the state. Its availability will be promoted on the recruitment web site www.ppova.org and by notices to health profession schools. The utility of this effort will be determined by the number of handbooks distributed, the types of responses to the evaluation questionnaire, and by feedback from health profession schools. The South Central AHEC also assists health professions students locate housing when assigned clinical rotations in its service area.

The Virginia AHEC program's third goal is to provide educational and practice support systems for the Commonwealth's primary care providers. The South Central AHEC has two strategies that it believes will help the program achieve that goal. It plans to provide access to STAT!Ref Electronic Medical Library to health care providers. STAT!Ref is an on-line service with 35 journals and other publications that can be accessed by health care providers for current

medical information. Evaluation efforts will consist of feedback from users and tracking the number of people logging onto the system.

The second approach to supporting the third goal will be to provide continuing education programs for Certified Nursing Assistants (CNAs) to improve the quality of care delivered. As a result of a survey of nursing homes, assisted living facilities, adult day care facilities, and long term care facilities regarding educational needs, the South Central AHEC has developed an in-service training program for CNAs using materials from Knowing More, a company specializing in in-services for CNAs. The program will be evaluated by tracking the number of programs conducted, and reviewing evaluations from continuing education programs as well as facilities.

Another program the South Central AHEC utilizes to provide educational and practice support systems for the Commonwealth's primary care providers is the School Nurse Resource Program. It offers school nurses the opportunity to apply for funding for resources for their schools. The focus of the 2002 program was on educational resources to improve the health of students. The maximum funding was $500 per school. Sixty-seven applications were received and a review committee approved funding for twenty-five. The number of applicants supports the contention that this is a popular program.

The fourth Virginia AHEC program goal is to collaborate with health, education and human service organizations to achieve the shared goals of improved health and disease prevention for the citizens of the Commonwealth. The South Central AHEC will support that initiative by providing community education programs. An indicator of success will be the provision of six programs per year for the community on a variety of wellness and disease prevention topics based upon community health indicators. Evaluation methods of this effort will include analyzing feedback from participants and tracking behavior changes in attendees.

Another effort to support this fourth goal by the South Central AHEC will include the offering of fibromyalgia self-help programs to improve quality of life for individuals with the disorder. It plans to offer seven-week self-help programs for fibromyalgia using a team trained by the Arthritis Foundation. The number of programs conducted each year and evaluations by participants noting changes in life quality will serve as evaluative indicators of success.

The South Central AHEC has two other programs that support the goal of human service collaboration. Each month the South Central AHEC offers a day of free blood pressure screenings at its office. The dates are scheduled to coincide with the receipt of Social Security checks because the South Central AHEC's office is located across the street from the bank where many elderly cash their social security checks.

It also provides blood pressure checks at LifeLine Screening events. LifeLine Screening is the nation's leading vascular screening service. The organization is dedicated to providing the highest quality imaging technology at an affordable rate to the general public. LifeLine Screening's goal is to make people aware of an undetected health problem and to encourage them to seek follow-up care with their physician. LifeLine Screening organizes the screening

programs at locations around the state. The South Central AHEC has partnered with LifeLine to sponsor the events that include abdominal aortic aneurysm screening, peripheral arterial disease screening, carotid artery/stroke screening and osteoporosis screening. The South Central AHEC provides patient education and blood pressure checks to individuals participating in the screenings.

One program that was omitted from the statewide AHEC federal grant application is the CPR and First Aid Training Classes offered by the South Central AHEC. A total of 110 individuals have participated in CPR training and 96 individuals have participated in First Aid Training since March 2002.

Assessment of the South Central AHEC

The South Central AHEC offers a number of programs that will assist Virginia in meeting its program goals. Unlike a few other community AHECs, it proposes objectives for all four goals. The programs generally appeared to be supportive of the goal, and although the detail provided about each program in the grant application could have been greater, specific numerical targets as indicators of success were identified.

Its activity regarding the second AHEC goal could have been more substantial in the federal AHEC grant application. This goal is to support community-based training of primary health care professions students, residents, and other health professions students in Virginia's underserved areas. The objective offered by the South Central AHEC is to develop and distribute a Resource Handbook to potential practitioners. While this effort represents a noteworthy undertaking, the breadth of the goal lends itself to an unlimited number of ways to accomplish the goal. Other community AHECs have either offered a number of objectives for this goal, or provided a single, detailed objective. The South Central AHEC should be encouraged to collaborate with other community AHECs to identify other potential objectives. The mediocre description of objectives in support of this goal in the grant application is particularly distressing because, as described earlier, the South Central AHEC offers assistance in locating housing for students assigned to clinical rotations in the area. At the very least, this assistance should have been identified and described in greater detail. Because the AHEC federal grant is a competitive one that is only applied for every three years, the failure to substantiate goals by the Virginia AHEC program may result in a decreased opportunity to achieve maximum federal support.

The AHEC federal grant application did not contain a description of the School Nurse Resource program described above. The number of applications received is an indicator that this is a popular program in the South Central service area. Its omission, and every omission, presents as a missed opportunity for the entire statewide AHEC program. It indicates a lack of communication between AHEC parties. If these programs were being planned by the South Central AHEC at the time the federal AHEC grant was submitted, they should have been identified.

Finally, one of the objectives presented for the fourth goal does not appear to be

particularly well suited to the South Central service area. The fourth goal is to collaborate with health, education and human service organizations to achieve the shared goals of improved health and disease prevention. As previously discussed, this service area has a number of public health challenges, such as the highest rates in the country for certain sexually transmitted diseases. The second objective, which offers fibromyalgia self-help programs present in the grant application as either inappropriate for the service area or not well documented.

In summary, the South Central AHEC offers many programs that appear to be well received within its service area. It appears to have a greater number of continuing education programs than other community AHECs. This area represents a "best practice" for the South Central AHEC. It should be encouraged to share its knowledge in this area with the other community AHECs. This area of expertise is particularly important in light of the federal peer-review document that lists the number of continuing education programs of the Virginia AHEC program as an area in need of improvement.

Rappahannock AHEC (RAHEC)

Three months after the South Central AHEC opened its doors in July of 1993, the RAHEC began serving another part of the state. Like the South Central AHEC, it is staffed by two people and a third one is expected to be hired within a year. The Executive Director works with the RAHEC board to develop a comprehensive approach to educational and community development programs that strive to improve the citizenry's access to primary care. The Director negotiates contracts with appropriate organizations and individuals for support of AHEC-sponsored activities in the region.

The Executive Assistant assists the Executive Director in conducting all activities, communications, and meetings involving the planning and operation of the AHEC program and board activities of the RAHEC. She has significant bookkeeping activities in conjunction with the accountant and auditor. She coordinates student schedules with community preceptors, arranges housing sites and collects data forms from students.

The Health Careers Assistant will be responsible for providing primary staff support for the RAHEC Speaker's Bureau, a group of approximately 25 volunteers offering "An Insider's Look at Health Careers" to schools and adult organizations throughout the service area. He will also assist the regional Partnership Promoting Health Careers (PPHC) coalition, distribute the Virginia Health Careers Manual and RAHEC guidance materials, and participate in career fairs and similar events. The position will be part-time.

Rappanhannock Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Caroline	22,075	11.8	$19,825	3.3	16.5	2,027	52.9
Charles City	7,240	11.9	$18,604	2.8	18.2	510	42.9
Essex	9,121	16.3	$20,388	4.4	13.6	1,194	68.3
Gloucester	35,463	10.9	$21,261	2.3	11.3	2,082	65.2
Hanover	85,410	12.7	$27,007	1.5	6.6	2,149	80.6
King George	17,681	10.1	$25,166	1.9	8.3	1,009	61.8
King & Queen	6,540	15.8	$20,034	3.0	15.0	686	54.4
King William	13,048	11.7	$23,437	2.4	11.4	655	51.0
Lancaster	11,349	28.0	$27,133	9.3	12.9	1,198	70.3
Mathews	9,255	20.6	$25,507	2.2	13.2	592	75.6
Middlesex	9,771	22.6	$23,255	2.2	12.5	778	72.8
New Kent	13,218	10.1	$23,705	2.0	6.9	429	76.7
Northumberland	11,668	26.1	$22,105	7.5	13.0	971	66.7
Richmond	8,745	16.9	$16,258	4.4	19.7	786	78.3
Spotsylvania	87,361	7.3	$26,555	1.6	7.0	3,385	67.0
Stafford	93,160	5.4	$23,031	1.6	7.2	2,886	71.0
Westmoreland	16,259	18.7	$20,313	5.1	16.2	1,733	43.3
Fredericksburg	18,826	17.6	$26,555	2.5	12.1	1,912	76.6
Rappahannock AHEC	498,625	15.3	$22,786	3.1	13.1	5.0%	65.3
State	6,872,912	11.2	$28,063	2.8	10.5	7.1%	73.0

Data source: 2000 Census

The 17 counties served by the RAHEC include Essex, Gloucester, King and Queen, King William, Lancaster, Mathews, Middlesex, Northumberland, Richmond, Westmoreland, Caroline,

Fredericksburg, King George, Spotsylvania, Stafford, Charles City, Hanover, and New Kent. The RAHEC serves one city- the City of Fredericksburg. The service area geographically dissimilar- half of it is rural, while the other half is suburban. The service area includes approximately 7% of Virginia's population. Six counties have fewer than 40 persons per square mile and only four counties and the City of Fredericksburg have more than 100 persons per square mile.

Socio-economic and health status indicators

The service area's per-capita income ($22,786) is slightly lower than the state average of $28,063. No county nor independent city exceeded the statewide average. While its percentage of residents below the poverty level (13.1%) is slightly higher than the statewide average of 10.5%, its percentage of residents that are Medicaid recipients (5%) is slightly lower than the statewide average of 7.1%. Although the service area's percentage of population over age 65 (15.3%) is only slightly higher than the statewide average of 11.2%, two counties, Northumberland and Lancaster have percentages that are more than double the statewide percentage with 26.1% and 28% respectively. These counties far exceed the statewide unemployment rate of 2.8%. According to the AHEC grant application, about 14% of the region's population is uninsured.

The age-adjusted death rates for diabetes, cancer, heart disease, cancer, stroke, kidney disease, and unintentional injuries are generally higher in the RAHEC rural counties than the Virginia rate. These counties also are far below state and national efforts toward achieving the goals set forth in Healthy People 2010. Because the counties with unfavorable statistics are likely to be located in the rural part of the service area, the RAHEC focuses its activities on rural counties or counties with high minority populations.

Rappanhannock Area Health Education Center Health Shortage Designation

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Caroline	X		X	X	X		X
Charles City		X				X	X
Essex				X	X		
Gloucester				X	X		
Hanover		X					
King George	X		X	X	X		
King & Queen			X	X	X		
King William				X	X		
Lancaster				X	X		X
Mathews				X	X		
Middlesex				X			
New Kent	X				X		
Northumberland				X	X		X

Richmond	X		X	X			X
Spotsylvania		X			X		
Stafford					X		
Westmoreland	X			X	X		X
Fredericksburg							

Of the top leading causes of death in Virginia the only leading cause of death to double the state rate in the RAHEC service area is unintentional injury. The statewide rate is 27 per thousand persons. In Mathews the rate is 60, in Richmond it is 69, and in Westmoreland it is 59.8 per thousand persons. The Rappahannock AHEC may want to design programs to assist the primary care providers in its service area to address this issue.

With the exception of the City of Fredericksburg, all of the counties and independent cities in the Rappahannock AHEC service area have some type of health shortage designation. Four of them, King George, King and Queen, Richmond and Westmoreland Counties have four designations each. Caroline County has five health shortage designations. It is clear the service area has many challenges concerning access to health care and that these challenges can be met by the traditional AHEC programs. Pursuant to its Bylaws, RAHEC's mission is to "optimize access to quality health care through community-academic educational partnerships that emphasize primary health care in underserved communities.

Projects

As noted earlier, the RAHEC focuses its activities on rural areas. The projects it has spearheaded during the past year reflect that emphasis.

- Project RAHECNet is an internet/intranet information and medical database system currently at 18 locations. Services include access to biomedical information and intranet connectivity between regional professionals.
- The Community Health Education and Development Program (CHED) assists community members examining their community through advisory groups, bringing knowledge to the community, and managing information and spreading the word in the community. It completed four Community Health Partner training sessions and developed the Community Health Advisory Groups (CHAGs) for Richmond, Lancaster, and Northumberland Counties. A total of 1,850 citizens have been to a health screening provided by Community Health Partners.
- The Rural Practice Initiative provided a training support designed to enhance community based rural experiences for health professional students and increase the collaboration between educators, students, community-based care delivery organizations and the broader community.
- The Virginia Health Access Network newsletter was distributed to 17,000 people and organizations in Virginia under the combined sponsorship of the RAHEC and other state entities.
- RAHEC partnered with Healthy Beginnings and Middle Peninsula-Northern Neck

Connections in collecting and compiling community resource information.

- The Health Careers Summer Internship Program was attended by 12 students.
- Approximately 59 health professional students received assistance ranging from preceptor recruitment and scheduling of rotations to arranging and/or providing payment of lodging expenses or travel reimbursement.
- The Rural Practice Handbook & Community Introduction Packet enhances student familiarity with the region by providing background information including health and community statistics.
- The Speakers Bureau provides a consistent and comprehensive message regarding opportunities in health careers to any age group. Two training sessions were held for new speakers and 17 individuals added to the bureau.

Future Activities

The RAHEC has programs designed to assist the statewide AHEC program meet all of its goals. The first Virginia AHEC goal is to develop health careers recruitment programs for Virginia's students, especially underrepresented and disadvantaged students. The RAHEC will promote health career choice through partnership with community institutions and actively recruit qualified individuals from rural counties and under-represented populations. An indicator of success will be if The Speakers' Bureau members increase by 50% during the project period and the number of presentations increase by 25% in each of three years. A goal of 75% of high school students who attend the summer "Health Career Internship Program" will enroll in health professions training programs. The RAHEC aims for 75% of its undergraduate interns to pursue medical school admissions, with at least one from the region enrolling in the Minority Medical Education Program (MMEP). The RAHEC has identified a detailed methodology that it believes will assist it to achieve this objective in support of the overall goal:

1. Enroll 12 high school students in the annual summer "Health Career Internship Program." This program lasts for eight days and includes four days at Mary Washington Hospital in Fredericksburg, a field trip to VCU to meet with the admissions staff from the schools of medicine, dentistry, pharmacy, nursing and allied health, and a field trip to the rural Community Health Center in Westmoreland County.
2. Promote the annual participation of students in "Young Women in Medicine" at VCU; the Robert Wood Johnson Foundation's MMEP at the University of Virginia and the Association of Medical Colleges' "Minority Student Medical Awareness Workshop" in Washington, D.C.
3. Expand and refresh the membership of the RAHEC Speakers' Bureau. The Speakers' Bureau consists of health professionals from all disciplines who present the RAHEC "Insider's Guide to Health Careers" to school and community groups, including public and private educators.
4. Promote and participate in the "Partners Promoting Health Careers" group serving the greater Fredericksburg area. Activities include sponsorship of a biannual health careers fair, support of the RAHEC Speakers' Bureau and the establishment of health careers information available through the MediCorp Health Link Information Service.
5. Secure funding and worksite support for a summer pre-medicine undergraduate internship

located in the rural Northern Neck for a local student. This program would consist of a six-to eight-week program providing the intern with hands-on skills instruction and work experiences at several community health settings including public health and safety net providers. Expand to the rural Middle Peninsula and Hanover areas as funding and support is secured.

6. Represent the health careers focus to the Rappahannock Community College Tech-Prep Program and to the Northern Neck-Middle Peninsula Public Education Consortium.

The second Virginia AHEC program goal is to support community based training of primary care health profession students, residents and other health profession students in Virginia's underserved areas. RAHEC will support community-based clinical rotations for health profession students in the region's rural and designated underserved areas. Specific activities include the following:

1. Annually support 17 first- and second-year medical students in collaboration with the Foundations of Clinical Medicine course at MCV/VCU.
2. Support 36 first- and second-year medical students completing two- and four- week clerkships in primary care.
3. Provide each student with a copy of "Rural Practice" introducing them to the health needs of the community. Provide each student with a copy of the text "Online Guide to Medical Research" along with an introduction to RAHECNet resources.

An indicator of success for this effort will be if the RAHEC is be able to support 50 students annually with travel and lodging expenses associated with primary care rotations at community practices. An evaluation tool will consist of self-evaluations of the students participating in the rotations. They will be asked to determine rate their community service experience and personal growth value as a result of participation in the program.

The Virginia AHEC program's third goal is to provide educational and practice support systems for the Commonwealth's primary care providers. The RAHEC offers two objectives in support of this goal. First, it will provide practice support for primary care providers serving in rural and/or underserved areas of the region. This effort will be accomplished in a number of ways. The RAHEC will provide maintenance, telephone upgrades, technical and educational support for the existing 18 primary care practices participating in RAHECNet. Among other efforts, it will also improve access to current medical references and research by upgrading the RAHECNet CD tower to a web-based access by subscription method. Although the methodology was detailed, a process to evaluate success was not indicated.

The fourth Virginia AHEC program goal is to collaborate with health, education and human service organizations to achieve the shared goals of improved health and disease prevention for the citizens of the Commonwealth. The RAHEC lists three efforts in support of this goal. First, it will participate in partnerships for improved health and disease injury prevention. Staff members will serve on boards, committees and project groups across the region to promote health and wellness, disease and injury prevention, and access to primary care for the

underserved. Next, it will host a website for the Community Resource Directory of the Community Coordinating Council and the website for the Virginia Health Access Network and provide a Community Directory of Children's Services for the Healthy Beginnings Network. Finally, it will participate in the establishment of an annual health fair for Westmoreland County. The evaluation efforts will include a review of website activity records.

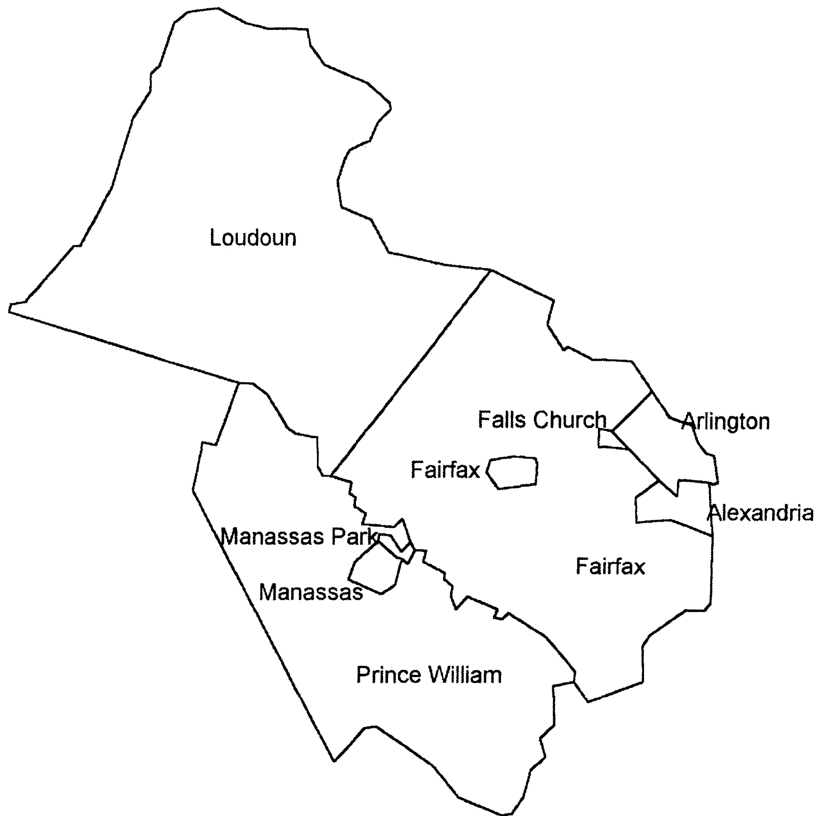
RAHEC Assessment

The RAHEC enjoys a strong presence in its community. In the past year there were over twenty newspaper articles explaining the RAHEC's program's attributes and successes. One of the RAHEC programs, the Community Health Education & Development (CHED) program and its component programs the Community Health Advisory Group and the Community Health Partners as well as the Community Health Information Services were featured numerous times.

Like the Southwest Virginia AHEC, the RAHEC stands out in both its excellence in the breadth of objectives it offers to assist the Virginia AHEC program meet its goals, as well as the process by which it will ensure its success. Its objectives are aggressive, yet realistic. They promote community collaboration and reflect the leadership role the Southwest AHEC has obviously taken in a number of earlier projects. Some of the activities identified in its methodology for achieving certain objectives represent an ambitious undertaking. However, the detail by which their execution is planned lends credibility to their potential for success.

The RAHEC should partner with the Eastern Virginia AHEC in assuming a leadership role in certain programmatic areas within the Virginia AHEC community. Its objectives reflect strong planning principles. It enjoys a strong presence in its service area. It has successfully partnered with a number of community organizations. These are attributes that would serve any community AHEC well. Together, the leaders of both AHECs could offer an in-service at an AHEC staff meeting on their respective areas of expertise. They could easily provide helpful information regarding planning, publicity, partnerships thereby leveraging AHEC resources. Given their geographic proximity, (they share an AHEC border) there may be great partnership opportunities.

Northern Virginia AHEC



The final community AHEC to be formed was the Northern Virginia AHEC, which was incorporated in 1995. Its activities are carried out by two employees- an executive director and an administrative assistant. The executive director is responsible for assisting the board with planning and development for the scope of educational activities structured to strengthen the primary care system of its service area. She negotiates contracts with appropriate organizations and individuals in support of AHEC-sponsored activities in the region. She evaluates its current program activities and investigates possible future collaborations.

The administrative assistant assists the Director in the conduct of her activities, communications and meetings involving the planning and operations of the Northern Virginia AHEC. He is an integral part of office communication and reporting as well as office maintenance activities.

The Northern Virginia AHEC serves nine jurisdictions in its service area. This service area includes counties of Arlington, Loudoun, Fairfax and Prince William, and the cities of Alexandria, Fairfax, Falls Church, Manassas and Manassas Park.

Northern Virginia Area Health Education Center

County/City	Total Pop.	% 65 and over	Income per capita	Unemployment Rate	Percent below 100% FPL	Medicaid Recipients	% students going to college
Arlington	174,848	10.4	$46,677	1.5	4.0	7,698	88.4
Fairfax	945,717	7.8	$44,303	1.6	2.2	26,355	85.3
Loudoun	156,284	5.8	$34,495	1.2	3.4	2,586	79.4
Prince Will.	270,841	4.5	$27,759	2.0	3.4	11,484	79.8
Alexandria	117,390	13.1	$46,290	2.2	3.8	7,602	89.5
Fairfax Cty.	20,697	14.0	$44,303	0.9	2.9	83	85.3
Falls Church	9,944	19.2	$44,303	1.3	3.7	32	96.4
Manassas	33,498	7.3	$27,759	1.5	3.5	1,466	72.5
Manassas Prk	7,891	5.8	$27,759	1.1	5.9	406	62.5
Northern Va.	1,737,110	9.8	$38,183	1.5	3.6	3.4%	82.1
State	6,872,912	11.2	$28,063	2.8	10.5	7.1%	73.0

Data source: 2000 Census

Socio-economic and health status indicators

The service area has a total population of nearly two million people. Nearly 21% of them are foreign-born; 11% of those over the age 5 (nearly 200,000 individuals) describe themselves as speaking English "less than well." A recent report from the Brookings Institute ranks the Washington, DC metro area, of which the Northern Virginia service area is a part, as the fifth most common destination for legal immigrants to the United States.

The Northern Virginia AHEC's service area enjoys a per-capita income ($38,183) well above the state average of $28,063. Consequently, its percentage of residents below 100% of the federal poverty level, (3.6%) is notably lower than the statewide percentage of 10.5%. The percentage of Medicaid recipients (3.4%) is almost half of the 7.1% statewide. Finally, the percentage is students planning to attend college (82.1%) is higher than the 73% experienced statewide. Its socio-economic indicators reveal a service area with relatively few socio-economic challenges.

As mentioned above, the five leading causes of death in Virginia are heart disease, cancer, unintentional injury, cerebrovascualar disease, and coronary obstructive pulmonary disease. The rate in Virginia of people dying from cerebrovascular disease is 27 per thousand persons. In the Northern Virginia AHEC service area this rate is 62.7. The Northern Virginia AHEC and the South Central AHEC are the only AHECs with service areas that are more than double the state rate for deaths attributed to cerebrovascular disease. This may represent an opportunity for future collaboration for the two community AHECs. In addition, the Northern Virginia AHEC may want to focus on translating medical information regarding cerebrovascular disease into foreign languages.

In stark contrast to the majority of the community AHECs in general and to the South

Central AHEC in particular, the Northern Virginia service area has only one locality with health care shortage designation. With the exception of certain census tracts in Loudoun County that have been designated as a MUP, none of the remaining areas have any such designation. However, the absence of health shortage designations does not mean the service area does not have any problems with health care access. Rather, it means the Northern Virginia's health care access challenges are likely to be unique, and will likely require a customized approach to addressing them.

Northern Virginia Area Health Education Center Health Shortage Designation

County/City	Entire County, Primary Care HPSA	Partial County, Primary Care HPSA	Dental HPSA	Mental HPSA	Medically Underserved Area	Medically Underserved Population	Virginia Medically Underserved Area
Arlington							
Fairfax							
Loudoun						X	
Prince Will.							
Alexandria							
Fairfax Cty.							
Falls Church							
Manassas							
Manassas Prk							

Like the Rappahannock AHEC, its mission is to "optimize access to quality health care through community-academic educational partnerships that emphasize primary health care in underserved communities." This mission is achieved by:

1. Developing health careers recruitment programs for minority and disadvantaged students;
2. Supporting the training of primary care health professions students and residents in community-based settings;
3. Providing practice support systems for primary care health professions, including access to continuing education and library and learning resources;
4. Collaborating with health, education, and human services organizations to achieve the shared goal of improved health and disease prevention for the citizens of the Commonwealth; and
5. Assessing and evaluating programs on a yearly basis to determine efficacy.

Like the Southside Area AHEC, the NVAHEC Articles of Incorporation lists activities that will be given priority. They are as follows:

1. Community-based undergraduate health professions education.
2. Student recruitment into health professions, especially minority and disadvantaged individuals.
3. Community-based graduate and resident training and education.

4. Community-based multidisciplinary health education and training.
5. Continuing education for health professionals.

Present Activities

The Northern Virginia AHEC experienced a number of sobering financial realities in fiscal year 2001. It went from core federal funding to model funding which resulted in a nearly 80% decrease in its grant funding stream. In addition, a local foundation that provided funds went out of business. The Northern Virginia AHEC carefully considered its existing programs in light of these funding challenges.

In an effort to make the most of declining financial resources, it suspended support for all extra-mural programs with an eye toward reinstating them only if they could demonstrate community need once funding was increased. The Northern Virginia AHEC also suspended financial support for programs that interfaced with academic medical centers in Washington, DC. so as not to compete with the newly formed District's programs. All existing Virginia programs had to demonstrate effectiveness in the community in order to receive support, and any expansion would be dependent upon outside funding. The Northern Virginia AHEC Board of Directors formed a Development Committee, responsible for seeking corporate support. The Executive Director resigned membership in ancillary organizations so as to save money and allow her to concentrate her efforts exclusively on Northern Virginia AHEC activities. Finally, all staff intensified grant and contract writing efforts.

The most dramatic result of the Northern Virginia AHEC's strategic planning efforts was the decision to increase its cultural competence programming. This program was developed in direct response to a number of health-related community needs assessments[28] that consistently ranked the top three provider needs as cultural competence education, trained health care interpreters, and translated health care materials. These studies also pointed out that the largest barriers to access are cultural and/or linguistic barriers or lack of insurance. Thus, in assuring that its programs were both non-duplicative and that they work collaboratively and responsively with the community, the Northern Virginia AHEC has focused on the needs of current providers who work with the underserved, supporting and assisting them thereby increasing access to primary care.

The NorthernVirginia AHEC engaged in a number of "traditional" AHEC programs before it implemented its strategic plan described above. Its focus in recruiting health professions students was to encourage minority students to pursue careers in the health professions. It supported health careers recruitment programs with two large, local minority agencies- the Hispanic Committee of Virginia and Hopkins House. Hopkins House is a minority-owned

[28] Virginia Department of Health, Multicultural Health Research Initiative, 2000; Metropolitan Washington Council of Governments, 1999; Survey of Community Provider Needs, a Maximus Report for NVAHEC, 1998; Arlington Health Foundation, 1997; March of Dimes, National Capitol Area, 1997; Fairfax-Falls Church Community Needs Assessment, 1995; Report of the Virginia Minority Health Advisory Committee, 1995.

business that provides childrens' services and, at that time, engaged in HIV/AIDS education and outreach to minority populations. Because Inova Fairfax Hospital, the Fairfax County Office of Partnerships and Northern Virginia Community College all have strong health careers programs for post high-school age students, the Northern Virginia AHEC decided to focus its recruitment efforts on high school age students. As will be demonstrated below, the Northern Virginia AHEC has engaged in a number of activities that support the traditional role of AHECs, as well as a greater number of activities that demonstrate its flexibility in meeting the challenges faced by its service area.

Major activities by the Northern Virginia AHEC for the past fiscal year include:

- By continuing to provide financial support to the Virginia Generalist Initiative, the Northern Virginia AHEC supported the Northern Virginia Summer Academy, a program that provides rising high school juniors and seniors[29] with the opportunity to explore the relationship between science, technology and public policy. The program served 21 students, about half of which were minority students. At the conclusion of the session, 13 of the 21 students reported a new or increased interest in pursing a medical career.
- Distributed its Health Careers Manual to secondary and post secondary schools throughout the region.
- Encouraged two bilingual medical professionals to attain certification in their respective fields.
- Interacted with the new medical education campus. This campus is a collaborative effort between Northern Virginia Community College, George Mason University and the Virginia Commonwealth University/Medical College of Virginia.
- Completed survey of 360 pediatricians regarding their practices' cultural mix and need for cultural training
- Enabled providers to understand patients by utilization of health care interpreter services. Since 1999, its service has provided 65 trained interpreters who speak, among them, 20 of the languages most commonly spoken in northern Virginia. These languages include Atoll, Albanian, Amharic, Arabic, Bosnian, Chinese (Mandarin), Creole (Haitian), Dinka, Farsi, French, Ga, Kurdish, Korean, Spanish, Somali, Swahili, Urdu and Vietnamese. All candidates are interviewed, tested for both proficiency in both English and the non-English language and must successfully complete a 40-hour course in health care interpretation. The interpreters have logged over 10,000 hours of service and assisted in an estimated 32,000 patient encounters. Provider satisfaction surveys show uniformly positive results. The program is supported primarily through grants.
- Provided consultation assistance for institutions in meeting Office of Civil Right's Department of Justice's Guidance on Title VI of the Civil Rights Act of 1964 and on the National Standards for Cultural and Linguistically Appropriate Services standards.

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[29] Other local programs introduce middle-school children to health careers.

Clients include five hospitals, two local health departments, the Virginia Department of Health, the Virginia Primary Care Association and multiple local clinics. Approximately 1,000 hours of consultation were provided during FY 2002.

- Assisted providers with consultation and interpreter assistance at 30 different sites in the service area. The sites include the Arlington Free Clinic, the Arlington County Health Department STD Clinic, four of the Northern Virginia Community College Network clinics, Alexandria's Parent Infant Education Program, eight clinics providing HIV/AIDS services under Ryan White Title I, and five local hospitals.
- Continued its program in cultural competence education. The program introduces participants to cross cultural care and offers sessions on the exploration of various cultures and their health beliefs and practices as well as organizational and personal cultural competence, cultural and linguistic access standards, and ethno-pharmacology.
- Designed continuing education programs for nurses and social workers. Awarded a grant by the federal AHEC office for the design of mental health and post traumatic stress disorder programs in the wake of the September 11, 2001 tragedies.
- Provided training for monolingual (English-only) providers regarding how best to communicate through a trained interpreter.
- Managed a database and performed focus group research for Virginia Department of Health, Multicultural Health Task Force.

Future Activities

The first Virginia AHEC goal is to develop health careers recruitment programs for Virginia's students, especially underrepresented and disadvantaged students. The Northern Virginia AHEC will increase awareness of health careers, particularly among minority and/or disadvantaged students. It plans to distribute 2,000 health career manuals annually to area middle schools, high schools, community colleges, libraries and hospitals. A second way the Northern Virginia AHEC plans to help the Virginia AHEC program achieve this goal is to reevaluate its role in health careers recruitment in the region. It will continue to obtain input from area schools, hospitals, and community-based agencies regarding their respective needs. It will then take this information to its board's program committee to reassess its programs in light of this information. Evaluation will be determine by tracking of strategic planning and needs assessment.

The second Virginia AHEC program goal is to support community based training of primary care health profession students, residents and other health profession students in Virginia's underserved areas. To support this effort, the Northern Virginia AHEC will reevaluate its role in supporting student rotations in the service area. It will obtain input on its efforts from Inova Health System, the Medical College of Virginia and potential practice sites. Once that information is obtained it hopes to continue to conduct quarterly board program meetings where the information will be shared and assessed. The Northern Virginia AHEC proposes to seek funding for this initiative. Its efforts will be evaluated by tracking the results of strategic planning and needs assessment. New programs will be evaluated by the number and satisfaction of students, faculty, and provider sites.

Another way the Northern Virginia AHEC hopes to support the second goal is by continuing financial support for student rotations, as needed by students and as funded through private sources. It plans to work with academic medical centers to determine student placements and financial needs. It will also solicit designated donations to support rotations. An indicator of success will be the number of students requesting support and the amount of funding raised. The Northern Virginia AHEC plans to measure its success by the number of students receiving support.

The Virginia AHEC program's third goal is to provide educational and practice support systems for the Commonwealth's primary care providers. The Northern Virginia AHEC has identified six activities that will assist the Virginia AHEC program in meeting this goal. The first will be to provide continuing education in cultural competence for 2500 participants. It is planning to conduct a two-day conference for 400 participants. It then plans to conduct workshops, seminars and/or in-services for 100 physicians and 2100 other providers. The project's success will be evaluated by the number of attendees and evaluation of sessions.

Another way the Northern Virginia AHEC will support the third goal is by providing interpreter training to 400 bilingual individuals who successfully pass the language proficiency test. A first step of this project will involve the testing for language proficiency of an estimated 600 bilingual individuals. Next, it will conduct either two, three or five day sessions for training. This process will be evaluated by the number of students trained, student satisfaction with the sessions as well as the employer's satisfaction with the program.

A third opportunity that has been identified by the Northern Virginia AHEC in support of the third statewide AHEC program goal is to provide 1000 hours of consultation on cultural competence and on cultural and linguistic access to primary care. The employees believe the Northern Virginia AHEC can complete this task based upon the number of requests for services, but it recognizes that it may have to market services if necessary. The evaluation process will include the number of students trained and employer's satisfaction with the program.

The fourth Virginia AHEC program goal is to collaborate with health, education and human service organizations to achieve the shared goals of improved health and disease prevention for the citizens of the Commonwealth. The Northern Virginia AHEC lists no projects that will assist in this effort.

Northern Virginia AHEC Assessment

The Northern Virginia AHEC objectives for supporting the first Virginia statewide AHEC goal are appropriate and demonstrate a clear understanding of the principles of program evaluation as well as planning. The first Virginia AHEC goal is to develop health careers recruitment programs for Virginia's students, especially underrepresented and disadvantaged students. The Northern Virginia AHEC is wise to focus its efforts in this area on re-evaluating its role. Unlike other parts of the state, the residents in the Northern Virginia AHEC service area

have a number of health career opportunities and the schools there and in the District of Columbia do not generally have difficulty in recruiting students in the area. These circumstances make it imperative for the Northern Virginia AHEC to determine whether the pursuit of these activities represents the programmatic approach that will yield the greatest results in improving access.

The second Virginia AHEC program goal is to support community based training of primary care health profession students, residents and other health profession students in Virginia's underserved areas. Once again the reassessment of this activity appears to be an appropriate approach for the Northern Virginia AHEC. Its decision to provide financial support for student rotations by soliciting donations is a safe approach because it would assist students already involved in an existing AHEC program.

The Virginia AHEC program's third goal is to provide educational and practice support systems for the Commonwealth's primary care providers. The Northern Virginia AHEC is not only the leader in Virginia in the effort to provide educational programs in cultural competency, but it has been recognized nationally for its role in this area. Its many programs assist literally thousands of providers and it plans to increase those numbers. More important, it seeks to assist three agencies in the development of their own interpreter services thereby exponentially increasing the number of culturally competent providers.

As mentioned earlier, none of the community AHEC programs have been able to document its achievement of the fourth Virginia AHEC program goal, which is to collaborate with health, education and human service organizations to achieve the shared goals of improved health and disease prevention for the citizens of the Commonwealth. This lack of documentation in the Virginia AHEC grant submission suggests the Northern Virginia AHEC and other community AHECs have no objectives to meet this fourth goal. HRSA has indicated it values partnerships highly when making grant awards. Despite the lack of documentation in the grant submission, it is nonetheless apparent that the Northern Virginia AHEC has many programs whereby health service agency collaboration is a necessary element. It could not have achieved success with its cultural competency programs without any collaboration by interested health care entities and practitioners. This repeated document oversight highlights the need for a system of "checks and balances" by many before the next federal grant is submitted.

The Northern Virginia AHEC's greatest strength lies in its ability to identify challenges to health care access experienced by members of its community despite traditional indicators that suggest no access problems exist, and to then design nationally-recognized programs to address those problems. Another strength is its ability to be flexible so as to accommodate the unique needs identified in its service area. While all AHECs are unique, some are unique not only because of the programs that they provide but because of the different challenges they have to face. The Northern Virginia AHEC's flexibility has been demonstrated not only in its response to the problems the service area providers face in rendering services to an area with a high percentage of people with limited English proficiency, but its quick response in addressing the unforeseeable events of September 11, 2001 by providing post traumatic distress syndrome

programs. The leadership of the Northern Virginia AHEC has demonstrated significant foresight in her ability to respond creatively to these unique challenges.

The Northern Virginia AHEC faces challenges in its service area that are experienced by few AHECs in the country. The first challenge is that unlike other Virginia AHECs, its service area is almost completely suburban or urban. Because the other Virginia community AHECs generally focus on the rural underserved or the inner-city poor, the Northern Virginia AHEC has had to forge new territory. It has developed new programs that are tailored to the specific needs of its community. The Northern Virginia AHEC is a great example of how suburban AHECs meet community need.

Probably, the NVAHEC's greatest challenge is addressing a considerable population base that has problems with English proficiency. The manner in which the Northern Virginia AHEC has responded to this second challenge demonstrates the power of the AHEC program's flexibility. While the service area is characterized by considerable affluence, there are pockets of underserved populations who experience great difficulty with health care access. As noted above, an estimated 20% of the people in its service area are foreign born. Of that percentage, 30% are limited English proficient (LEP) and require the assistance of interpreters to locate and receive health care.

The success experienced by the Northern Virginia AHEC in meeting the needs of its service area can be attributed in large part to good planning. As noted above, the Northern Virginia AHEC has relied upon its own needs assessment, as well as similar assessments conducted by other health entities in identifying the health care needs in its community. This approach is a non-traditional one because the common indicators of health care need such as income data and health care shortage designation information do not have the specificity to identify the unique challenges to access faced by the residents of this service area. Had the AHEC relied upon these indicators alone, it would have missed a tremendous opportunity to provide culturally appropriate services as a tool to combat lack of health care access by a significant portion of its population.

The Northern Virginia AHEC's services were the subject of a recent Washington Post article[30]. The article focuses on the difficulties encountered by health care professionals in Northern Virginia in attempting to provide health care services to limited English proficient patients so as to comply with the "meaningful access" standard of Title VI to which all recipients of federal funds must comply. The Northern Virginia AHEC has designed a number of programs that assist health care providers with compliance. The Northern Virginia AHEC is to be commended for its programs because they represent not only a novel approach to identifying health care access, but because they highlight the unique role AHECs can play in health care access issues.

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[30] The Washington Post, Sarah Park July 22, 2002 "Struggling to Be Understood"

Conclusion of Assessments

Based up VDH's assessment of the eight community AHECs, it appear that current statutory language limits AHEC activity because it states that the AHEC mission shall be carried out through four major areas of program activity. However, it is not clear whether each AHEC must in fact satisfy all four major goals of program activity. One additional area where AHECs could make a valuable contribution is health care access. One of the AHEC's greatest strengths is their ability to respond in a timely manner to evolving health access issues. The Code of Virginia could be made more permissive concerning the authority of AHECs to address health access issues.

Recommendation #1_The Code of Virginia should be amended to allow for the community AHECs to exercise creative programmatic approaches to address the issue of health care access. This legislation should allow the AHECs to engage in programs that they are able to document are both needed by the community and are likely to have a substantial effect on improving health care access.

VII. AHEC Funding

As mentioned earlier, the Virginia AHEC program is funded by three primary sources. The federal government, state government, and other funds such as grants sustain its programs. As explained earlier, federal AHEC funding can come in the form of either "core" federal funding or as "model" AHEC funds. The core federal funding cycle is for six years. Core funding requires only a 25% match that can be made in cash or in-kind contributions. Once all of the AHECs in a state have exhausted core funding, the program becomes eligible for model funds. AHEC model funding is capped at $250,000 per community AHEC with a maximum of eight AHECs being eligible. There is also a $2 million maximum level of funding per state. More important, model AHEC funding requires a dollar for dollar match. In fiscal year 2001, the Virginia AHEC program became eligible for model AHEC funding as the Northern Virginia AHEC completed core AHEC funding.

The AHEC federal funds for the period September 30, 2001 through September 29, 2002 were distributed and expended as follows:

AHEC Office	Direct Amount Awarded	Indirect Costs Awarded	Total Amount Awarded	Total Amount Spent	Balance Remaining
Statewide Office	$190,915	$15,273	$206,188	$ 86,333	$119,855
Eastern Virginia AHEC	73,444	5,876	79,320	10,832	68,488
Blue Ridge AHEC	73,444	5,876	79,320		79,320
Southside AHEC	73,444	5,876	79,320	5,818	73,502
Southwest AHEC	73,444	5,876	79,320		79,320
Greater Richmond AHEC	73,444	5,876	79,320	23,994	55,326
South Central AHEC	73,444	5,876	79,320	37,265	42,055
Rappahannock AHEC	73,444	5,876	79,320	45,875	33,445
Northern Virginia AHEC	110,481	8,838	119,319	28,943	90,376
Total Award Amount	$815,504	$65,240	$880,744	$239,060	$641,684

Note: BRAHEC and SWAHEC were unable to provide VDH with expenditure data.

In addition to federal funds, the Virginia AHEC program receives state general funds and other funds. The history of the Virginia AHEC program funding is summarized in the following chart:

Fiscal Year	**Federal**	**State General Funds**	**Other***	**Total**
1992	$ 626,069	$ 150,000		$ 776,069
1993	1,186,901	208,000		1,394,901
1994	1,646,439	200,000		1,846,439
1995	1,500,282	240,000		1,740,282
1996	1,778,952	358,139		2,137,091
1997	1,869,267	658,139	$ 326,178	2,853,584
1998	1,534,160	993,139	400,745	2,928,044
1999	999,491	1,058,139	821,806	2,879,436
2000	610,909	1,158,139	1,148,954	2,918,002
2001	625,341	1,158,139	1,377,752	3,161,232
2002	880,744	1,158,139		
2003	917,520	1,058,139		

*The category "Other" represents any income is not a state appropriation or AHEC federal grant. Examples include Ryan White funds, Health Careers Opportunities Program funds, and Virginia Health Care Foundation funds.

As the above chart demonstrates, federal funding has been increasing since it reached an all-time low in fiscal year 2000. However, it remains to be seen whether this trend will continue in light of the federal AHEC budget challenges described below. The state general funds have steadily increased although they flattened out in fiscal year 2000 and have remained at the same amount since that time.

A closer analysis when comparing and contrasting federal and state funding reveals that during the fiscal years 1994 through 1999, federal funds decreased from $1,646,439 to $999,491 which represents a reduction of sixty-one percent. This decrease is consistent with federal expectations that state AHEC programs should not rely on continued federal funding. However, for the same time period, state general funds increased from $200,000 to $1,058,139- representing an increase of five hundred and twenty-nine percent.

In December 2001 the Statewide AHEC program requested $1,050,000 in federal Model AHEC program funds. A Notice of Grant Award was received by the AHEC statewide program office from HRSA on July 25, 2002. For the budget period 9/30/2002 through 9/29/2003 the Virginia AHEC was awarded Model AHEC funds in the amount of $917,520. This amount is in excess of the $840,000 awarded last year by HRSA.

Although federal funding was awarded to the Virginia AHEC program, the award is based upon continued federal appropriations. As of September 26, 2002, neither the President's proposed budget, nor the proposed budgets of either side of Congress had identified any funds

for the AHEC program for FY04. This situation represents one of first impression in AHEC funding history. In addition to the availability of federal funds, pursuant to the grant terms continued federal funding is also dependent upon satisfactory progress of the Virginia AHEC program, and a determination by the federal government that continued AHEC funding is in its best interest.

The category of "other" above represents grants and other non-governmental or governmental dollars unrelated to AHEC federal funds. As the above chart demonstrates, these funds have been consistent. Although information was requested from the community AHECs regarding their historical success in receiving grant funding, few responded with enough information upon which a reasonable assessment regarding their historical success could be made. However, it is clear that those community AHECs that did submit information, notably the Northern Virginia AHEC and the Southwest AHEC were able to document increasing success in securing outside funding. Recently, both the state office and the local AHECS have had increased success in securing federal grants.

The community AHECs have been successful in broadening their funding base. In fiscal year 2001, the eight AHECs matched a total of $1,377,752 over and above the state appropriation and federal funding. For each one dollar invested by the state, the AHECs raised an additional $1.37. This is also a twenty percent increase over FY 2000, when the AHECs raised $1,148,954 of outside monies.

All of the funds raised were used for specified programs and came from a variety of sources such as fee for services, contracts with public and private agencies, donation and grants. Examples of sources include the Virginia Tobacco Settlement Foundation, Ryan White Title I, Mary Washington Hospital Community Services Fund, HRSA Office of Rural Health Outreach, Campbell-Hoffman Foundation, Virginia Office of Newcomer Services, the Virginia Health Care Foundation, Pearl Vision Foundation, Eastern Virginia Telemedicine Network and many others. The ability to gain these and other funds was often made possible by the existence of state funds.

State funding for the overall AHEC program underwent changes during the 2002 General Assembly session. Funding was reduced by 10 percent each year. The language that previously earmarked the distribution of funding was eliminated to allow for flexibility in the allocation of the remaining state funds among the AHECs. In response to this change, the Virginia AHEC statewide office and the community AHECs agreed to allocate the state funds identified in item 306(B)(3) of the Appropriation Act as follows:

Eastern Virginia AHEC -	$165,000
Blue Ridge AHEC-	130,000
Southside AHEC-	130,000
Greater RichmondAHEC-	95,000
Southwest AHEC-	95,000
Rappahannock AHEC-	95,000
South Central AHEC-	95,000

Northern VA AHEC	95,000
Total	$900,000

Also, the purposes for which these funds could be used were likewise amended. Rather than allow for funding for "activities related to health careers promotion, clinical training for health professions students, continuing education and practice support for practitioners, and community health initiatives," as the language formerly permitted, the amended language restricted these general fund appropriations to "the recruitment, training, continuing education, and practice support of health care professionals for medically underserved areas and areas with medically underserved populations." Hence, health careers promotion and community health activities were no longer activities that the community AHECs could support with state funds. This change has significant consequences for the Virginia AHEC program for as the aforementioned Joint Commission report noted, ". . . Most local AHECs are federally funded and therefore respond to federal priorities for local AHECs, which emphasize health careers promotion and support of community- based education. As a result, the statewide AHEC program has evolved into an organization whose primary focus is on health careers promotion and educational support as opposed to innovative service delivery and indigent care."

The Virginia general fund appropriation for the Virginia Generalist Initiative recruitment and admissions activities is found in the Health and Human Resources Secretariat appropriation section of the budget. Of the $158,139 appropriation to supplement the student recruitment and admissions activities at Virginia's three medical schools and the Virginia statewide AHEC program, $40,000 is appropriated to the AHECs." However, these funds are restricted to activities related to the goals of the Virginia Generalist Initiative sole purpose. While the amount of the Virginia Commonwealth University / Medical College of Virginia's Center for the Advancement of Generalist Medicine and the statewide Center for the Advancement of Generalist Medicine at the University of Virginia's portion of the $158,139 was cut from the budget in the second year of the biennium, the $40,000 that was appropriated for the Virginia Statewide Area Health Education Centers Program remained untouched for both the first and second years of the biennium budget

VIII. Evaluations of the Federal and State AHEC Program

There have been a number of federal efforts to evaluate the AHEC program.[31] One of the most comprehensive evaluations was one performed by federal Department of Health and Human Services and is entitled, "Evaluation of the Impact of the National Area Health Education Center Program." The study documented the wide range of effects AHEC programs have on their service area. It identified and described characteristics of successful AHECs. They are as follows:

- Successful AHECs have a state-supported system with funding for health professions education and partnerships between the school and community-based centers that involve the community in planning and implementing the stated missions.
- Successful AHECs have institutionalized functions and activities. Both the functions and activities must be permanent and stable in the community and recognizable as such by the community.
- AHECs that have met with success have generally improved the status of primary care specialties within the medical schools. They have been able to direct the attention of medical schools toward primary care training of residents and students in the community. Indicators of success include increased numbers in primary care residency positions created by new or augmented programs, improved quality of primary care education through enriched curricula, and the appointment of new primary care faculty positions and the creation of new primary care rotations.
- Successful AHECs have been able to increase access and improve the quality of health care through a regionalized system of health profession education.

As is explained in the next section, these characteristics of successful AHECs in other states are reflective of many of the goals to which Virginia's AHEC program aspires. At the very least, these characteristics should be considered as a springboard for discussion in any future attempts to assess the Virginia AHEC program.

Another important national AHEC evaluation effort was performed in 1995 by the Department of Health and Human Services' Office of the Inspector General. This report focuses on the role AHECs have played in enhancing the rural practice environment nationwide. It found that AHECs are enhancing rural practitioners' access to health care information by linking them with medical library resources and that they are responding to the needs of many types of practitioners for continuing education on clinical topics. However, the report also found that for the most part, AHECs are missing opportunities to educate practitioners about innovations in

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[31] House of Representatives Report by the Committee on Interstate and Foreign Commerce (1975); Report to the Congress of the United States by the Comptroller General (1978); Report of the Secretary of Health, Education and Welfare on an Assessment of the National Area Health Education Center Program (1979); Area Health Education Centers: The Pioneering Years (1972-1978); Eleven Area Health Education Centers: The View from the Grass Roots (1980); House of Representatives Report of the Committee on the Budget (1981); Evaluation of the Impact of the National Area Health Education Center Program (1990); Area Health Education Centers- A Role in Enhancing the Rural Practice Environment (1995).

health care delivery, such as clinical practice guidelines or managed care. According to the study, the AHECs were beginning to use telecommunications to provide support to isolated practitioners, but they were not yet taking advantage of the full potential of this technology. The study concluded that the role of AHECs should be strengthened by facilitating their ability to focus on three areas: clinical practice guidelines, managed care, and telecommunications. Although these conclusions are not reflective of the role AHECs have traditionally played in Virginia, they do provide food for thought regarding how the role of Virginia's AHECs might be expanded.

The most important national effort to assess the activities of AHECs and other Title VII grantees has resulted in a new evaluative tool. The Comprehensive Performance Management System (CPMS) was designed to assist the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Bureau of Health Professions with information about grantee activities. CPMS consists of data on overall project performance so as to incorporate accountability and measurable outcomes and to develop a framework that encourages quality improvement in its programs and practices. The statewide AHEC office program director should be encouraged to research both the significance of this evaluative tool as well as the Virginia AHEC program's comparative performance with the regional HRSA office.

Another evaluative tool used by HRSA is its peer review performance rating. Program directors from around the country evaluate a state's federal Model AHEC grant proposal. AHECs are entitled to receive federal Model AHEC funding once their core federal funding is exhausted. A favorable evaluation is essential for federal funding yet does not guarantee funding. In April 2002, Virginia's AHEC program received a peer review score of 87 out of a possible 94 points. However, the statewide AHEC office does not know how this score compares to others in region III or to neighboring states. As noted above, all evaluations of the Virginia AHEC program should be summarized in an annual report to the General Assembly and the Governor.

Essentially the peer review report identifies the strengths and weaknesses of the Virginia AHEC grant proposal based upon enumerated criteria. The grant proposal requests funds on behalf of the entire statewide AHEC program. The criteria as well as highlights of the strengths and weaknesses for the most recent grant submission are listed below:

CRITERIA 1: The degree to which the proposed project adequately provides for the program requirements as set forth in the federal AHEC program requirements (described above):

Strengths: The applicant's objectives target the program emphasis established. The Centers have strong working relationships with the core medical schools and other schools in their regions as well as community agencies. The AHEC experience and credentials of the advisory boards and the program's statewide committee are strong. The applicant proposes a reasonable and achievable plan for the three-year project identifying measurable benchmarks.

Weaknesses: A chart for the time line and achievement of the project outcomes would help to communicate progress.

CRITERIA 2: The capacity of the applicant to carry out the proposed project activities in a cost-effective manner.

Strengths: A history of success in this program provides a level of confidence that the proposed project will be successful in the future. There is unique programming within each center for its service area.

Weaknesses: On average, each community AHEC has a staff of 2.5 FTEs to administer, develop, and implement the Virginia AHEC's programs. This level of staffing may not be adequate for the projected scope of work.

CRITERIA 3: The extent of the need which the proposed AHEC program is addressing in the area to be served by the AHEC.

Strengths: A number of factors have been taken into account in the proposal including service area needs, the state's population, health needs, disease prevention and health workforce goals.

Weaknesses: A stronger section of need and data support of need indicators, would enhance the application.

CRITERIA 4: The potential of the proposed AHEC program and participating community AHECs to continue on a self-sustaining basis.

Strengths: The applicant presents a thoughtful assessment of the funding situation in Virginia and the relationship to its ability to match funding. The program has established state support, as reported funding for the program has been increased seven times since 1991. Possible program pursuits are discussed that will bring in new funds and diversify financial support.

Weaknesses: Inclusion of in-kind contributions may not be the best use of time for the applicant.

CRITERIA 5: The extent to which the proposed project adequately responds to AHEC program performance measures and outcomes indicators.

Strengths: The applicant has a strong methodology in place to address primary care workforce needs in the state and to monitor the distribution of primary care providers from each year's graduating and medical schools and residency programs.

Weakness: As reported, there is minimal sponsored rural training.

A strength noted by the peer reviewers in the Virginia AHEC program's ability to

encourage diversity in its programs is that the number of African-American students participating in health careers is noteworthy, particularly given the participation in programs of at least 40 hours in duration. A noted weakness in this area is that the overall number of students reported as participating in health career programs is not consistent with the effort report. Another weakness is that the outcomes of the health career program participants are not well described given the large number of initial participants.

With regard to the quality of the Virginia AHEC programs, one strength noted was the quality of the distance education programs offered on disease prevention topics and the telemedicine activities. The federal peer reviewers also highlighted another quality Virginia AHEC program- those programs that seek to increase provider multicultural skills and health care interpreting. Two weaknesses with regard to quality noted were the low numbers of continuing education programs and participants documented as well as the insufficiency of distance learning offered in rural areas.

HRSA has also contracted with an independent company in Research Triangle Park, NC to conduct an assessment of the national AHEC program as well as other Title VII programs. Although the study is completed, HRSA has delayed announcing its results.

In addition to federal efforts to evaluate the AHEC program, a number of academicians have likewise attempted to do so. In 1991 the most comprehensive study on AHEC performance was published[32]. The study described how AHEC activities increased access to primary health care, by virtue of services rendered by residents, physician assistants, and nurse practitioners while they were being trained in the community. Health services institutions were able to improve their capacity to train students and deliver quality care because AHECs training programs upgraded the skills of staff or produced a better organization of services, or increased access to consultation and referrals. Physicians in medically underserved areas gained better access to low-cost CME near their practices. Health professions schools were assisted by the AHECs in their attempts to increase emphasis on and acceptance of primary care education in the curriculum and improve faculty attitudes toward community-based training, toward the quality of community preceptorships, and toward the importance of cultural sensitivity to quality health care.

One of the most important findings of the 1991 study in light of the challenges facing Virginia is that AHECs have demonstrated an ability to respond to current and emerging needs that distinguishes them from other institutions that have educational missions. They are able to remain neutral when faced with competing pressures and are able to respond more flexibly and quickly than is possible within the administrative bureaucracies and priorities of traditional, more narrowly focused institutions. They are in a superior position to mobilize community resources and develop local networks that can be accessed when new needs arise. Because Virginia is geographically, economically, and socially diverse, these abilities are especially important. A

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[32] Fowkes, V.A. and Sandra R. Wilson, Evaluation of the Impact of the national Area Health Education Program, Palo Alto, CA American Institute for Research.

great example of the Virginia AHEC program's ability to respond to unique community needs is evidenced by the Northern Virginia AHEC's ability to respond to the challenge of serving an area with a high incidence of people with Limited English Proficiency (LEP). Their superior ability to mobilize community resources indicates they should play a greater role in bioterrorism preparedness efforts.

The study concluded that the AHEC program "is a vital and flexible resource able to respond to health manpower needs with unique and enduring strategies and activities." A shortcoming of the program noted in that study was the lack of equivalent data from the various AHECs. The researchers found little commonality in AHEC data sets from one state to another. HRSA appears to be trying to address that problem with the Comprehensive Performance Management System (CPMS) that will be described in Section VIII.

In 1991, the *Journal of Rural Health* also published an article that summarized the challenges faced by earlier researchers in their attempt to evaluate the AHEC program. This article asserts that any post hoc assessment of the AHEC program that utilizes inferential statistics faces serious methodological problems with regard to the generalizability of it findings because the national AHEC program was established using neither random sampling nor randomization.[33] It argued that a more valid picture of the AHEC program may result from a purely descriptive study of the AHEC program. Using that approach as a model, the study found that in comparison to non-AHEC counties, the primary care physician-to-population ratios of counties served by an AHEC tended to improve more in counties that were less urbanized and were not contiguous to standard metropolitan statistical areas. When compared to non-AHEC counties, AHEC counties consistently demonstrated a relatively faster rate of improvement in primary care physician-to-population ratios for less urbanized counties, especially those that were not contiguous to SMSAs. The article concluded that AHEC counties showed a greater absolute and percentage improvement in primary care patient-to-population ratios than did non-AHEC counties.

Virginia AHEC Program Evaluations

There have been a number of evaluations of the Virginia AHEC program. The first comprehensive assessment was completed in 1994. It was performed by Andrew W. Nichols, M.D., M.P.H. who was the Director of the Arizona AHEC program and was highly respected in the national AHEC community. Generally, his findings were favorable. He noted that the Virginia Statewide AHEC program is accepted by key individuals in the state decision making process as having a vital role to play in meeting the health needs of Virginia. However, the report noted several areas of concern. Some of these areas of concern still exist today. They are as follows:

- The AHEC's mission has been potentially reinforced, but also confused, by a proliferation of other related programs. Primary among these are the Generalist Initiative

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[33] Hynes, Kevin and Nathaniel Givner, The Effects of Area Health Education Centers on Primary Care Physician-to-Population Ratios from 1975 to 1985. The Journal of Rural Health. Vol 6, No. 1, pp 9-17

recent review. An AHEC program must receive at least 76 points in order to be recommended for approval for funding. A score higher than 76 does not, however, guarantee funding.

In the future HRSA plans to implement an evaluation program in development by the East Texas AHEC. In an effort to become familiar with the process before HRSA formally implements it, the Virginia statewide AHEC office has engaged in a number of conversations with East Texas AHEC staff in an effort to better understand how it can best respond to this new initiative.

Recently, The Regis Group of Leesburg, Virginia evaluated the Virginia AHEC program. This management consulting firm was hired on behalf of the AHECs to address an unsettled relationship between some of the community AHECs and the statewide AHEC office. The consultant began his assessment by surveying members of the Virginia AHEC Board and program directors. In essence, it was a self-assessment of the AHEC program by AHEC program leaders. The survey found that the majority of respondents felt that the characteristics that best define the Virginia AHEC are its leadership role in health career recruitment efforts, its leadership role in community-based training for primary care health care professionals, and its leadership role in educational and practice support systems for health practitioners as well as visibility within the health care community and its role as a proactive change agent in support of health career education.

The survey revealed that, according to its respondents, the greatest challenges facing the Virginia AHEC is the lack of collaboration between the statewide AHEC office and the community AHECs tied with the lack of funding available for AHEC-related services. The second ranked challenge was competition for funding sources throughout the community AHECs. The third rated challenge was the lack of communication of AHEC services to target constituencies.

When asked what services should the statewide office be providing to the community AHECs the majority responded it should be coordinating information and activities both to and from the community AHECs. Tied for the second-ranked response were the following responses:

- The statewide AHEC office should be monitoring federal and state budget requests.
- The statewide AHEC office should be performing advocacy activities in support of the community AHECs.
- The statewide AHEC office should be providing technical assistance for grant writing.

After a series of introspective exercises, the group stated that its vision for a successful Virginia AHEC program was exercising common influence on behalf of the public, and offering strong and successful methods and protocols implemented by individuals with the appropriate talents and skills to both foster and then to sustain the trust of the healthcare community, the legislature and the public.

Recommendation #2- The role of the Virginia statewide AHEC office should be clearly

defined in the Code of Virginia. This statutory change would eliminate the current confusion concerning its role, provide notice to its partners as to its strengths and limitations, and provide a solid ground upon which to evaluate its success or failure in the future.

As a part of this assessment, the Virginia Department of Health also conducted a survey of AHEC partners as identified by AHEC program members. Those partners were sent a survey concerning the AHECs. The survey contained eight questions. The first five questions mirrored the language found in the *Five Point Plan* regarding the benefits of a proposed Virginia AHEC program. The next four questions track the language found in the Code of Virginia regarding the Virginia AHEC program's statutory responsibilities. Fifteen partners responded although none of them answered all of the questions.

The following chart summarizes the responses to the survey:

In your opinion, has the AHEC program:	**Yes**	**No**	**Summary of Responses**
Decentralized education for primary care physicians and for other health care professionals?	3	1	A number of respondents stated this question was inapplicable or that they were not sure what the question meant. A medical school respondent stated the AHECs have been vital in the ambulatory education projects. Another respondent stated they have been significant role but in varying degrees.
Maintained active affiliations between community providers and medical schools?	8	0	A number of respondents were not sure or believed that the answer varied from AHEC to AHEC. Two respondents believe the medical schools should assist the AHECs to a greater degree. The AHECs were recognized for their assistance with supporting opportunities to enable medical school students to learn more about and work in Free Clinics.
Improved recruitment and retention of primary care providers in medically underserved areas?	4	0	Many respondents were uncertain about this question. They thought it varied or that it was not applicable or that they had no experience with this effort. One respondent stated several regional AHECs have reduced isolation of rural physicians and improved retention. Another stated that while most of the AHECs help with recruitment, more leadership and support are needed at the state level because Virginia's efforts are not as aggressive as those of North Carolina's. Two cited www.ppova.org as a great example.

Improved quality, utilization, and efficiency of community providers?	3	0	Seven respondents were not sure. One commented the AHECs serve a useful role in identifying community teachers and sites. Another commented that this is really a medical school function but that by providing superb services like the interpreter program, they improve the efficiency of the providers.
Improved primary care access and health status for underserved populations?	5	0	One respondent stated this is not a good question because the AHECs are not health care providers and are not intended to be providers. Another stated the statewide Program Director is good at networking which is essential for this task. Another stated this is not really the role of AHECs but that their success varied from AHEC to AHEC. Two respondents stated they were not sure.
Developed health careers recruitment programs for Virginia's students, especially underrepresented and disadvantaged students?	10	0	One respondent stated, "I find this to be an incredible strength of those programs that focus on this." Another said the AHECs have "good-to-excellent" programs. Another praised the Health Careers Manual. Finally, another partner stated, "AHEC has been particularly effective at planning programs in rural areas that recruit youngsters to health careers. Rural hospitals have appreciated the partnerships they have with the AHECs."
Supported community-based training of primary health professions students?	8	0	The medical school respondents and a Free Clinic respondent were particularly positive. One stated it still receives money to house its students.
Provided educational and practice support systems for the Commonwealth's primary care providers?	7	1	Four respondents were not sure. One queried whether this was an [appropriate] mission. The Rappahannock AHEC was praised for its assistance in setting up computer systems in physician offices and providing training.
Collaborated with health, education, and human services organizations to facilitate and promote improved health education and disease prevention among citizens of the Commonwealth?	8	1	One respondent did not believe this question represented an AHEC mission. A number of respondents were not sure.

The above survey suggests the role of the Virginia AHEC program may not be well understood by its partners. However, it is also very clear that the programs it provides are well received in spite of the lack of a strong mission. Its role in recruitment and retention of health care practitioners was least understood. This result is consistent with the prior finding by Andrew W. Nichols who stated this area overlapped with other program responsibilities in the state.

According to the survey respondents, the AHEC successes are in providing educational and practice support systems for the Commonwealth's primary care providers and collaborating with health, education, and human services organizations to facilitate and promote improved health education and disease prevention among citizens in the Commonwealth. This result is interesting because the AHEC peer reviewers found the first area to one in need of improvement and the second area was not well described in the grant application. This finding suggests the Virginia AHEC programs partners believe they perform well in these areas and that the next grant application should reflect this success.

One of Virginia Department of Health's primary conclusions from this study is that the AHECs need to be more accountable to the Governor and to the General Assembly. This can best be accomplished through expanded reporting requirements for the AHEC program. An annual report should be required. The annual report should include a summary of the peer review evaluation and any other evaluation prepared by the federal government. The report should include information regarding its attempts to address the weaknesses identified in the peer-review process as part of its annual report. In addition, it should quantify program participants and outcomes so as to document the quality of its programs.

The information provided should include a detailed description of how the Virginia AHEC program compares to the federal evaluations of other AHEC programs in HRSA Region III states as well as states that border Virginia. This information would allow the Virginia AHEC program to better assess its own strengths and weaknesses.

The statewide AHEC program office should be required to include a section in the annual report mentioned above concerning its success in securing private or federal grant funds for the Virginia AHEC program. The overall success or failure of this activity should serve as a litmus test for whether the Virginia AHEC program should be restructured organizationally.

Finally, the annual report should also include a section regarding community AHEC involvement in telemedicine activities. Telemedicine represents an important tool regarding both access to health care in rural areas as well as support for community based training. Its uses for AHEC activities are unlimited.

The statewide AHEC program office should be required to include information in the AHEC program's annual report concerning its success in securing private or federal grant funds as well as its attempts to secure funding for the Virginia AHEC program.

This annual report requirement should be in addition to the report requirement found in the Appropriations Act that the Virginia AHEC program report on the actions taken to secure non-state funding to support AHEC activities, as well as documenting that a cash match of at least 50 percent of the funds provided by the Commonwealth was obtained. The two reporting requirements can be combined into a single document.

Recommendation #3 - The Code of Virginia should be amended to require the AHEC program to submit an annual report to the Governor and to the General Assembly. This annual report should include:

- Documentation of a needs assessment within each AHEC's service area, and a description of how programs have been developed that are reflective of community need.
- Detailed description of how the Virginia AHEC program compares to the federal evaluations of other AHEC programs in HRSA Region III as well as to states that border Virginia.
- Community AHEC involvement in telemedicine activities.
- Attempts to address weaknesses identified in the peer review process
- Quantify program participants with outcomes so as to document the quality of its programs.

Recommendation #4 : The Virginia General Assembly should continue to fund the AHEC program for fiscal years '03 and '04.

IX. Assessment of Need for Continued State Funding for Statewide Office

History of Statewide Office

As noted in an earlier section, the AHEC grant application envisioned a statewide AHEC office that would provide direction across institutions and oversee the implementation of programmatic objectives. This structure was believed to be necessary because it would allow the Virginia AHEC program to more expeditiously carry out the federally mandated objectives. The five reasons listed in support of this structure were:

1) the three state medical schools were largely autonomous with no existing mechanism for state funding of joint programs, and a separate AHEC corporate structure is needed to ensure equal representation and professional participation from these institutions;

2) the long-term success of the Virginia AHEC program will be linked closely to other statewide initiatives, therefore a constituency formed to address manpower distribution will be critical because it would be impossible for any one of the academic medical centers to develop this level of support to the other participating institutions;

3) Virginia's efforts to improve primary care delivery will need a separate identifiable coalition to sustain interest and support for the interventions necessary to solve the manpower distribution problem- the proposed governing structure will create a coalition through broad based state advisory council, discipline-oriented statewide task forces, and local governing and advisory boards for each community AHEC;

4) the development of a Virginia statewide AHEC system was spawned by a desire to improve access to care for all Virginians, with particular emphasis on those localities defined as medically underserved areas and/or health professional shortage areas; and

5) the survival of the AHEC program is clearly contingent upon obtaining long-term financial support from the state, a separate corporation that advocates for a number of initiatives designed to improve the overall health care system will be in a strong position to request and to receive such funding.

The current relevancy of each of these arguments needs to be examined. While it is true the three medical schools in Virginia are largely autonomous organizations with separate governing boards and few existing ties to one another, it is not true that there is no existing mechanism for state funding of joint projects among the three. The Commonwealth funds the family practice programs which are cooperative programs involving all three medical schools. Each of the three medical schools also has a Center for the Advancement of Generalist Medicine. There are currently no problems with this funding mechanism. In addition, these funding mechanisms do provide at least one tie among the three, therefore the statement that the three have few existing ties to one another is questionable. Therefore, circumstances supporting the first reason cited in the HRSA AHEC grant application for a need for a separate statewide office are no longer evident.

The second reason stated in the HRSA grant for a separate statewide AHEC office is that the long-term success of the Virginia AHEC program will be linked closely to other statewide initiatives, therefore a constituency formed to address manpower distribution will be critical because it would be impossible for any one of the academic medical centers to develop this level of support to the other participating institutions. This suggests a constituency is necessary to address statewide manpower distribution because absent such a constituency, each medical school is incapable of supporting initiatives that benefit the Commonwealth as opposed to its own service area. This argument is unavailing today because there are a number of programs that demonstrate the medical schools' ability to collaborate for the common good of Virginia such as the Virginia Generalist Initiative and the other programs mentioned above.

The third reason in support of a separate statewide AHEC office offered in the initial HRSA grant is that Virginia's efforts to improve primary care delivery need a separate identifiable coalition to sustain interest and support for the interventions necessary to solve the manpower distribution problem. It was thought that the proposed governing structure will create a coalition through broad-based state advisory council, discipline-oriented statewide task forces,

and local governing and advisory boards for each community AHEC. This reason is similar to the second reason explained above. It suggests a constituency is necessary to improve the primary care delivery challenges because each medical school is incapable of supporting initiatives that benefit the state as opposed to its own service area. For the reasons stated above, it appears that while this argument may have been sustainable when the grant was submitted, it is difficult to support today.

The fourth reason given in support of a separate the development of a Virginia statewide AHEC program office was that the idea was spawned by a desire to improve access to care for all Virginians, with particular emphasis on those localities defined as medically underserved areas and/or health professional shortage areas. Like the first three reasons above, this objective can be accomplished without a Virginia statewide AHEC program office.

The final reason in support of a separate statewide AHEC program office is that a separate corporation that advocates for a number of initiatives designed to improve the overall health care system will be in a strong position to request and to receive state funding. This argument is a very powerful one yet it needs to be broadened to adequately capture the essence of the need for a statewide AHEC office. The statewide AHEC program office is strategically situated to draw upon the collective strength of the Virginia AHEC program and as such it has the potential to offer a benefit that no other community AHEC can offer. It is in a strong position to request and to receive many types of outside funding, not limited to state funding sources. The statewide AHEC program office can apply for grants, on behalf of the statewide AHEC program, that require a statewide presence. Because it represents the entire Virginia AHEC program, it would be an eligible candidate for such grants while the community AHECs that represent only a segment of the state would not.

The assertion that the statewide AHEC program office is a superior grant candidate as opposed to the community AHECs represents a strong reason for the continuation of a statewide AHEC program office. As noted above, the Regis Group survey participants strongly believed the statewide AHEC office should be, among other things, providing technical assistance for grant writing. Participants in the strategic planning exercise agreed that the statewide AHEC program office should devote more of its time to this effort. Since that time the statewide AHEC program office has identified a number of funding opportunities. It has secured funding in the amount of $15,000 for a CD version of "Volunteers in Action" and $60,016 for a Summer Community Health Fellowship Program from the Virginia Primary Care Association. It has requested funding from the HRSA Model AHEC Bioterrorism Supplement and the Robert Wood Johnson Leadership Program as well as the Virginia Department of Health's Chronic Disease Prevention program. This renewed focus for the statewide AHEC program office is crucial because both federal and state AHEC funds may not be as readily available as they have been in the past. The Virginia AHEC program's reliance on non-governmental AHEC funding will necessarily have to increase if the program is to continue.

A 1995 Joint Commission on Healthcare report explored an option recommending the elimination of the statewide AHEC program office. As a part of the proposal the eight local

AHECs would be consolidated into three, one at each of the academic health centers. The proposal in its entirety suggested eliminating the statewide AHEC program office and funding three separate regional AHECs. Under this scenario, the state would be divided into three regional AHEC territories for which the three academic health centers would be responsible. The consolidation of resources makes sense in times when fiscal restraint is being exercised. However, if the statewide AHEC office is successful in its attempts to secure outside funding on behalf of the Virginia AHEC program and the community AHECs continue to leverage funds as well as other resources, then the elimination of the statewide AHEC office may prove to be an unwise move. However, the annual report should be the vehicle upon which the Virginia statewide office justifies its existence. The document should also advocate the current AHEC structure that includes eight community AHECs so as to ward off any suggestions in the future that three community AHECs are sufficient.

Recommendation #5: The role of the statewide Virginia AHEC office should be re-evaluated in two years by the Virginia Department of Health to determine whether it has fulfilled the aforementioned expectation. Its two annual reports should provide the information necessary to make a decision regarding the need for its continued existence.

Current AHEC Statewide Program

The Program Director for the Virginia Area Health Educations Centers Program is responsible for providing leadership for the Virginia Statewide AHEC system with regard to vision, mission and strategic direction, program management, resource development and fiscal management, operations management, and marketing and advocacy. She is responsible for establishing long and short-term goals and objectives for the program, represents the program in state and federal legislative issues, cultivates funding sources for sustainability and expansion of program activities and performs other duties as necessary to ensure the successful operation of the program. She performs these general functions under the general direction of the VCU Vice President for Health Sciences and the Virginia Statewide AHEC Board in Directors and in collaboration with the AHEC program advisory group.

The program administrative assistant reports to the program director and is responsible for oversight of the daily operational details of the statewide office. She assumes responsibility for establishing and maintaining office policies and procedures in five key areas: general administration and personnel, program management, data management, fiscal administration, and board governance affairs with guidance from the program director. She provides technical assistance for projects requiring a variety of skills in graphics, software mapping, and desktop publishing.

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VA-AHEC Program Office State Appropriation 1991-2004: Totals and Allocations

Year	VA-AHEC Program Office	Eastern Virginia AHEC	VCU Regional AHEC	UVA Regional AHEC	Sub-Contracts to Community AHEC Programs	VA-CAGM Program Office	UVA-CAGM Program	EVMS-CAGM Program	VCU-CAGM Program	VDH Subs to AHECs	Totals
91-92	$9,590	$105,000	$17,705	$17,705							$150,000
92-93	$13,000	$195,000									$208,000
93-94		$200,000									$200,000
94-95	$15,000	$219,850	$5,150								$240,000
95-96	$4,000	$200,920	$17,539	$17,541		$47,824	$8,415	$6,000	$55,900		$358,139
96-97	$2,000	$200,900	$28,000	$9,100		$65,824	$2,415		$49,900	$300,000	$658,139
97-98					$40,000	$55,644	$2,415		$60,080	$835,000	$993,139
98-99					$40,000	$68,239			$49,900	$900,000	$1,058,139
99-00					$40,000	$68,239			$49,900	$1,000,000	$1,158,139
00-01					$40,000	$68,239			$49,900	$1,000,000	$1,158,139
01-02					$40,000	$68,239			$49,900	$1,000,000	$1,158,139
02-03					$40,000	$68,239			$49,900	$900,000	$1,058,139
Total	$43,590	$1,121,670	$68,394	$44,346	$240,000	$510,487			$415,380		$8,398,112

The above table provides a history of how the Virginia statewide AHEC program office has used its state funds since the inception of the Virginia AHEC program. The Virginia statewide AHEC program office staff members are paid through federal funds.

The $40,000 in state funding for the statewide AHEC office functions as a pass-through to the community AHEC programs. This amount is referenced above in the sub-contracts column. The budget language requires this money to be "used to supplement the student recruitment and admissions initiatives at Virginia's three medical schools and the Virginia Statewide Area Health Education Centers Program." Hence, the money is to used solely for recruitment and admissions initiative efforts. In its October 1, 2002 report to the Virginia Department of Health the Virginia Statewide AHEC Office stated these funds were divided among five lower-funded community AHECs as follows:

- The Southwest Virginia AHEC received $8,000 to offset expenses incurred during its Health Careers Summer Institutions for students interested in pursuing medical health careers. Expenses included room and board, meals, lab coats, activity supplies, speaker fees and travel. Thirty-nine high school students attended Institutes at the University of Virginia's College at Wise and at Radford University. Students visited health care facilities, shadowed professionals at work; completed hands-on science projects; attended lectures; and visited medical schools.

- The Greater Richmond AHEC (GRAHEC) received $8,000 to partially cover salary and fringe expenses for the full-time position of executive director and CEO to develop, implement, and evaluate the programmatic, development, and administrative activities. The GRAHEC supports clinical training programs for health professions students in settings that target medically underserved populations. Equally important, the GRAHEC continues to build a very significant health careers promotion program for students and

their teachers and parents, many of whom are interested in medicine. The GRAHEC recently received national recognition from the National AHEC Office for the quality of its programs.

- The South Central AHEC received $8,000 to implement four summer Health Careers Exploration programs. Two programs open to middle school students are offered at various locations, including Lynchburg College, Averett College, and Patrick Henry Community College. This week-long program includes anatomy, chemistry, biology, and introduction to health careers. Two programs open to rising high school juniors and seniors are offered at Lynchburg College and Patrick Henry Community College. High school participants expressing an interest in medical health careers are selected by competitive application. This week-long program includes job shadowing, college level anatomy, chemistry, biology, physics, field trips, team building and college preparation.

- The Rappahannock AHEC received $8,000 to continue implementation of programs focusing on community-based medicine workforce development. An emphasis on health professional students and practice site support requires on-going attention to the maintenance and expansion of educational partners, technology solutions and community capacity development. In order to increase the numbers of generalist physicians in their medically underserved areas, the Rappahannock AHEC developed and produced "Rural Practice," a manual highlighting the rewards of primary care practice. Copies of this manual are regularly distributed to medical students who perform their clinical rotations in Rappahannock AHEC's rural areas in order to stimulate their interest in rural primary care medicine.

- The Northern Virginia AHEC received $8,000 for the recruitment and training of members of the area's multicultural community to serve that community's needs for generalist physicians. This was accomplished by 1) recruiting and training bilingual community members to become health care interpreters; 2) encouraging those interpreters to further their education in medical health careers; and 3) educating and supporting current health care providers to enable them to utilize the skills of these interpreters fully and appropriately.

As is demonstrated by the above, the statewide AHEC program office chooses to disperse the $40,000 in state funds it receives to some of the community AHECs. The historical reality of this money is that it does not remain in the statewide AHEC office. It can also be argued that while this allocation by the statewide AHEC program office complies with the spirit of the law regarding its use for recruitment efforts, some of the activities above suggest it may not comport with the letter of the law. The removal of these funds from the statewide AHEC program office does not eliminate the existence of the statewide AHEC program office.

As stated earlier, the statewide AHEC program office is paid for with federal funds and it relies upon federal funds to support its activities. At issue, however, is whether there is a need for continued state funds for the statewide AHEC office. In essence, although the statewide AHEC

office does not utilize the funds, it still has a right to them despite its choice to disperse these funds.

Recommendation # 6- Introduce a budget amendment requiring the $40,000 in state funds for the statewide AHEC Program Office to be distributed equally to all community AHECs to further the purposes of the recruitment efforts of the Virginia Generalist Initiative. The community AHECs should be required to account for the use of these funds in the AHEC program's annual report. This action would d assure that the funds are used for their intended purpose.

X. Summary of Conclusions and Recommendations

As previously mentioned, Virginia faced a number of health resource challenges when it was considering to develop a statewide AHEC program. Fifty-two of its 136 counties and independent cities were designated by the federal government as medically underserved areas (MUAs) and/or health professional shortage areas. Today, 102 of Virginia's counties or independent cities have either a state or federal health shortage area designation. That figure suggests that the state's health workforce needs have become more acute. The problem regarding the lack of health care access by a substantial number of Virginia residents still exists although collaborative efforts are now underway to combat this issue.

The Virginia AHEC partners need the Virginia AHEC program to remain the keystone of the Five Point Plan that is still in implementation. The Virginia Primary Care Association plans to add 27 new access sties to its existing community health center organizations. It predicts the new sites will serve 74,000 new users and will require recruiting approximately 80 new providers and 220 new support staff. The Virginia AHEC statewide program can easily plan an important role in the recruitment effort. The Virginia Department of Health has convened a Health Workforce Advisory Committee to assist the Commissioner in health care recruitment and retention issues. The AHEC program has representation on that committee and will likely play a major role in that collaborative effort. The Virginia Department of Health also relies heavily on the collaborative efforts by it and the community AHECs to maintain the primary care recruitment website- www.pppva.org. The Virginia Health Care Foundation relies on AHEC members in its attempts to increase awareness of its loan programs. Finally, the introduction of another medical school in Virginia represents a great source of opportunity for collaboration on health access issues. In recent years the Virginia Generalist Physician Initiative has watched its total percent of medical school graduates from the state's three medical schools entering generalist residency programs decrease from its all-time high of 59% in 1997 to 48% in 2002. In essence, the Virginia AHEC program is needed today now more than ever.

The intent of the AHEC program is to improve health care access by achieving better geographic and specialty distribution of health care practitioners through emphasizing medical and dental education in underserved areas. The objectives are to increase the supply and geographic distribution of health care practitioners, particularly primary care providers, in underserved areas, thereby improving accessibility of health care services. It is clear the Virginia AHEC program has many programs that have the potential to increase the availability of primary care providers. However, one weakness of the program is a lack of empirical data to support the assertion that it has, in fact, increased primary care provider availability.

What the Virginia AHEC program has not done is document its successes on a statewide basis. Its partners have been directed by statute or have taken the initiative to report on how their funds have been used. They have used that opportunity to describe the successes of their programs. The Virginia AHEC program needs to be accountable to the Commonwealth of Virginia for the funds it receives. An detailed annual report would serve to both inform policymakers of its many programs as well as dissipate any criticism regarding its program

participants. For example, the issue regarding whether funds from the Health and Human Resources Secretariat should be used to support health career education or science education in general or whether that responsibility should rest with the Secretary of Education could be debated with appropriate information regarding the advantages and disadvantages of such funding. A healthy debate on this issue can not take place in the absence of adequate information. The vehicle by which the Virginia AHEC program should be held accountable should be a programmatic annual report like the one described above.

Finally, the Virginia AHEC program should continue to address the health care access problems experienced by Virginia residents. Whether it utilizes traditional or innovative programs is not as important an issue as whether its programs should be financially sustained. However, there should also be an understanding of their limitations and a continuing analysis of their relationship to other programs and policies.

Summary of Recommendations:

The Virginia General Assembly should continue to fund the AHEC program for the next year and introduce language into the Code of Virginia requiring it to submit a detailed programmatic annual report to the Chairmen of the Senate Finance Committee, the House Appropriations Committee, and the Joint Committee on Health Care. The annual report should require the community AHECs and the statewide AHEC program office to demonstrate, among other things, that they have performed a needs assessment within their respective communities and that they have designed programs reflective of that community need. The programs should be evaluated and the results should be summarized in the report. The demand for AHEC services within the community AHEC service areas should likewise be made apparent. This information could assist legislators in deciding whether there is a need for eight local community AHECs, as broached in the aforementioned Joint Commission report or whether another structure might be appropriate.

The annual report should include a summary of the peer review evaluation and any other evaluation prepared by the federal government. The report should include information regarding its attempts to address the weaknesses identified in the peer-review process as part of its annual report. In addition, it should quantify program participants and outcomes so as to document the quality of its programs.

The information provided should include a detailed description of how the Virginia AHEC program compares to the federal evaluations of other AHEC programs in HRSA Region III states as well as states that border Virginia. This information would allow the Virginia AHEC program to better assess its own strengths and weaknesses.

The statewide AHEC program office should be required to include a section in the annual report mentioned above concerning its success in securing private or federal grant funds for the Virginia AHEC program. The overall success or failure of this activity should serve as a litmus test for whether the Virginia AHEC program should be restructured organizationally.

Finally, the annual report should also include a section regarding community AHEC involvement in telemedicine activities. Telemedicine represents an important tool regarding both access to health care in rural areas as well as support for community based training. Its uses for AHEC activities are unlimited.

This annual report requirement should be in addition to the report requirement found in the budget that the Virginia AHEC program report on the actions taken to secure non-state funding to support AHEC activities, as well as documenting that a cash match of at least 50 percent of the funds provided by the Commonwealth was obtained. The two reporting requirements can be combined into a single document.

The Code of Virginia should be amended to allow for the community AHECs to exercise creative programmatic approaches to address the issue of health care access. The current language appears to limit AHEC activity to the four major areas of program activity. If the overall goal of the AHEC program is to address problems related to health care access, and if the greatest strength of the AHECs is their ability to respond timely to quickly evolving health access issues, then the language of the Code should not be as restrictive as it is currently written. The cultural competence programs offered by the Northern Virginia AHEC is but one example of a program that has tremendous ability to improve health care access for a significant part of the northern Virginia population, yet because it does not fit within one of the four categories identified by the Code its significance is lost in any worthwhile evaluative process. The Code should be amended to add a fifth category that allows for other program activities as appropriate, so long as their efficacy in promoting health careers and access to primary care is well documented.

Because the AHEC funds to support the goals of the Virginia Generalist Initiative Program and its recruitment and admission activities do not remain in the statewide AHEC office and because they may have been dispersed for reasons other than their allowable purpose pursuant to the budget language, it is recommended that these funds be distributed equally to the community AHECs in the future with the stipulation that they be used solely as intended. Finally, the Code should be amended to require a review of the statewide AHEC office relative to the expectation that it will be successful in securing outside funding.

XII. Appendices

§ 32.1-122.7. Statewide Area Health Education Centers Program.

A. The Virginia Statewide Area Health Education Centers Program (AHEC) is a collaborative partnership conducted under the auspices of the Virginia Statewide AHEC Board of Directors. Generally, AHECs are nonprofit organizations with a governing or advisory board of individuals representing the services area. The mission of the Area Health Education Centers Program is to promote health careers and access to primary care for medically underserved populations through community-academic partnerships. The mission of the Virginia Statewide AHEC Program is accomplished through the following four major areas of program activity: (i) developing health careers recruitment programs for Virginia's students, especially underrepresented and disadvantaged students; (ii) supporting the community-based training of primary care health professions students, residents, and other health professions students in Virginia's underserved communities; (iii) providing educational and practice support systems for the Commonwealth's primary care providers; and (iv) collaborating with health, education, and human services organizations to facilitate and promote improved health education and disease prevention among the citizens of the Commonwealth.

B. The Board of Directors shall report annually the status and progress of the implementation of the Program's goals and objectives to the Secretary of Health and Human Resources, the State Board of Health, and the Governor and the General Assembly. The annual report shall also include a detailed summary of how state general funds appropriated to the Virginia Statewide AHEC Program and the local AHECs were expended during the most recently completed fiscal year.