



**2003
Third Annual
REPORT TO THE SECRETARY
DEPARTMENT OF HEALTH AND HUMAN SERVICES
and to the
CONGRESS**

**RECOMMENDATIONS
Interdisciplinary, Community-Based Linkages
Title VII, Part D
Public Health Service Act**

**National Advisory Committee on
Interdisciplinary, Community-Based Linkages**



The views expressed in this document are solely those of the Advisory Committee on Interdisciplinary, Community-Based Linkages and do not necessarily represent the views of the Health Resources and Services Administration or the U.S. Government.

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Executive Summary

Previous Findings and Recommendations

The National Advisory Committee on Interdisciplinary, Community-Based Linkages (the Committee) views community-based, interdisciplinary training as the most effective way to prepare the Nation's health care workforce to meet the needs of our most vulnerable populations including the socioeconomically disadvantaged and geographically isolated as well as the elderly, children, and disabled people. The Federal Community-based, Interdisciplinary Training Grant Programs can also help providers learn how to overcome cultural and linguistic barriers with patients and prepare workers to deal with emerging health needs associated with contemporary issues such as chemical and biological terrorism.

Committee members have diligently reviewed the Programs under the auspices of its authorization. The Committee has made recommendations aimed at strengthening the capacity of these programs to meet the needs for a highly qualified, culturally competent health care workforce that is also geographically well distributed in the Nation's shortage areas.

In previous Annual Reports, the Committee's recommendations were based on findings gleaned from expert testimony, various data and information provided by the Health Resources and Services Administration (HRSA), as well as the personal observations and experiences of Committee Members who are well acquainted with the grant programs and the nation's needs for health care. The Committee feels that these past recommendations are as relevant today as they were at the time of their original publication. Priority findings and recommendations published in the initial Annual Reports are summarized below.

- Congress and the Secretary should reauthorize the Title VII, Part D, Section 751-756 Grant Programs and provide funding at a level that is no less than and even more than appropriated in Fiscal Year 2003.
- The Secretary should use the administrative tools of "preferences and priorities" for making grant awards that are "truly interdisciplinary," and Congress should authorize a new grant program that demonstrates model interdisciplinary training that addresses the Nation's most pressing needs in health care.
- Federal health agencies such as the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), and others should establish formal agreements with funding arrangements with HRSA to engage the participation of the Programs' grantees in disseminating emerging health information and practice guidelines that will ensure the competency of the Nation's health care workforce.

- HRSA and Congress should find new ways to recognize the critical need for training “Allied Health” professionals through better recognition in legislative and administrative language, and inclusion of Allied Health training in other currently authorized grant programs.
- The “diversity” of the health care workforce must be improved through measures that enhance the capacity of these Programs to achieve such outcomes.

In the Committee’s review of the statutes governing the administration of the Community-based, Interdisciplinary Training Grant Programs, the Committee found that there were several changes that would strengthen these Federal efforts. These statutory changes are discussed in greater detail in the Second Annual Report, but can simply be described as the following proposed actions.

- Redefine and expand the list of “Allied Health” professions that are eligible for Federal sponsorship described in the administrative language of Allied Health grant awards.
- Expand the legislative authority dealing with Chiropractic research to include interdisciplinary training for Chiropractic students so as to increase the number of individuals trained in Chiropractic medicine and the number of other health workers who are familiar with Chiropractic medicine.
- Develop a new legislative initiative that authorizes support for graduate training for behavioral and mental health providers. This new section should incorporate the current Federal support for Graduate Clinical or Counseling Psychology and should also be broadened to include other disciplines such as Clinical Social Work.
- Move the current legislative section defining the grant program for training Podiatric physicians to that part of the Public Health Service Act that includes training grants in family medicine, general internal medicine, and other discipline-specific medical practices. The relocated section in Podiatric Medicine should receive a separate appropriation, apart from that which currently funds Allied Health programs.
- Reauthorize the National Advisory Committee for Interdisciplinary, Community-Based Linkages. The Committee’s authority expires with Title VII and its continuation requires Congressional action by including it in the renewal of the law.

In the Second Annual Report, the Committee also recommended various strategic directions in training health professionals and students that improve health care in the nation. These matters necessitate both legislative and administrative actions. The Committee plans to address the following “strategic directions” in its future meetings:

- Improvement of the racial and ethnic diversity of the health care professions;
- Enhancement of the status of Allied Health; and

- Greater coordination of the work of this National Advisory Committee with other Federal Advisory Committees and Task Forces, in part by seeking cross-representation on each other's groups, perhaps in an ex-officio capacity.

Recommendations – Third Annual Report

In the present report, the Committee addresses two important matters: 1) outcomes and performance measures; and 2) the role of the grant programs in training health care workers to cope with the effects of chemical and biological terrorism.

The Committee's findings and recommendations regarding measurement of outcomes and grantee performance apply generally to all those training grants managed within HRSA's Bureau of Health Professions (BHPr). In brief, these recommendations are listed below.

- Report performance measures that more completely describe changes in outcomes associated with the status of a community's health and economic impact.
- BHPr should work with monitoring agencies such as the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO) to agree upon performance measures that also include the use of qualitative data.
- HRSA and BHPr should develop a mechanism for sharing performance measure data within the Bureau, HRSA, and across Department of Health and Human Services agencies, and with grantees in order to promote more effective and efficient approaches to meeting the health needs of the nation.
- Congress should appropriate funding for evaluation, the development of educational research models, and tracking long-term outcomes associated with the Grant Programs.

The threat of chemical and biological terrorism requires that the Nation's health care workforce be prepared to render appropriate services in such emergencies as well as to cope with the long-term consequences of attacks. While several Federal agencies manage grant programs aimed at training health care professionals, the Community-based, Interdisciplinary Training Grant Programs address educational needs of many health care workers who are not otherwise included in these other grant projects. Also, the Community-based Grant Programs include "center" systems such as Area Health Education Centers (AHECs), Health Education and Training Centers (HETCs), Geriatric Education Centers (GECs) and others that have an existing infrastructure for immediately delivery of training programs to health care workers in rural, remote areas and inner-cities.

With respect to curriculum development and training related to bioterrorism, the Committee makes the following recommendations:

- The HRSA Administrator should ensure development of a national consensus regarding core competencies for the curricular objectives and necessary elements in teaching bioterrorism and emergency preparedness.
- Funding should be made available to provide quality continuing professional education to a wide range of practicing health care professionals in every state.
- Grants should be made to Academic Health Centers and/or consortia of health professions schools or programs to develop new or adapt existing curricula to train students and medical residents in bioterrorism preparedness.
- Other DHHS and HRSA “bioterrorism and emergency preparedness” initiatives should be linked with BHP Division programs.

In the following report, the Committee offers rationale and potential benefits associated with each of these recommendations. The Committee is committed to pursuing implementation of these ideas.

I. Introduction

Background

In 1998, the Congress of the United States, recognizing the beneficial impact that interdisciplinary community-based linkages can have upon the quality and availability of health care services to populations that have traditionally been underserved or are otherwise medically vulnerable, adopted legislation authorizing grant funds to support the development of such linkages. The legislation, set forth in Title VII, Part D, of the Public Health Service Act ("the Act"), identified five sets of programs, all with the central mission of training and education, deemed to be particularly endowed with the potential for beneficial linkages of this nature. The programs were as follows:

- Area Health Education Centers (Section 751);
- Health Education and Training Centers (Section 752);
- Geriatric Education and Training Programs (Section 753);
- Quentin N. Burdick Program for Rural Interdisciplinary Training (Section 754); and
- Entities engaged in education and training for the Allied Health professions and other disciplines (Section 755).

Although these programs differ in detail, they share a common element: each has the potential for fostering the development and application of interdisciplinary, community-based linkages. This occurs in areas where such linkages are most urgently needed, on health care delivery issues of greatest concern from a community standpoint, and it targets populations that are especially vulnerable or underserved.

The mission of Part D, Interdisciplinary, Community-based Linkages of Title VII, Health Professions Education, is to assure that there is a workforce that can meet the health needs of state, local, and rural populations of the nation, especially those with unserved, underserved, vulnerable, and disadvantaged populations; a workforce that can respond effectively to new and demanding health priorities. "Interdisciplinary" and "community-based" training are two educational strategies that help to prepare health professionals who are both knowledgeable of and sensitive to the needs of these populations because they worked with and for them in the course of their education. These initiatives are effective ways to ensure that there will be an adequate health workforce to meet the needs of communities, particularly those with at-risk populations.

Thus, an important component of Part D, Title VII is to integrate "interdisciplinary" and "community-based" concepts into the training of health professionals. Given the diversity of the health care workforce, incentives for these professionals to work together in teams have become

imperative. Moreover, these incentives should target education in community-based settings to optimize the delivery of the public's health care and to minimize health care needs based on the goals and priorities established by Healthy People 2010. Also, by using interdisciplinary educational strategies, the quality of interactions among the professionals, quality of communications with the patient, and quality of actual services delivered will improve.

Compelling Need for Interdisciplinary Community-based Linkages Programs

These Interdisciplinary Community-based Linkages Programs (ICBLP), by virtue of their mission, prepare the future health professions workforce to meet the current and future health needs in our society. These programs are unique as the education and clinical training of the future health workforce is targeted on the care of this country's growing vulnerable and underserved populations in community settings. These populations include: the poor, homeless, frail elderly, ethnically and racially diverse, migrant, immigrants, rural, and incarcerated groups. Using preventive, primary care and population-based approaches to health care, these programs educate the future generation of health professionals to deliver culturally competent, clinical and public health services in underserved communities. The integration of interdisciplinary and community-based concepts into the training of health professionals through these programs has demonstrated its efficacy in preparing a diverse national health workforce to provide culturally competent, high-quality care to these populations. The public's health is enhanced through the population-based services delivered by these health professions learners and faculty, ultimately expanding the capacity of the current health workforce.

Population projections predict that the U.S. will almost double its older population to 70 million people by the year 2030 and increase its very-old population five-fold to 19 million in 2050.

Without Title VII Part D programs, interdisciplinary health professions education would be severely restricted and access to care for underserved and vulnerable populations would be reduced. Furthermore, the anticipated growth in these populations is expected to stretch health professions education and training resources well-beyond current and future capacity. Health professions' schools, deluged by these demands, are limited by the lack of available institutional resources targeted at institutionalizing service to communities. In addition, the distribution and diversity of the health workforce in these community-based settings frequently is not well-matched to the populations it serves, further limiting access to care. This combination of factors mandates the critical need for Federal and State support for these interdisciplinary, community-based programs.

These looming projections have been exacerbated in the wake of September 11, 2001. The health care concerns associated with bioterrorism, emergent infections and epidemics require collaboration across public health and primary care as well as interdisciplinary teamwork. As examples, the increased incidence of West Nile Virus, anthrax, and terrorist activities over the past year, calls for higher levels of collaboration across systems of public health and primary care. These real threats to human health could be addressed through the efficient integration of existing Interdisciplinary Community-based Linkages Programs mobilizing

academic/community partners to use population-based approaches to health. Through teamwork among health care providers, partnerships with public health and communities, and innovative education and clinical training programs, can expand new and existing programs in a cost-effective manner, avoiding duplication and fragmentation.

Community Benefits of Interdisciplinary, Community-Based Linkages Programs

The ICBLP offer real world experiences for community-based primary care education and training for health professionals, students, faculty, and community health workers. The value and benefits of each of the ICBLP are described in Chapter 2. Community benefits and outcomes that exemplify the overall annual impact of these programs are described below:

- Since 1972, interdisciplinary community- based linkages programs have provided education and training to develop and expand the Nation’s health workforce, thereby improving access to care for this country’s most vulnerable populations.
- Federal investment in interdisciplinary community-based programs has developed more than 180 academic/community partnerships.
- Interdisciplinary community-based programs link naturally with 530 Community Health or Migrant Health Centers and 170 National Health Service Corps training sites.
- More than 40,305 health professions students are educated and clinically trained through the interdisciplinary community-based linkages programs.
- More than 340,000 students from K-12 participated in health professions career recruitment programs.
- More that 194,000 health professionals participated in Continuing Education Programs.
- More than 70,800 individuals benefited from the delivery of health promotion programs provided by trainees.

Formation of the Advisory Committee for Interdisciplinary, Community-Based Linkages

In addition to the programs identified in Sections 751 through 755 of the Act, Section 756 authorized establishment of a committee, termed the Advisory Committee on Interdisciplinary, Community-Based Linkages, to which it assigned the following duties and responsibilities:

- Provide advice and recommendations to the Secretary concerning policy and program development and other matters of significance concerning the activities under this part; and
- Not later than 3 years after the date of enactment of this section, and annually thereafter,

prepare and submit to the Secretary, and the Committee on Labor and Human Resources of the Senate, and the Committee on Commerce of the House of Representatives, a report describing the activities of the Committee, including findings and recommendations made by the Committee concerning the activities under this part.

Section 756 further directed that:

- Appointments to the Committee be made from among individuals who are health professionals associated with schools of the types described in Sections 751 through 755;
- A fair balance be maintained among the health professions, with at least 75 percent of the appointees being health professionals;
- Broad geographic representation and a balance between urban and rural members be maintained; and
- Adequate representation of women and minorities.

A 21-member committee meeting these requirements was appointed by the Secretary and assigned a charter with an effective date of March 24, 1999. The charter was subsequently renewed on March 22, 2001 and March 23, 2003.

II. Grant Program Characteristics

Overview of Grant Programs

The five grant programs that are authorized by Part D, Sections 751 through 755 of the Public Health Services Act and that are under the purview of the Advisory Committee include:

- Area Health Education Centers (AHECs);
- Health Education Training Centers (HETCs);
- Geriatric-Related Education and Training;
- Quentin N. Burdick Program for Rural Interdisciplinary Training; and
- Allied Health Program.

While these programs focus on different constituencies, they all provide training for health professions students, medical residents and local providers in community settings. In addition, they provide a key link between the academic health institutions and communities.

Without the Federal support provided by these programs, communities of persons who are vulnerable and often ignored by our traditional health care system would be denied access to primary and preventive health care. These populations include the elderly, rural residents, inner-city minorities, and those with special needs who live in U.S./Mexican border areas.

While distinguished by their different target populations, these programs share the following common goals:

- To increase the numbers of health professionals who can function in an interdisciplinary and multidisciplinary community-based setting through the training of students in the health professions, education of faculty in academic health centers, and continuing education for health care practitioners.
- To promote a redistribution of the health workforce to underserved areas within our nation.
- To improve the health status of the most vulnerable of our citizens by providing them with health care professionals who are technically well-trained, culturally-competent in the care they provide, responsive to the needs of the communities in which they work, and comfortable providing that care as part of an interdisciplinary team.

The success of these interdisciplinary, community-based grant programs in meeting their goals is clear. In FY 2000, the 45 AHECs and 13 HETCs trained approximately 40,000 health professions students in community-based sites. These sites, in areas designated as health professional shortage areas, include migrant health centers, local health departments, and National Health Service Corps sites. Of the students trained, slightly over one-half are medical students. Reaching down into the potential health manpower pipeline even further, approximately 25,000 high school students participate each year in AHEC-sponsored health

career recruitment activities.

The Allied Health Program plays a crucial role providing a rapid transition of students with a baccalaureate degree into the health-related sciences. Allied Health professions encompass about 30 percent of the total health care workforce and projections are that by 2010, 5.3 million new Allied Health workers will be needed. Already there are shortages in critical Allied Health fields. For example, clinical laboratories are experiencing shortages of all types of diagnostic scientists and technicians from the associate's degree level through graduate degrees.

In addition to student training, faculty development activities are an important part of these grant programs. The Quentin N. Burdick Program trains faculty in the economic and logistical problems associated with rural health care delivery. Geriatric Education Centers train academic and clinical faculty at 170 health-related schools and 550 affiliated clinical sites. Additionally, 33 Geriatric Academic Career Awards were funded in FY 2002 to train the next generation of academic geriatricians.

Continuing education is another major activity in all of the Interdisciplinary Community-Based Grant Programs. Over 200,000 health professionals in the community received continuing education programs sponsored by the AHEC, HETC, GEC, or Burdick program in FY 2000.

Encouraging health care professionals to continue to serve in medically underserved areas or with medically underserved populations is also an important goal of Part D programs. A recent national survey of graduates of the Quentin N. Burdick Program showed that 54 percent were employed in rural or frontier areas 3 years after training. Many of the health professions students and the community health workers who receive training by the HETCs in underserved areas ultimately remain there to continue their practice.

Thus, in combination, these programs provide important educational and clinical opportunities for a health workforce that will serve unserved or underserved populations in our Nation.

Characteristics of Individual Programs

Area Health Education Centers (Section 751)

Purpose

The foremost purposes of AHECs are to:

- Improve the recruitment, distribution, supply, quality, and diversity of personnel who provide health services in underserved rural and urban areas or to populations with demonstrated serious unmet health care needs;
- Increase the number of primary care physicians and other primary care providers who provide services in such areas and to such populations; and

- Increase health careers awareness among individuals from underserved areas and underrepresented populations.

Activities

AHECs carry out the following activities to achieve the purposes stated above:

- Recruitment and health careers awareness programs to recruit individuals from underserved areas and underrepresented populations into the health professions;
- Preparation of individuals to more effectively provide health services to underserved areas or underserved populations through 1) field placements, 2) preceptorships, 3) conducting or supporting community-based primary care residency programs, and 4) agreements with community-based organizations such as community health centers, migrant health centers, Indian health centers, public health departments, and others;
- Health professions education and training activities for students of health professions schools and medical residents,
- At least 10 percent of the clinical education required of medical students is conducted at sites remote to the primary teaching facility of the contracting institution; and
- 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 findings.

Accomplishments

- Since 1972, AHEC programs have trained more than 1.8 million students and residents in medicine, nursing, Allied Health, dentistry, pharmacy, public health, and other disciplines in areas designated as health professional shortage areas.
- As of 2003, the AHEC network consisted of 49 campus-based AHEC programs affiliated with 180 community-based AHEC centers. More than 60 percent of the centers are hosted by non-profit 501(c)(3) organizations. Community colleges and universities host another 19 percent, community hospitals 9 percent, community health centers 3 percent, and other host relationships account for the remaining 6 percent.
- The 49 AHEC programs consist of 33 Model (fully established) and 16 Basic (under development or expansion) programs. Each AHEC program consists of a program office and one or more remote centers. Model centers receive approximately \$82,000 in Federal AHEC funds, making up the rest of their budget from State and local sources. The average AHEC center employs a full-time equivalent staff of about four.

AHEC programs exist in all but seven states and Puerto Rico. Their annual impact is briefly summarized below:

- AHECs train approximately 31,100 health professional students in community-based sites per year. Of that total, slightly over half (17,000) are medical students; the rest are students from other health professions, including Allied Health.
- AHECs work with approximately 530 community or migrant health centers and 475 health departments, approximately 170 National Health Service Corps sites serve as training sites.
- Approximately 28,200 high school students participate each year in 20 or more hours of AHEC-sponsored health career enhancement or recruitment activities.
- More than 329,600 local providers receive AHEC-sponsored education on topics relating to locally defined needs and Federal priorities. Topics covered include bioterrorism and emergency preparedness, oral health, women's health, domestic violence, adolescent issues, diabetes, HIV, and mental health. Cultural competence is also a focus.

Below are some examples of AHEC program leadership in bioterrorism training to health care professionals.

- Three AHEC programs, Oklahoma AHEC, California AHEC (UC-SF), and South Carolina Area Health Education Consortium (Medical Univ. of SC) are Bioterrorism Training and Curriculum Development Program (BTCDDP) awardees, a Title III program in the Division of State, Community, and Public Health. Four other AHEC programs, Arkansas AHEC, Colorado AHEC, Connecticut AHEC, and the Virginia Statewide AHEC System, are collaborative partners with BTCDDP awardees in their states.
- With extensive involvement using the continuing education resources and networks of these seven AHEC programs, an estimated 52,615 health care professionals will receive bioterrorism preparedness training.

Funding

In FY 2003, 49 AHEC programs received \$31.6 million in funding, an amount essentially unchanged from the previous two years (FY 02: \$32 million for 46 programs; FY 01: \$31.6 million for 44 programs).

Health Education and Training Centers (Section 752)

Purpose

As their primary purpose, HETCs address persistent and severe unmet health care needs in States along the border between the United States and Mexico and in the State of Florida. They are

also charged with the same mission in other areas, urban or rural, that have populations with similar needs.

Activities

To accomplish their mission, HETCs engage in the following activities:

- Training and education programs for health professions students in the assigned service area;
- Training in community-based health education services, including training to prepare community health workers; and
- Education and other services to health professionals practicing in the area.

In support of these activities, each HETC maintains an advisory board of health service providers, educators, and consumers from the designated area.

Accomplishments

In FY 2002, HETC's achieved the following:

- 16,000 health professional providers received continuing education;
- 3,677 health professions students and 1,226 preceptors served in medically underserved areas;
- 7,593 students in grades 9-12 participated in health careers awareness activities of 20 hours or more; and
- 681 community health workers (CHWs) received training that addressed a variety of topics including lead poisoning, indoor air quality, asthma control, environmental health, cardiovascular disease, building community capacity, rural health issues, and others.

Funding

In FY 2003, 13 HETC programs (5 border and 9 non-border) received a total of \$4 million in funding, with half of that amount (\$2 million) awarded to border area HETCs in Arizona, California, New Mexico, Texas and Florida. Average funding per HETC program in FY 2003 was \$400,498 for border programs and \$250,361 for non-border programs. The average for all HETC programs in FY 2002 and FY 2003 was \$308,260, as opposed to \$480,000 in FY 2001 when there were only nine HETC programs. With the total Federal investment remaining essentially constant over time while the number of programs increases, there is an insufficiency of funds for individual programs to address worsening health education and personnel training needs, particularly in the U.S.-Mexico border region.

Geriatric Education and Training Projects (Section 753)

This section of the legislation, designed to improve the training of health professionals in geriatrics, consists of three components:

- Geriatric Education Centers (GECs);
- Geriatric Training for Physicians, Dentists, and Behavioral/Mental Health Professionals (GT); and
- Geriatric Academic Career Awards (GACA).

Geriatric Education Centers

Purpose

The GEC Program is the only federally-funded program dedicated solely to the interdisciplinary geriatrics education and training of all health professionals. By its very nature, geriatrics health care requires a team approach. The elderly tend to have multiple health problems and quality health care for these individuals requires an interdisciplinary team approach. The GEC Program provides funding to strengthen interdisciplinary education and training of all health professionals in the diagnosis, treatment, and prevention of disease and other health problems of the elderly. GECs provide services to and foster collaborative relationships among members of the health professions educational community.

Activities

Projects supported by the GECs offer interdisciplinary training involving four or more health professions disciplines. The interdisciplinary approach of the GECs fosters an interdisciplinary team approach among partners and enables this team of health professions partners to work together in ways that would not otherwise be utilized to achieve a statewide approach. Through, for example, interactive videoconferencing and other state-of-the-art distance learning technologies, each project is afforded the opportunity to establish regional sites through any given State, thereby equipping each GEC to be an effective and efficient way to reach target populations, particularly those in rural/underserved areas. Since 1983, GECs have worked to:

- Improve the training of health professionals in geriatrics by providing geriatric residencies, traineeships, or fellowships;
- Develop and disseminate curricula to health professionals on the treatment of health problems of the elderly;
- Support the training and retraining of faculty to provide instruction in geriatrics;

- Support continuing education of health professionals who provide geriatric care; and
- Provide students with clinical training in geriatrics in nursing homes, chronic and acute disease hospitals, ambulatory care centers, and senior centers.

Accomplishments

These activities have produced the following accomplishments:

- Since inception in 1983, the GECs have provided geriatric training to over 400,000 health professionals in 27 disciplines and to 2,700 academic and clinical faculty at 170 health-related schools and 550 affiliated clinical sites.
- All GEC grantees have collaborated and established linkage relationships with the State and local organizations that deliver health care to increase or enhance the services provided to underserved communities and populations.
- Each GEC works with primary and secondary schools that have a high percentage of minority and disadvantaged students to increase their interest in health professions careers and in order to expand the pool of diverse and culturally competent qualified applicants for the health professions workforce.
- The National GEC Network (NGN) has developed and continues to develop a continuum of audiovisual media for presenting educational content. The interaction continuum ranges from television with full-motion video and audio interaction to interaction with either visual or audio media. The midpoint of this continuum is the use of computers as an interactive medium for learning.
- To encourage continued collaboration between centers and avoid redundant development, the GEC Clearinghouse Web site, <http://coa.kumc.edu/gecresource/loginMain.asp>, was established by the GEC at the University of Kansas Medical Center. The Clearinghouse is a depository of resources developed by GECs across the country. GEC resource information maintained in the Clearinghouse is searchable by title, keywords, descriptions, or authoring organization. Access to the GEC Clearinghouse is available to health professionals and the public at large.

Funding

It is important to note that over the last few years, funding for establishing new GECs has been scarce (i.e., 15 new GECs were funded in FY 2000, 14 in FY 2001, 12 in FY 2002, and five in FY 2003 with Alaska and Maine representing states with GECs for the first time). Forty-six (46) GECs received \$16.8 million in FY 2003, with an average first-year award of \$200,000 for a single institution and \$400,000 for a consortium of three or more. Despite ongoing efforts, the goal of establishing a minimum of one GEC within each state has yet to be realized.

Geriatric Training for Physicians, Dentists, and Behavioral/Mental Health Professionals

Purpose

The goal of the GT program is to train physicians, dentists, and behavioral/mental health professionals to become experts in geriatrics in order to serve as faculty for other trainees in their respective health professions. Training must be based in a graduate medical education program in internal medicine or family medicine or in a department of geriatrics or behavioral or mental health. This program consists of two options:

- A 1-year retraining program in geriatrics for current faculty members; or
- A 2-year internal medicine or family medicine fellowship program, with emphasis in geriatrics, for physicians, dentists, and behavioral or mental health professionals who have completed graduate medical education or post-doctoral training.

Activities

- The GT program provides full-time, intensive training in a 1- or 2-year program for physicians, dentists, and behavioral and mental health professionals in geriatrics who plan to become faculty members. The GT program provides a minimum of 2,080 hours of training in a 1-year program and 4,160 hours in the 2-year fellowship.
- Each program has a core curriculum for all fellows and specialized training in each discipline.
- The core curriculum addresses teaching, research, administration, and clinical training.
- The programs provide fellows exposure to elderly patients in various levels of wellness and functioning and from a range of socioeconomic and racial/ethnic backgrounds.
- Service rotations include geriatric consultation services, acute care services, dental services, geriatric psychiatry units, day and home care programs, rehabilitation services, extended care facilities, geriatric ambulatory care, and community care programs for elderly persons with mental retardation.

Accomplishments

The GT program is unique in the country. It is an integrated program that is not limited to one hospital and has flexibility in affiliations and in curriculum. The number of clinical sites is broad and includes day and home care programs, geriatric psychiatry units, rehabilitative services, extended care facilities and community care programs for elderly persons with mental retardation. The program is the only program in the U.S. that trains faculty in postdoctoral geriatric dentistry.

Between 1989 and 1999, 334 fellows were trained. The seven projects scheduled to end in 2005 will train 87 fellows. Two projects, one at a historically Black college/university (HBCU), are projected to train an additional 30 fellows by the end of the program in FY2007. Three new projects scheduled to end in 2008 are projected to train an additional 45 fellows.

Funding

In FY 2003, \$6.5 million was awarded to 12 geriatric training programs for physicians, dentists, and behavioral/mental health professionals.

Geriatric Academic Career Awards

Purpose

The GACA Program was established in 1998 by the Health Professions Partnership Act to increase the teaching of geriatrics in medical schools. The purpose of the Geriatric Academic Career Award is to support the career development of geriatricians in junior faculty positions who are committed to academic careers teaching clinical geriatrics.

Activities

- GACA recipients are required to provide training in clinical geriatrics, including the training of interdisciplinary teams of health care professionals.

Accomplishments

- The first competition for the GACA was held in 1999. The accomplishments of these junior faculty members are impressive and diverse. All are providing interdisciplinary training. Many are providing training in community-based settings in addition to hospital and medical school-based training. Their activities include curriculum development, various administrative duties at their medical schools; providing care and teaching in a wide range of clinical settings; clinical research; participating in educational programs to build their own skills; and providing continuing education to already practicing health professionals and working with other sponsored health education programs.
- In a single year (FY 2002), the 13 funded GACAs from FY 1999 provided training to over 4,800 health professionals including medical students, residents, fellows, physicians practicing in the community, nurses, nurse practitioners, social workers, physical and occupational therapists, dentists, psychologists, respiratory therapists, ethicists, health administrators, case managers, pharmacists, community workers including police personnel, informal caregivers, and community dwelling elderly persons.
- In FY 2002, 20 GACAs were awarded.

Funding

In FY 2003, \$6.8 million funded 73 Geriatric Academic Career Awards, 29 continuations and 41 new awards.

Quentin N. Burdick Program for Rural Interdisciplinary Training (Section 754)

Purpose

The purpose of the Quentin N. Burdick Program for Rural Interdisciplinary Training is to support the interdisciplinary education and training of health professional teams to enter into practice and/or remain in rural areas. The interdisciplinary training projects are designed to:

- Use new and innovative methods to train health care practitioners to provide services in rural areas;
- Demonstrate and evaluate innovative interdisciplinary methods and models designed to provide access to cost-effective comprehensive health care;
- Deliver health care services to individuals residing in rural areas;
- Enhance the amount of relevant research conducted concerning health care issues in rural areas; and
- Increase the recruitment and retention of health care practitioners from rural areas and make rural practice a more attractive career choice for health care practitioners.

Activities

To accomplish these goals, Quentin N. Burdick programs carry out the following major activities:

- Provide all health-related students an interdisciplinary learning experience designed to enhance the understanding of the contribution that each discipline brings to the solution of health problems.
- Conduct workshops and education activities in rural communities for rural health professionals and the community.
- Provide information and awareness activities for K thru 12 grade students concerning career opportunities in the health professions.
- Funds are also used to purchase or rent transportation and telecommunication equipment where needed.

Accomplishments

- Since 1990, over 13,000 health care providers, teachers, and students in 23 disciplines and 31 states have been trained through Quentin N. Burdick programs.
- The retention aspect of the program is impressive. Over 50 percent of the graduates of these programs were, according to a recent nationwide survey, employed in rural or frontier areas 3 years after training.

Funding

Since 1990, \$51 million has been spent to fund a total of 99 Quentin N. Burdick interdisciplinary training projects. In FY 2003, \$6.7 million was awarded to 22 projects.

Allied Health and Other Disciplines (Section 755)

Purpose

Section 755 has several purposes. In addition to a major emphasis on increasing the supply of individuals trained in the Allied Health professions, this section of the legislation authorizes support for:

- Preventive and primary care residency training of podiatric physicians;
- Collaborative demonstration projects involving chiropractors and physicians and the treatment of spinal and lower-back conditions; and
- Graduate programs in behavioral and mental health practice.

Activities

Allied Health

To meet the goal of increasing the supply of Allied Health practitioners as effectively as possible, the programs and activities funded under this Section focus on:

- Professions with the greatest shortages or whose services are most needed by the elderly;
- Programs that provide rapid transition training into an Allied Health profession for students with baccalaureate degrees in health-related sciences;
- Community-based programs linking academic centers to rural clinical settings;
- Career advancement training programs for Allied Health professionals in practice;

- Programs that develop curricula involving prevention and health promotion, geriatrics, long-term care, home health and hospice care, and medical ethics;
- Programs that seek to expand or establish clinical training sites in underserved or rural communities;
- Interdisciplinary training to promote the effectiveness of Allied Health practitioners in geriatric care; and
- Demonstration centers that apply innovative models to link Allied Health practice, education, and research.

Podiatric Medicine Training Grants

These grants are used to support training programs that encourage primary care, especially for underserved, minority, and elderly populations and for persons with AIDS.

Chiropractic Demonstration Grants

In addition to emphasizing collaborative efforts between chiropractors and physicians, a major focus is placed on the development and application of research protocols that will significantly expand documented research in the field.

Behavioral and Mental Health Training Grants

Activities conducted in connection with these grants include: increased training in residential care, faculty support for training and/or retraining, continuing education for certified/licensed paraprofessionals, and clinical training of students in senior centers and ambulatory care settings.

Accomplishments

Allied Health

Since inception, a total of 163 Allied Health projects have been funded. Currently, there are 38 Allied Health grants in place, training large numbers of students and serving people throughout the Nation.

- Allied Health programs provide access to health professions education and training to students in both minority and disadvantaged populations. For example, 95 percent of student recruitment and retention activities in Allied Health Special Projects have been offered to students from these populations.
- Grants have been awarded to academic institutions, hospital-based education programs, and consortia involving 42 different allied health disciplines in 22 states and the District of Columbia, with 26 percent of these awards going to Hispanic Serving Institutions and Asian Americans and Pacific Islanders Serving Institutions. Student recruitment and retention activities have affected more than 9,080 individuals, with 95 percent of these students being minority, disadvantaged, or both.

Podiatric Medicine Training Grants

At present, there are three grants for training students in podiatric medicine.

Chiropractic Demonstration Grants

Since 1994, more than 9,000 patients have received chiropractic care through grants with schools of chiropractic. Chiropractic care is provided to research participants at no cost to the patient.

- Since 1994, 13 grants have been awarded and have supported institutions and practitioners in the states of California, Iowa, Illinois, Minnesota, and Oregon. Grantees have provided chiropractic care to more than 9,000 patients.
- Chiropractic demonstration research grants are designed to improve the quality of chiropractic care by developing and testing new models for interdisciplinary medical and chiropractic care for the alleviation of pain and to increase mobility among back pain sufferers. This results in the continual improvement of the quality of patient care and service delivery. Grantees provide chiropractic care to research participants at no cost to the patient.

Behavioral and Mental Health Training Grants

In FY 2002, a new Graduate Psychology Education Program was instituted. Fifty-two (52) grant applications were approved and 15 were funded. In addition, work began on 3 new geropsychology projects, emphasizing the behavioral and mental health needs of the elderly. In FY 2003, 25 new graduate psychology education projects were funded. Also, a new Graduate Geropsychology Education Program was instituted in FY 2003. Twenty (20) applications were approved and seven were funded.

Funding

In FY 2003, funding under this section of the legislation was as follows:

- Four new Allied Health projects were funded and 34 projects received continuation funds, for a total of \$4.2 million;
- The three podiatric medicine awards totaled \$160,432;
- Three new chiropractic demonstration projects totaled \$1.2 million; and
- Total funding for behavioral/mental health training was \$4.9 million. Twenty-five (25) new graduate psychology projects were funded and 17 projects received supplemental funds for a total of \$3.7 million. Seven new Graduate Geropsychology Education grants totaled \$1.2 million.

III. Review of Past History

The Committee has concluded in its previous reports that community-based, interdisciplinary training is the most effective and efficient way to prepare the Nation's future health care workforce, especially those providers who are or will be serving the country's neediest populations. The Committee Members have diligently reviewed selected Federal grant programs that partially support interdisciplinary training activities and have made recommendations aimed at strengthening the capacity of these programs to meet the Nation's needs for a highly qualified, culturally competent health care workforce that is geographically well-distributed in shortage areas.

In its First and Second Reports, the Advisory Committee's actions were based on findings gleaned from testimony, various data sources, and the personal observations and experiences of expert Committee Members. The Advisory Committee feels that certain of these recommendations are as relevant today as they were at the time of their original publication. These priority findings and recommendations are summarized below.

Recommendation: Congress and the Secretary should reauthorize Title VII, Part D, Section 751-756 Grant Programs and provide funding at a level that is no less than and even more than in Fiscal Year 2003.

The Advisory Committee strongly suggests that Congress and the Secretary make every effort to maintain and strengthen these grant programs described under Title VII, Part D, Sections 751 – 756 of the Public Health Service Act. While there is occasional overlap of purpose and activities between the grant programs and not all the programs under the Advisory Committee's jurisdiction are truly "interdisciplinary," each grant program is productive and necessary to meet a present and compelling need for preparing the Nation's health care workforce.

Consequently, the Advisory Committee recommends legislative reauthorization of these programs. It also recommends no less funding for these programs and, if possible, increasing appropriations in order to expand these efforts where they exist and to establish new programs in geographic regions without the full complement of such efforts and in service to the interests of severely medically underserved populations.

Recommendation: The Secretary should use the administrative tools of "preferences and priorities" for making grant awards that are "truly interdisciplinary," and Congress should authorize a new grant program that demonstrates model interdisciplinary training that addresses the Nation's most pressing needs in health care.

The Advisory Committee suggests that the Secretary should use administrative "preferences and priorities" for making grant awards that propose truly interdisciplinary training strategies in health professions education projects. The Advisory Committee, in its 1st Report, describes the parameters of what constitutes "interdisciplinary." The Committee also suggested that a new grant program known as the "Interdisciplinary Education Demonstration Projects" be established

within Title VII. New appropriations would be necessary to implement this particular grant program so as to not jeopardize the national infrastructure of currently funded interdisciplinary, community-based programs.

Recommendation: Federal health agencies, such as NIH, CDC, FDA, and others should establish formal, funding-based links with HRSA in order to engage the participation of the “community-based, interdisciplinary” grantees in addressing the objectives of these other agencies in maintaining the utmost level of competency of the Nation’s health care workforce.

The Advisory Committee recognizes that the “interdisciplinary grantees” have developed a strong, highly sophisticated infrastructure of training health professions students, medical residents, and health care practitioners. This workforce development infrastructure is often the only viable link between health care providers who are located in remote geographic areas and/or serve needy patient populations and the educational content that ensures continuously quality improvement. The “center” grant programs, such as AHECs, GECs, and HETCs have significant capacity for such training and continuing professional education.

Other Federal agencies and entities, such as NIH, CDC, and FDA, generate valuable content information that can improve health care services. The Advisory Committee suggests that these Federal agencies establish a programmatic and financial partnership with HRSA to utilize the health professions training infrastructure of the community-based, interdisciplinary grant programs to disseminate this information. Such a partnership should ensure that critical health service-related information will reach primary care and “safety-net” providers in a timely manner. The Advisory Committee recommends that 1 percent of these agencies research budgets be designated for information dissemination and continuing professional education by these grant programs. In view of the potential threat associated with bioterrorism in our nation, this recommendation by the Advisory Committee seems even more important than ever before.

The Advisory Committee had a related recommendation in its initial report; it suggested that the Federal research agencies find ways to encourage the linkage of human research that seeks to be more “population inclusive” with the community-based, interdisciplinary grant programs. In recent years, there has been increased emphasis on including more people who are from minority and disadvantaged populations into human health care research. The community-based, interdisciplinary grant programs have a strong connection with health care providers who serve such populations and their communities. It would seem that promoting a partnership between such research and these grant programs through administrative language would be desirable.

Recommendation: A new grant program known as “Interdisciplinary Education Demonstration Projects” should be enacted by Congress and administered by HRSA under Title VII, Part D of the Public Health Service Act.

The Advisory Committee proposes to establish a new grant program, known as “Interdisciplinary Education Demonstration Projects.” This grant program would ask grantees to focus their efforts on developing truly interdisciplinary curriculum and training on health professions students and practitioners who are working in teams that address the objectives of Healthy People 2010 in a community setting. New appropriations by Congress would be necessary to implement this recommendation. The grant program should be administered by HRSA with other similar grant programs.

Recommendation: HRSA and Congress should find new ways to recognize the critical need for training “Allied Health” professionals through better recognition in legislative and administrative language and inclusion in current grant programs.

The Advisory Committee finds that the training of future and current “Allied Health” providers does not seem to have the Federal grant-making priority that is demanded to meet the national need for such health care providers. Therefore, it is recommended that that an Office or Division of Allied Health be established within HRSA to better define “Allied Health” and to find administrative ways to encourage more federally-sponsored training of these disciplines. Such methods may or may not involve new grant programs, but would certainly entail administrative descriptions of current grant programs toward greater participation of “Allied Health” in the current community-based, interdisciplinary grant programs.

Recommendation: The “diversity” of the health care workforce must be improved through measures that enhance the capacity of these grant programs to achieve such outcomes.

The Advisory Committee has documented the continuing need for measures that improve the diversity of the Nation’s health care workforce. It has also observed that the community-based, interdisciplinary grant programs make substantial contributions to activities that have greater diversity as a goal.

In its Second Report, the Advisory Committee made various recommendations for administrative changes to strengthen the capacity of the grant programs to achieve these outcomes. The topic of “diversity” will also be the subject of a future meeting of the Advisory Committee.

Recommendation: Several statutory changes would strengthen the capacity of the grant programs to meet the workforce needs on the national agenda.

In its review of the statutes governing the administration of these grant programs, the Advisory Committee found that there were several changes that would strengthen the intent of Congress for these efforts. These changes are discussed in greater detail in the Second Report, but can briefly be described as follows:

- Redefinition of the list of “Allied Health” professions that are eligible for federal sponsorship through grant awards and other related definitions of “Allied Health;”
- Expansion of the Section addressing Chiropractic Research to include health professions education to increase the number of individuals trained in Chiropractic medicine; Development of a new Section regarding training in graduate programs for behavioral and mental health providers that incorporates the current Federal support for graduate psychology and also broadens the scope of sponsorship to include clinical social work; and
- Moving the Section defining the grant program for training podiatric physicians to another Part that includes programs that support training in family medicine, general internal medicine, and other medical disciplines.

IV. Recommendations for Educational Incentives for Curriculum Development and Training Related to Bioterrorism

Given the role of health care professionals in bioterrorism, the Advisory Committee focused on educational incentives for curriculum development and training related to the Bioterrorism Preparedness and Response Act of 2002, which authorizes curriculum development and continuing education in bioterrorism preparedness for health professions students and practitioners. The Advisory Committee focused on funding considerations regarding this educational initiative. These considerations included funding proposal factors and indicators of program success instrumental in providing Statewide continuing education in bioterrorism preparedness. Separate recommendations regarding these funding considerations were provided to the HRSA's Bureau of Health Professions, Division of State, Community, and Public Health.

Recommendation 1: Encourage the HRSA Administrator to convene national professional health associations across all health professions for the development of consensus regarding core competencies in the teaching of bioterrorism and emergency preparedness curricula.

Rationale

The Advisory Committee endorses the competency-based model for curriculum development in preparing the Nation's health care workforce in bioterrorism and emergency preparedness. This approach allows for national consensus on the performance standards for health professions students and practitioners. In order to achieve consensus for this recommendation in a timely manner, the Committee supports convening key constituent health professional groups.

Benefits

Competencies provide a framework for assessing practitioner performance in response to bioterrorism to their ability to recognize the indications of a terrorist event in their patients, treat patients in a safe and appropriate manner, provide a rapid and effective alert of the public health systems and other emergency responders, and prepare vulnerable and disadvantaged members of the community for acts of bioterrorism. Identification of core competencies for developing new curricula (where necessary) or adapting existing curricula for the continuing education of practicing professionals or training of health professions students is key to ensuring they readiness of the health care workforce to respond to bioterrorism and other threats.

Recommendation 2: The Advisory Committee recommends continued funding to provide quality continuing education in bioterrorism preparedness to a wide range of practicing health care professionals in every State.

Rationale

There is an existing infrastructure of health care practitioners in every State who, if appropriately trained, will provide quick recognition and response in the event of a bioterrorist event. Coordination of training within each State should be strongly encouraged.

Benefits

Funding for practitioner continuing education programs would build capacity for our Nation's emergency preparedness and the inclusion of continuing education providers as primary bioterrorism trainers would assure practitioner participation in training programs. Effective State and local response throughout the Nation will secure an effective national response overall.

Recommendation 3: The Advisory Committee recommends continued funding to develop new curricula (where necessary) or adapt existing curricula in bioterrorism preparedness to train students in the health care pipeline at health professions schools, in partnership with Academic Health Centers and/or consortia of accredited health professions schools or programs.

Rationale

Preparing the total health care workforce for rapid and efficient response to a bioterrorist attack requires focusing on health professions students in the health care pipeline, as well as practicing health professionals.

Benefits

Curricula focusing on bioterrorism preparedness that targets health professions students in the health care pipeline will result in students being better prepared to assist in response to a bioterrorism attack, thus increasing the number of competent responders within the health care workforce in the Nation. Upon completion of educational programs in health professions schools, these new practitioners will be competent in bioterrorism preparedness.

Recommendation 4: Other DHHS and HRSA funding initiatives or other Federal agencies that have funding initiatives dedicated for bioterrorism preparedness education should encourage linkages with the BHP Division programs and the State plans.

Rationale

To adequately and accurately address and prepare for potential threats of bioterrorism, and to build the Nation's capacity for competent, rapid, responsiveness of the health care workforce, linkages and coordination of funding initiative toward this goal should be encouraged.

Benefits

Increased coordination and linkages among Federal funding initiatives for bioterrorism preparedness education of the Nation's health care workforce would enhance the country's readiness and provide a stronger coalition against bioterrorism.

V. Recommendations on Outcomes and Performance Measures

The Committee recognizes and endorses the efforts that the Bureau of Health Professions (BHPPr) has made relative to developing performance measures to help monitor progress of interdisciplinary programs and disseminate program outcomes to a wide variety of external constituencies. The Committee encourages BHPPr to work with representatives from the interdisciplinary programs within its portfolio as they consider responding to the recommendations listed below. This will ensure that any new performance measures and processes/procedures associated with reporting of outcomes will better support the BHPPr mission and more accurately reflect specific programmatic impact and relevance.

Recommendation 1: The Committee recommends inclusion of additional performance measures within the evaluation framework that more completely describe outcomes related to the changes of health status within communities and the economic impact of the various interdisciplinary programs.

Rationale

Endorsing a statement of common purpose and overarching goals related to changes in health status and economic impact at the community level may accomplish this. The existing evaluation framework focuses on measurements that track workforce diversity and the placement of health care workers in underserved communities. Examination of the effects of these processes represents a natural extension of this analysis. Performance measures should include changes in health status in underserved communities, the relationship of specific programming to changes in health status and direct services, and the quality and distribution of healthcare providers. Presently, there are no objective measurement tools that document changes in health care costs attributable to these programs. The evaluation of economic impact is a critical determinant of the value of interdisciplinary programs within the community. Tools need to be developed to illustrate cost savings with regard to: 1) health care expenditures for older adults receiving interdisciplinary care; 2) frequency of co-morbid conditions in older adults receiving interdisciplinary care; and 3) efficiency of health care professionals involved in interdisciplinary care settings. Additionally, performance measures should reflect demonstrated need for Federal support, leveraging of other sources of funds (State/local/private), and effectiveness of consortia and partnership efforts. This approach should be coordinated through the development of logic models in collaboration with BHPPr.

Benefits

An additional and significant data set for the interdisciplinary programs will be obtained through a coordinated effort and approach that supports the dissemination of outcomes that more completely reflect direct community and economic impact. External constituencies will be able to link programmatic initiatives directly to underserved communities and vulnerable populations.

Recommendation 2: The Committee recommends that BHPr work with other Federal agencies such as the Office of the Management of the Budget (OMB) and Congressional Budget Office (CBO) to develop data collection processes for the interdisciplinary programs that include the use of qualitative data.

Rationale

To obtain a comprehensive evaluation of the interdisciplinary programs, one must consider both quantitative and qualitative data. Qualitative data provides information related to the end user and a more complete picture of community and economic impact. The current evaluation framework does not provide a mechanism to capture information that demonstrates the effects of education and training of health professionals on the target population. Similarly, it has not been possible to gauge the effectiveness of outreach activities targeted to pre-professional students and educational initiatives targeted to the general public.

Examples of qualitative data that can be considered are information obtained through end-user and community dialogue, description of program improvements and innovations, unexpected outcomes, and anecdotal accounts. These may be particularly relevant to the analysis of changes in cultural competency, workforce diversity, and the health professions pipeline. To obtain qualitative data it may be necessary to develop a qualitative instrument that encourages end user to submit their input as to the effectiveness of programs in their community.

Benefits

This approach may provide a better mechanism to communicate tertiary outcomes for the interdisciplinary programs. External constituencies may be able to more completely describe the effects of the interdisciplinary programs on individuals within communities. This would represent a significant and timely development in the evolution of the evaluation framework for these programs.

Recommendation 3: The Committee recommends development of a process for sharing data from all interdisciplinary programs within BHPr, among interested federal agencies, and across the programs.

Rationale

The Committee supports the BHPr concept of developing a data system for all interdisciplinary programs that is well defined, easily understood by all, and a minimal burden to the users. Additionally, the Committee supports the concept of the "one department" approach to evaluation and oversight of federally funded programs. However, joint assessment of program effectiveness should be based on evaluation criteria that produce acceptable and consistent documentation of outcomes. For the BHPr interdisciplinary programs, this should include a core of standardized reporting items (performance measures) across all programs. A web-based

process could more easily facilitate access to and sharing of these standardized performance measures. A central repository for data from each program managed by BHPPr would represent an important part of this web-based archive. Additionally, individuals or groups that access this data need to be provided with opportunities to comment on usefulness and relevance.

Benefits

A centralized source of information will ensure the availability of data and facilitate selection and use of data sets for specific purposes such as evaluation of program effectiveness and impact. This mechanism would more easily identify gaps in the data that indicate a need for additional strategies to collect specific information. Additionally, the existence of an accessible centralized data bank would make it easier to establish "best practices" models from the data. The data should be expressed in easily digestible short statements that are clear and concise and include a global glossary of evaluation and outcomes terms across all applicable Federal agencies.

Recommendation 4: Congress should appropriate funding for the purposes of evaluation, development of educational research models, and tracking long-term outcomes specific to BHPPr interdisciplinary grant programs.

Rationale

Evaluation is required by BHPPr. The state-of-the-art and the expectations for accurate and meaningful evaluation have evolved to the point that most programs need to hire specialists to design appropriate assessment tools and guide the overall evaluation process. The current size of program awards should be increased to allow for such support without sacrificing the number and quality of programmatic initiatives. The additional funds allocated for this important activity will allow for responses to the evolving expectations and demands of external constituencies regarding program evaluation.

Benefits

This approach would encourage grantees to embrace the importance of evaluation and become more outcome-oriented. Thus, grant-funded programs would have an increased ability to identify and address "gaps" in their programming. Additional types of evaluation could be accomplished including assessments associated with long-term tracking and educational research.

VI. Future Activities

The Advisory Committee will continue to pursue recommendations that strengthen the capacity of interdisciplinary, community-based grant programs to meet health care workforce needs in America. In the next year's agenda, the Advisory Committee will consider more carefully those "Strategic Recommendations" made in this report and move toward making specific suggestions regarding future legislation and/or changes in administrative procedures. The topical areas to be explored include the following:

- Strengthening and developing pipeline programs to encourage Kids into Health Careers
- Devise interdisciplinary faculty development programs to prepare an interdisciplinary cadre of health professionals for an academic career in health fields experiencing a shortage of qualified faculty
- Consideration of Chiropractic programs and Psychology programs and their expansion and inclusion within the realm of Title VII, Part D programs

The Advisory Committee recognizes the dire need to encourage workforce development in health care. It can do so in three main ways: pipeline programs, faculty development, and workforce expansion. These areas are the primary focus of the Committee for the upcoming year.

Also, the Advisory Committee will continue to examine the policy and procedural proposals provided by presenters at meetings during the previous year; many of these suggestions were offered by grantee constituency groups and address matters that could lead to significant improvement in their capacity to operate at the local level. These ideas, as well as a careful study of the matter of Federal reauthorization and appropriations for interdisciplinary, community-based programs will be a high priority in the next year.

Finally, the Advisory Committee will continue to examine issues of diversity and inequalities. In the past year, the Committee began identifying recommendations to address these issues; however, much work is still to be done. Inequalities pertaining to educational opportunities and advancement in the workplace will be areas of particular focus for the upcoming year.

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APPENDIX

Findings from the FY 2001 Annual Report

FINDING A

Interdisciplinary, community-based grant programs show clear and overwhelming evidence of successful outcomes. As the Nation's only health professional training programs with a mandate for, and experience in, focusing on community-based strategies, they:

- Respond to unmet health needs through partnerships with communities in rural, urban, and suburban areas;
- Promote best practices and models of interdisciplinary health care;
- Address gaps in health service delivery resulting from private health care failures in communities that are difficult to serve; and
- Educate the workforce for the nation's system of community and migrant health centers, rural health centers, and community hospitals.

FINDING B

Grant programs of this nature are most effective when the legislative language and administrative policies permit them the greatest flexibility to respond to community needs. Decision-making that takes place locally, through community-academic partnerships, results in educational strategies and program organization that best meet local and regional needs.

FINDING C

Interdisciplinary health care is an important way to meet the Nation's health care needs effectively and efficiently, and is consistent with policies and standards set forth by such organizations as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the President's Advisory Commission on Consumer Protection, and the National Commission for Quality Assurance Standards.

FINDING D

Allied Health professionals have played, and will continue to play, a vital role in interdisciplinary community-based care. In this regard, however, there are two issues that need to be addressed:

- The definition of what constitutes "Allied Health" needs to be clarified; and
- The visibility and representation of this set of professions needs to be strengthened.

FINDING E

Some grant programs are well-positioned to serve a vital national interest by disseminating practice guidelines and research outcomes likely to improve the quality of evidence-based health

care in American communities, especially in areas or for populations with the poorest current access to health care.

FINDING F

Federal criteria for cost-sharing are an important aspect is ensuring successful outcomes and reducing the need for Federal funding. However, such criteria, and in particular any requirement for ultimate self-sufficiency, may be impossible to achieve in communities that are economically deprived.

FINDING G

Insofar as this legislation is concerned, the inclusion of podiatric medical residents within section 755, which pertains to Allied Health, is inconsistent with the organizational location of podiatric medicine within the HRSA's Bureau of Health Professions, where it falls under the auspices of the Division of Medicine and Dentistry.

Each finding was accompanied by one or more recommendations, summarized below:

<u>Finding</u>	<u>Associated Recommendation(s)</u>
A	<p>Federal interdisciplinary, community-based grant programs should be reauthorized. (Recommendation #1)</p> <p>Appropriations for programs of this nature should be increased. The accompanying legislation should encourage collaborations between these programs and institutions that train minority and immigrant populations. (Recommendation #2)</p>
B	<p>Future legislation should encourage the design and implementation of funded activities relating directly to the unique health needs of a region or local area. Also, administrative policies should be established to promote the incorporation of community advisory groups within the grant program organization as well as training protocols uniquely defined for the local service area or population. (Recommendation #3)</p>
C	<p>The administrative policy tools of "preferences and priorities" should be used to make awards to grantees that truly propose training of an interdisciplinary nature. (Recommendation #4)</p> <p>Congress should establish a grant program ("Inter-disciplinary Education Demonstration Projects") to encourage cooperative community-based ventures between two or more of the programs currently described in Title VII, Part D, Sections 751-755 of the Public Health Service Act. New appropriations should be authorized for this new initiative. (Recommendation #5)</p>
D	<p>The Committee endorses the 1995 recommendation of the National Commission on Allied Health that there be established within the Health Resources and</p>

Services Administration (HRSA) an organizational entity that would give greater visibility and representation to Allied Health. (Recommendation #6)

- E Federal agencies such as the National Institutes of Health, Agency for Healthcare Research and Quality, Centers for Disease Control and Prevention, and Food and Drug Administration should establish formal, funding-based links with HRSA to enable the entities described in Sections 751-755 to carry out continuing professional education and other forms of postgraduate training that could serve to translate research into practice. (Recommendation #7)

Federal agencies that seek to promote more "population inclusive" research should be instructed to establish funding relationships with the entities described in Sections 751-755. (Recommendation #8)

- F Federal criteria for cost-sharing with State or local governments and private foundations should be maintained for programs that have demonstrated successful outcomes but not for Health Education and Training Centers (HETCs), owing to the unique nature of their target populations and economic areas served. Also, because of the unique nature of the target populations and economic areas served by HETCs, the current legislative cost-sharing requirement for such entities should be restated as a desire, not a requirement. (Recommendation #9)

- G The legislative authority for podiatric medicine grants, currently contained in Section 755 of the Act, should be relocated in Section 747 in association with discipline-specific grants to train family physicians, general internal physicians, and other primary health care providers. (Recommendation #10)