

# ADVISORY COMMITTEE ON INTERDISCIPLINARY, COMMUNITY-BASED LINKAGES

## BEST PRACTICES FOR IMPROVING ACCESS TO QUALITY CARE FOR THE MEDICALLY UNDERSERVED: AN INTERDISCIPLINARY APPROACH

Sixth Annual Report to the  
Secretary of Health and Human Services  
and the U.S. Congress



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

# Advisory Committee on Interdisciplinary, Community-Based Linkages

## Sixth Annual Report

### Table of Contents

I.	Executive Summary.....	2
II.	Listing of Recommendations.....	6
III.	Recommendations with Rationale and Benefits.....	8
IV.	Future Direction of the Committee.....	15
V.	Background of the Committee.....	16
VI.	Committee Members and Federal Support Staff.....	17

### Appendices

Appendix 1: Testimony – June Meeting.....	20
Appendix 2: Testimony – July Meeting.....	26
Appendix 3: Title VII Interdisciplinary, Community-Based Training Grant Programs.....	32
Appendix 4: Previous Recommendations.....	39
Appendix 5: Committee No-Cost Extension Letter.....	48

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

## I. Executive Summary

The members of the Advisory Committee on Interdisciplinary, Community-Based Linkages (the Committee) represent programs funded under Federal Title VII, Part D, Section 751 through 755 Interdisciplinary, Community-Based Training Grant Programs. They are aware of the services these programs provide in their communities and the key roles they play in the training of our Nation's health care workforce. Committee members are also aware of the significant impact the recent defunding and dismantling of some of these programs has had on the communities they serve. Other Title VII Interdisciplinary, Community-Based Training Grant Programs have experienced funding cuts but are still striving to meet the needs of students and patients.

In response to these negative developments for Title VII Interdisciplinary, Community-Based Training Grant Programs, the Committee shifted its focus in 2006. In the past, the Committee has addressed such issues as workforce diversity, cultural competence, and expanding the involvement of allied health in Title VII Interdisciplinary, Community-Based Training Grant Programs. These past efforts were intended to expand and enhance the focus of the Title VII Interdisciplinary, Community-Based Training Grant Programs and ultimately to improve the quality of health care in the Nation.

In 2006, as a result of the recent funding developments, the Committee focused on "best practices" in providing interdisciplinary education and training for improved access to and quality of care for medically underserved populations. The Committee addressed two inter-related questions: 1) what are the best practices/models of interdisciplinary training and/or community-based training; and 2) has such training improved access to care or the quality of care provided to underserved populations? The intent of the Committee was to identify activities of Title VII Interdisciplinary, Community-Based Training Grant Programs that directly improve access to and the quality of health care, with the goal of documenting and disseminating these practices (through Recommendations to the Secretary and to Congress) so that they can be implemented by other programs.

<b>Title VII Interdisciplinary, Community-Based Training Grant Programs Funding Levels</b>			
	FY 2005 Actual	FY 2006 Appropriation	FY 2007 Estimate
AHEC	\$28,971,000	\$28,681,000	---
HETC	\$3,820,000	---	---
Geriatric Programs	\$31,548,000	---	---
Quentin N. Burdick Program	\$6,076,000	---	---
Allied Health and Other Disciplines	\$11,753,000	\$3,960,000	---

On a daily basis, Committee members witness the benefits resulting from their own programs. The testimony provided during 2006 offered examples from across the country and across Title VII Interdisciplinary, Community-Based Training Grant Programs of the vital programs and services provided.

Note: The FY 2006 budget for “Allied Health and Other Disciplines” included funds only for the Chiropractic Demonstration Program and the Graduate Psychology Education Program; the Allied Health Projects Program and the Podiatric Program were not funded.

Programs funded under Section 755, Allied Health and Other Disciplines, were considered in the 2005, Fifth Annual Report and appropriate recommendations were developed (see Appendix 4, Previous Recommendations, page 39). The Allied Health Projects Program, the Chiropractic Demonstration Program, the Graduate Psychology Education Program, the Geropsychology, and the Podiatric Program are not included in this report or in its recommendations.

### **Health Education and Training Centers**

The Health Education and Training Centers (HETCs) serve the most resource-poor populations and address their health concerns at the local level by providing: training to community members, especially community health workers (CHWs); health education programs; learning opportunities to health professions students; linkages between the community and available health services; and opportunities for families and children to explore health professions. In FY 2004-2005, HETCs trained more than 1,000 CHWs. A Texas program for CHWs won an innovative practice award from the Centers for Medicare and Medicaid Services (CMS) for enrolling uninsured children into the SCHIP Program—57,000 children in 6 months with a 90 percent retention rate. Texas has adopted legislation to certify CHWs, and the Texas HETC model has been adopted by three other States. HETCs supported or facilitated clinical experiences for over 8,600 health professions students. Forty-two (42) best practices from 13 programs have been compiled in a document that was created for an annual HETC meeting.

### **Area Health Education Centers**

Area Health Education Centers (AHECs) connect students to health careers; recruit and place health professionals; and improve health services within communities. Through AHECs, approximately 300,000 students, ranging from kindergarten through college, have been introduced to health careers. A “best practices” example is the Arkansas AHEC and its M\*A\*S\*H Program, which has enabled over 3,200 students (15% minorities) to interact with health care experts. Two AHECs from Washington State serve as “best practices” examples of recruiting health professionals into community settings. These two programs work closely with safety net providers in all 39 counties of the State and have clinical training and service delivery sites in the following safety net programs: 40 community/minority health centers; 40 National Health Service Corps

(NHSC) sites; 39 local health departments; 30 tribal health clinics; and 110 rural clinic sites. Approximately 65 percent of the students who participate in the AHEC clinical rotations return to work with underserved populations. In 2003-2004, the Washington AHECs expanded the delivery of direct patient care through over 6,000 hours of service/learning by health professions students in over 250 safety net clinical sites.

### **Geriatric Education Centers**

The goal of the Geriatric Education Centers (GECs) is to facilitate training of health professions faculty, students, and practitioners in addressing problems of the elderly, using a train-the-trainer model. Fifty (50) GECs were funded through December 2006, mostly in areas that are more than 50 percent rural. An example of their efforts is the Des Moines GEC's Delirium Reduction Program, which effected a 40 to 50 percent reduction in delirium, as well as a reduction in the length of hospital stay and a decrease in overall facility costs. The program has been recognized as a best practice and is being implemented in nursing homes. The Arkansas GEC developed linkages with 50 rural community health centers (CHC) to provide geriatric education to: rural health professionals; faculty in the health professions; and primary health care providers who serve as student training sites or mentors.

### **Quentin N. Burdick Program for Rural Interdisciplinary Training**

Exemplifying best training practices, the Interdisciplinary Rural Health Training Program of East Carolina University, funded under the Quentin N. Burdick Program, trained students in multiple disciplines. The curriculum included an interdisciplinary patient case conference, resulting in a care plan; community projects (such as assessment of asthma incidence in schools); community site visits; and team visits. The Program's Burdick funding was scheduled to continue until January 2007. North Dakota's Quentin N. Burdick Program-supported Project CRISTAL sought to improve health care services to populations residing on an Indian Reservation.

Also in 2006, the Committee considered new research relating to inflammatory gum disease. Common conditions among elderly nursing home residents (cerebrovascular, cognitive, and musculoskeletal disorders) are associated with inflammatory gum disease, with risk of systemic inflammation, exacerbation of chronic diseases, and respiratory infections such as pneumonia. The dental insurance industry responded to the new research findings by incorporating dental information into medical disease management educational materials, encouraging dental visits, enhancing benefits (more extensive coverage), and waiving the frequency on preventive services for at-risk members. A model is needed that overlaps disease boundaries, is focused on prevention and treatment of inter-related inflammatory conditions, and includes progressive diagnosis and treatment of periodontal disease. A proposed model for addressing this growing need is a nursing/dental hygienist collaboration to assess and diagnose the patient and develop a

long-term plan of care, which is comprehensive, cost-effective, and focused on prevention.

The Committee discussed at length the testimony, bringing the expertise and experience of Committee members to bear on the various topics. From these discussions arose the Recommendations to the Secretary and to the Congress.

It is important to note that the work of the Committee has also been affected by the funding reductions. Instead of two to three face-to-face meetings a year, as the Committee has held in the past, in 2006 the Committee held one face-to-face meeting and two conference calls to conduct its work. During the meeting and conference calls, the Committee received testimony from individuals representing a variety of HRSA-supported agencies and programs.

## **II. Listing of Recommendations**

1. The Secretary and Congress should provide incentives for colleges, universities, and health science centers to create and maintain permanent offices or departments of interdisciplinary health sciences (participating disciplines as defined by current HRSA guidelines) education.
2. The Secretary and Congress should support interdisciplinary geriatrics education/training programs for all professionals and paraprofessionals associated with community health centers, rural health clinics, or related networks and partnerships.
3. The Secretary and Congress should give greater attention to investments in programs that educate and train health care professionals and paraprofessionals through interdisciplinary and community-based programs designed to foster the delivery of quality care to underserved and medically compromised populations.
4. The Secretary and Congress should provide funding incentives and demonstration projects in support of education and training to develop interdisciplinary health professions education clinical teams in conjunction with community health centers, rural health clinics, and other providers in underserved areas, to improve capacity, encourage positive evidence-based outcomes, and enhance the quality of health care.
5. The Secretary and Congress should support interdisciplinary community-based partnerships that: 1) provide education/training programs and/or demonstration projects addressing links between oral health and systemic health; 2) establish new models that include oral health as part of comprehensive preventive care; or 3) provide data on the overall health economics impact of preventive oral health approaches.
6. The Secretary and Congress should address the need for workforce development, faculty development, clinical educator development, and access in interdisciplinary geriatrics and gerontology to meet the need for trained professionals and paraprofessionals to provide care for older adults across the continuum of care settings.
7. The HRSA Bureau of Health Professions should provide Section 752 Health Education and Training Centers, Section 753 Education and Training Relating to Geriatrics, and Section 754 Quentin N. Burdick Program for Rural Interdisciplinary Training grantees funded in 2005 the option for no-cost extensions for up to 12 months to allow for effective use of funds and to preserve vital networks that are critical to addressing health care needs of some of the Nation's most vulnerable citizens.

8. The Secretary and Congress should support community-based linkages of health professions education programs with community health centers, rural health clinics, and other community-based sites in the development of a diverse workforce through education and recruitment activities in both rural and urban medically underserved communities.

9. The Secretary and Congress should recognize that community health workers are a valuable part of the safety net workforce and should provide funding preferences to interdisciplinary academic and community-based organizations that provide education to community health workers.

### **III. Recommendations with Rationale and Benefits**

*1. The Secretary and Congress should provide incentives for colleges, universities, and health science centers to create and maintain permanent offices or departments of interdisciplinary health sciences (participating disciplines as defined by current HRSA guidelines) education.*

*Rationale:* There has been a gradual disappearance of interdisciplinary health science education and training programs over the last 10 years. This is due in large part to the loss of Federal funding and initial support for programs that were never institutionalized. Educational institutions need to take ownership of these programs and make commitments to sustainability of faculty and resources so that the programs continue to evolve and improve. Those institutions that have developed interdisciplinary offices, centers, or departments have demonstrated that they promote collaboration, rather than competition, in education and patient-care delivery. They have also demonstrated the effectiveness of this type of education and training in their communities. Thus, this is a model that should be encouraged and promoted.

*Benefit:* Initial incentives for colleges, universities, and health science centers to create their own permanent offices or departments of interdisciplinary health sciences education reduces long-term Federal costs and results in programs designed to be effective in local communities. The programs developed within these settings are more likely to be subjected to rigorous review and assessment approaches. Additionally, establishment of these infrastructures enlarges the cadre of qualified interdisciplinary faculty and the potential to enhance the pipeline of future faculty.

*2. The Secretary and Congress should support interdisciplinary geriatrics education/training programs for all professionals and paraprofessionals associated with community health centers, rural health clinics, or related networks and partnerships.*

*Rationale:* There has been a recent Federal emphasis on CHCs as an approach to meeting the health care needs of the underserved. However, little attention has been given to the proper education/training of the professionals/paraprofessionals that will provide health care services within the infrastructure of CHCs, rural health clinics, and related networks and partnerships. This is especially true in geriatrics where the majority of service providers lack adequate training. The recent loss of Federal support for interdisciplinary Geriatrics education/training programs provides a sense of urgency regarding quality care for the elderly. The interdisciplinary care model has documented success in improving the quality of care and reducing overall health care costs for the elderly population. There are well established “best practice” models developed by the GECs that can be applied to education/training programs for CHC infrastructure service providers.

*Benefit:* CHC infrastructures and related networks and partnerships (including rural health clinics) may not be able to provide quality care for the elderly under the present

circumstances. Specific interdisciplinary geriatrics/gerontology programming will improve the quality of care, reduce overall health care expenditures, and ensure that services are provided in a culturally sensitive and appropriate fashion.

*3. The Secretary and Congress should give greater attention to investments in programs that educate and train health care professionals and paraprofessionals through interdisciplinary and community-based programs designed to foster the delivery of quality care to underserved and medically compromised populations.*

*Rationale:* Health professions education programs that use interdisciplinary and community-based educational strategies, with measurable outcomes, are critical to the preparation of a workforce that will respond to society's greatest health care needs. The investments of the past have supported the availability of interdisciplinary and community-based educational opportunities, increased access to health care in underserved and medically compromised populations, advanced the preparation of a workforce educated to respond to increasingly complex health care needs, and sensitized health care providers to issues of diversity, cultural competence, and disparity. Examples of the breadth and depth of the impacts of the investments include:

- HETC programs in FY 2005 facilitated collaboration with approximately 100 CHC sites, providing over 219,000 contact hours of continuing education to over 20,000 participants, enabled community-based training of nearly 7,500 health professions trainees from a broad range of disciplines, and reached out to nearly 13,000 secondary education students.
- GECs trained more than 50,665 health care providers in 35 disciplines and 9,000 students in underserved areas. They have logged more than 8.5 million patient encounters in ambulatory hospitals, long-term care settings, and senior centers.
- In the Quentin N. Burdick programs, 4,303 trainees have provided over 300,000 interdisciplinary health service encounters to diverse populations in rural, underserved areas.

*Benefit:* It is projected that between 2000 and 2012 the need for health professionals will grow at twice the rate of all other occupations and 29 percent more providers will be necessary. The geographic distribution of the workforce will also continue to be an issue. Today, there are 4,474 health professional shortage areas (HPSAs) in the United States, in which 62 million people live and 35 million are underserved. Future investments are necessary to address projected workforce shortages and health care needs.

*4. The Secretary and Congress should provide funding incentives and demonstration projects in support of education and training to develop interdisciplinary health professions education clinical teams in conjunction with community health centers, rural*

*health clinics, and other providers in underserved areas, to improve capacity, encourage positive evidence-based outcomes, and enhance the quality of health care.*

*Rationale:* The Fifth Report of the Committee emphasized the importance of interdisciplinary health care education and training, which is defined as a collaborative process in which an interdisciplinary care team of health care professionals provide an educational experience that “shares knowledge and decision making to create solutions to health care problems that transcend conventional discipline-specific methods and work together in service of patient-centered and/or community-centered health care needs.” Recent funding reductions in a number of major Bureau of Health Professions (BPHr) programs have greatly decreased the opportunities for interdisciplinary education. In its discussions, the Committee strongly believed that despite this situation, interdisciplinary education and training of health care practitioners is of critical importance to a culturally competent, diverse, and well-educated workforce grounded in evidence-based outcomes and committed to quality care. Interdisciplinary education and training must continue as a core mission of BPHr.

*Benefit:* CHCs and other community-based sites provide an important clinical setting for interdisciplinary health care education. HRSA funds over 1000 CHCs, which provided health care to over 13 million people in 2004 in rural and underserved areas. Many of those served had no other way to receive these services. CHCs have proven to be an important community-based health care delivery site and HRSA projects that CHCs will be strengthened in number and size in the coming years. Providing funding incentives and demonstration projects that foster interdisciplinary education opportunities in CHCs, rural health clinics, and other providers in underserved areas would improve the workforce and capacity of these organizations to deliver quality care while providing enhanced team-oriented clinical education opportunities in a community-based environment.

*5. The Secretary and Congress should support interdisciplinary community-based partnerships that: 1) provide education/training programs and/or demonstration projects addressing links between oral health and systemic health; 2) establish new models that include oral health as part of comprehensive preventive care; or 3) provide data on the overall health economics impact of preventive oral health approaches.*

*Rationale:* Sufficient data now exist to link oral health with systemic health. Poor oral health has many systemic consequences and may initiate or exacerbate many common chronic inflammatory conditions/diseases, especially cardiovascular/cerebrovascular disease and diabetes. Thus, overall health is dependent on good oral health. This has been recognized in the recent reports by the U.S. Surgeon General and the national organization of America’s Health Insurance Plans. Providing preventive oral care as part of comprehensive health care in vulnerable populations, especially those with chronic inflammatory diseases and the elderly, reduces health care expenditures in subsequent years. However, there remains a general lack of awareness of these important facts among health care professionals/paraprofessionals, educators, and the public.

*Benefit:* Interdisciplinary, community-based partnerships that address this important relationship will improve the quality of life for all Americans. Future information in this area will have major effects on the delivery of preventive services, design of insurance plans, and national health care costs. Federal support of pilot programs and initiatives will provide important urgency and credibility to these efforts. Greater accessibility to preventive oral care may represent the next significant public health achievement in America.

*6. The Secretary and Congress should address the need for workforce development, faculty development, clinical educator development, and access in interdisciplinary geriatrics and gerontology to meet the need for trained professionals and paraprofessionals to provide care for older adults across the continuum of care settings.*

*Rationale:* The number of older Americans will double over the next 30 years, with a projection that by 2030, almost one in five Americans will be 65 or older. People over 85 years of age are the fastest growing segment of the U.S. population. With increasing numbers of older adults also comes an increasing population experiencing chronic illness, functional limitations, and disability. The traditional model of health care delivery in the U.S. has been a physician-centered system. The use of alternative models of care, including informal care, community-based care, in-home services, and residential facilities is expanding, and presents shifting and increasingly interdisciplinary workforce needs. Workforce studies report that the need for more health care providers for the elderly is expected to increase both to fill new positions resulting from changing service delivery models as well as to replace older retiring providers. The availability of geriatric/gerontology clinical educators, with the training and focus on an interdisciplinary care delivery model, is critical to the Nation's response to an increasing need and demand for health care by an aging population. Without an adequate core of qualified faculty and clinical educators, workforce shortages cannot be effectively addressed. Prior GEC authorization has not permitted the training of paraprofessionals directly, a group that is critical to meeting the health care needs of our aging population.

*Benefit:* Interdisciplinary training is an important educational complement to quality care. HRSA programs that are currently funded focus on training of physicians and nurses. Insufficient training opportunities are available in other health care disciplines, which are critical to the care of the aging population. The recommended funding incentives in the HRSA-funded programs can encourage the inclusion of a broader range of health disciplines in workforce, faculty, and clinical educator development programs. These incentives will expand the base of educators prepared to train current and future health care providers, as well as the base of health care providers educated, in the interdisciplinary care of our aging population. Funding incentives to support and advance careers of geriatric/gerontology clinical educators, in a variety of health disciplines, with a focus on interdisciplinary training, will address a severe shortage in the field and improve access to care for older adults.

7. *The HRSA Bureau of Health Professions should provide Section 752 Health Education and Training Centers, Section 753 Education and Training Relating to Geriatrics, and Section 754 Quentin N. Burdick Program for Rural Interdisciplinary Training grantees funded in 2005 the option for no-cost extensions for up to 12 months to allow for effective use of funds and to preserve vital networks that are critical to addressing health care needs of some of the Nation's most vulnerable citizens.*

*Rationale:* The Department of Labor, Health and Human Services, and Education and Related Agencies Appropriations Act 2006, passed by Congress in December 2005, appropriated no funds for Section 752-Health Education and Training Centers, Section 753-Education and Training Relating to Geriatrics, and Section 754-Quentin N. Burdick Program for Rural Interdisciplinary Training. As a result, grant activities under these programs will conclude at the end of the current funded budget period. No-cost extensions for these unfunded grantees have been limited by HRSA's BHP to 6 months.

These programs have been in existence for 10 to 20 years and provide critical interdisciplinary and community-based training and education to entry-level, advanced, and faculty trainees. The program grantees have developed important partnerships with other organizations, Federal programs, and local and State agencies, schools, colleges and universities. These partnerships are vital to the success of the programs and have required trust to initiate, time to develop, and sustained effort to maintain. On-again, off-again relationships are not a viable option for the creation of infrastructures that respond to the needs of the Nation's most vulnerable citizens. Once undone, the opportunities for reestablishment of partnerships, collaborations, and networks may be limited.

*Benefit:* With limited additional administrative support by HRSA, grantees could be given needed flexibility in managing the expenditures of unencumbered funds, which could serve to help preserve vital collaborations and partnerships by simply expanding the time available, from 6 to 12 months, to develop and implement program continuation strategies. The beneficiaries of such an option for extended no-cost extensions, a commonly used strategy that encourages responsible budgeting and expenditure of unencumbered funds, are the program grantees and trainees and the underserved and vulnerable citizens served today and in the future by the program participants.

[ Editor's note: In support of this Recommendation, and with due regard for the perceived need for rapid action, the Committee directed the Chair, Dr. Thomas Cavalieri, to send, without delay, a letter advocating the no-cost extensions. A copy of that letter to Secretary Leavitt appears as Appendix 5 to this Report.]

8. *The Secretary and Congress should support community-based linkages of health professions education programs with community health centers, rural health clinics, and other community-based sites in the development of a diverse workforce through education and recruitment activities in both rural and urban medically underserved communities.*

*Rationale:* The Institute of Medicine's 2004 report, *In the Nation's Compelling Interest: Ensuring Diversity in the Health-Care Workforce*, presents an evidence-based argument to support the importance and benefits of diversity in health professions education. Moreover, affiliation with the federally qualified health centers (FQHCs) and other community-based primary care facilities enhance the opportunity to attract and train a more diverse and competent work force. The CHCs are the foundation of the Nation's formal safety net system. Through participation in public-private collaboration and partnerships with health professions education programs, these sites could effectively train and expose the full range of health professions students, including primary care residents and medical students, to the special practice characteristics of these settings while also facilitating mechanisms for future recruitment of a diverse workforce. Further, the coordination and communication among these sites with other agencies will promote innovative models of collaboration for long-term solutions to workforce development, recruitment, and retention, which can be replicated on multiple fronts.

Consistent with the President's Community Health Initiative and the projected growth of CHCs, including their expanded medical capacity, the demand for health professionals is anticipated to grow at twice the rate of other occupations. These workforce issues pose a significant challenge and relate to the need for systematic data on the supply and demand of health workers and the diversity imbalances of the overall health workforce to effectively inform policy makers. There needs to be more coordination across Federal agencies, especially DHHS agencies and the Department of Education, on these issues.

*Benefits:* The support of community-based linkages and collaborations with CHCs and health professions education stimulates diversity and encourages workforce collaboratives among health professions training programs. In addition, these linkages promote innovative models on integrating recruitment and retention—best practices—in medically underserved and rural community-based health centers and other community-based sites. The identification and adoption of best practices, supported by targeted funding, promotes the availability and adequacy of a diverse and culturally competent workforce in support of CHCs, which will ensure access to appropriate primary and preventive care. This approach would encourage HRSA to evaluate lessons learned by multiple CHCs in solving recruitment and retention problems and to identify mechanisms that are replicable in other communities. Congress should increase funding for Title VII Interdisciplinary, Community-Based Training Grant Programs, such as the AHEC Program, which focuses on health careers training for high school students and has been shown to be effective in increasing the diversity of trainees in health careers programs. Other financial mechanisms that will also enhance the diversity of the health workforce should also be developed.

*9. The Secretary and Congress should recognize that community health workers are a valuable part of the safety net workforce and should provide funding preferences to interdisciplinary academic and community-based organizations that provide education to community health workers.*

*Rationale:* Both representing and serving resource-poor populations, CHWs help to meet the distinct needs of communities. They serve as liaison between their community and available health services and they provide health education on a “close-to-home” basis. They have the unique ability to work door-to-door in the neighborhood. Since they often arise from the community they serve, CHWs are welcomed as are no other health workers. They have little need for training in cultural competency or local linguistics and often serve as role models for young people in their community. For many, working as a CHW is the first step on the career ladder of the health professions. HETCs are federally-mandated to train CHWs. Other organizations could extend this training to many more communities if offered resources and incentives to do so.

*Benefits:* Many projects across the country have demonstrated the value resulting from the efforts of well-trained CHWs. A program in Texas won an innovative practice award from CMS for its efforts to enroll uninsured children in SCHIP. A California program offered effective outreach in the areas of breast cancer and asthma. A program in Georgia developed a coalition between business interests and health services. The positive light in which CHWs are uniformly held adds a subjective imperative to the demonstrable objective successes of programs around the United States. It remains now to extend CHW programs to many more resource-poor communities, to the ultimate benefit of all.

#### **IV. Future Direction of the Committee**

The Committee will continue to investigate best practices and new models for interdisciplinary education/training and health services as they relate to improving quality of life in communities across America. Emphasis will be placed on those areas that target rural and underserved communities/populations, including the elderly. Information will be gathered and synthesized from expert testimony and discussions of thought leaders representing various health professions, HRSA programs, industry, and the community at large. Reports and recommendations will be provided to the Secretary and Congress for consideration and action.

In the September 2006 conference call, the Committee identified possible topics for future meetings.

- Public Health and the role of Title VII Interdisciplinary, Community-Based Training Grant Programs in the Nation's public health system.
- Documenting outcomes: identifying effective models to demonstrate program effectiveness and the achievement of identified outcomes. A recent report by the Advisory Committee on Training in Primary Care Medicine and Dentistry addresses evaluating the impact of Title VII Interdisciplinary, Community-Based Training Grant Programs.
- The role of professional organizations and accrediting bodies in the development of standards that must be met by Title VII Interdisciplinary, Community-Based Training Grant Programs.
- The unique service delivery systems of rural health clinics. Many rural health clinics cannot provide interdisciplinary care because of the lack of specialized providers in the area and insufficient funding.
- Disaster Preparedness (as an aspect of public health). Many Title VII Interdisciplinary, Community-Based Training Grant Program grantees are preparing providers to respond to disasters such as hurricanes, earthquakes, and pandemic flu.
- A September 2006 Institute of Medicine (IOM) Report on Reimbursement calls for Medicare reimbursement to be based on the quality of care rather than the number of procedures performed or patients seen. The report mentions the importance of "teams" in the provision of care.

## **V. Background of the Committee**

In 1998, under the Authority 42USC 294F, Section 756 of the Public Health Service Act, the Advisory Committee on Interdisciplinary, Community-Based Linkages was created. The Committee's charge is to: 1) provide advice and recommendations to the Secretary concerning policy and program development and other matters of significance concerning activities under Section 756, Title VII, Part D of the PHS Act; and 2) prepare and submit to the Secretary, 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.

In addition, Section 756 directs that:

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

The Division of State, Community and Public Health in HRSA's Bureau of Health Professions is responsible for all aspects of the Committee's management. The Committee addresses its charge by meeting several times each year to hear testimony on specific topics relevant to its charge. The Committee was initially chartered March 24, 1999 and subsequently renewed March 22, 2001 and March 1, 2005.

## VI. Committee Members and Federal Support Staff

### **Mary Amundson, MA**

Assistant Professor  
University of North Dakota  
School of Medical and Health Sciences  
Center for Rural Health  
Grand Fork, North Dakota  
*Program: Rural Health*

### **Heather Karr Anderson, MPH**

Associate Director  
California AHEC & HETC Programs  
USCF – Fresno  
Fresno, California  
*Program: Health Education Training  
Center (HETC)*

### **Jeremy Boal, MD**

Associate Professor of Medicine and  
Geriatrics  
Vice Chair, Strategic Planning  
Department of Medicine  
Mount Sinai Medical Center  
New York, New York  
*Program: Geriatric Academic Career  
Award (GACA)*

### **Hugh W. Bonner, PhD**

Vice Chair, Advisory Committee on  
Interdisciplinary, Community-Based  
Linkages  
Dean and Professor  
College of Health Professions  
SUNY Upstate Medical University  
Syracuse, New York  
*Program: Area Health Education Center  
(AHEC)*

### **Amna B. Buttar, MD**

Clinical Associate Professor of Geriatrics  
and Gerontology  
Department of Medicine  
University of Wisconsin School of Medicine  
and Public Health  
Madison, Wisconsin

*Program: Geriatric Academic Career  
Award (GACA)*

### **Ann Bailey Bynum, EdD**

Associate Director, Arkansas AHEC  
Program  
Director, UAMS Rural Hospital Program  
Co-Director, UAMS Center for Distance  
Health  
Little Rock, Arkansas  
*Program: Area Health Education Center  
(AHEC)*

### **Cheryl A. Cameron, PhD, JD**

Acting Vice Provost  
Professor, Dental Public Health Sciences  
University of Washington  
Seattle, Washington  
*Program: Allied Health*

### **Thomas Cavalieri, DO FACOI, FACP**

Chair, Advisory Committee on  
Interdisciplinary, Community-Based  
Linkages  
Interim Dean  
Endowed Chair for Primary Care Research  
Professor of Medicine  
Director, New Jersey Institute for Successful  
Aging  
UMDNJ - School of Osteopathic Medicine  
Stratford, New Jersey  
*Program: Geriatric Training for Physician,  
Dentist and Behavioral Mental  
Health Professional*

### **Susan L Charette, MD**

Assistant Clinical Professor  
Division of Geriatrics  
Department of Medicine  
UCLA Medical Center  
Los Angeles, California  
*Program: Geriatric Academic Career  
Award (GACA)*

**William Elder, Jr., PhD**  
Clinical Psychologist  
Department of Family Practice and  
Community Medicine  
University of Kentucky Chandler  
Medical Center  
Lexington, Kentucky  
*Program: Graduate Psychology*

**Rosebud Foster, EdD, MSN**  
Special Assistant to the Executive Vice  
Chancellor and Provost  
Professor of Public Health  
Nova Southeastern University  
College of Osteopathic Medicine  
Ft. Lauderdale, Florida  
*Program: Health Education Training  
Center (HETC)*

**Gordon Green, MD, MPH**  
Professor, Family & Community  
Medicine  
Southwestern Allied Health Sciences  
School  
The University of Texas Southwestern  
Medical Center at Dallas  
Dallas, Texas  
*Program: Health Education Training  
Center (HETC)*

**Gail M. Jensen, PhD, PT**  
Dean, Graduate School  
Associate VP for Faculty Development  
in Academic Affairs  
Professor, Department of Physical Therapy  
Faculty Associate, Center for Health Policy  
and Ethics  
Creighton University  
Omaha, Nebraska  
*Program: Rural Health*

**Anthony Iacopino, DMD, PhD**  
Associate Dean for Research &  
Graduate Studies  
Director, Wisconsin GEC  
Marquette University School of

Dentistry  
Milwaukee, Wisconsin  
*Program: Geriatric Education Center  
(GEC)*

**Karona Mason-Kemp, DPM**  
Chair  
Department of Biomechanics and  
Orthopedic Diseases  
Dr. William Scholl College of Podiatric  
Medicine  
Rosalind Franklin University  
North Chicago, Illinois  
*Program: Podiatric Medicine*

**Andrea Sherman, PhD**  
Project Director  
The Consortium of New York Geriatric  
Education Centers  
Division of Nursing  
The Steinhardt School of Education  
New York University  
New York, New York  
*Program: Geriatric Education Center  
(GEC)*

**Stephen L. Wilson, PhD**  
Director, School of Allied Medical  
Professions  
Associate Dean, College of Medicine  
and Public Health  
Ohio State University  
Columbus, Ohio  
*Program: Allied Health*

**Rose M. Yuhos, RN**  
Executive Director  
Southern Nevada Area Health Education  
Center  
Las Vegas, Nevada  
*Program: Area Health Education Center  
(AHEC)*

**Writing Sub-Committee**

Gordon Green, MD, MPH (Chair)

Hugh W. Bonner, PhD  
Amna Buttar, MD  
Cheryl A. Cameron, PhD, JD  
Rosebud Foster, EdD, MSN  
Anthony Iacopino, DMD, PhD  
Stephen Wilson, PhD  
Rose M. Yuhos, RN

**Planning Sub-Committee**

Thomas Cavalieri, DO, FACOI, FACP  
(Chair)

Hugh Bonner, PhD  
Mary Amundson, MA  
Carol Ann Bynum, EdD  
Karona Mason-Kemp, DPM  
Andrea Sherman, PhD

**FEDERAL SUPPORT STAFF**

**Louis D. Coccodrilli, MPH**  
Designated Federal Official, Advisory  
Committee on Interdisciplinary,  
Community-Based Linkages  
Deputy Director, Division of State,  
Community & Public Health  
Deputy Director, Division of Medicine  
and Dentistry  
Bureau of Health Professions  
Health Resources and Services  
Administration  
Department of Health and Human  
Services

**Rosa Delgado**

Secretary  
Bureau of Health Professions  
Health Resources and Services  
Administration  
Department of Health and Human  
Services

**Cecelia Maryland**

Program Analyst  
Bureau of Health Professions  
Health Resources and Services  
Administration  
Department of Health and Human  
Services

**Vanessa Saldanha, MPH**

ASPH/HRSA Public Health Fellow  
Area Health Education Center Branch  
Bureau of Health Professions  
Health Resources and Services  
Administration  
Department of Health and Human  
Services

**CONTRACTOR**

Paula Jones  
Consultant

## **Appendix 1: Testimony – June Meeting**

### **The California AHEC and its Relationship with Community Health Centers**

Presenter: Heather Karr Anderson, MPH

California AHEC and HETC Programs, USCF-Fresno

Research shows that the best way to adequately staff CHCs is to train health professionals in community settings. In 1993, the California AHEC received State funding that matched Federal grant awards to develop a new initiative to create and expand a residency program at CHCs or at community-based clinics. Results of this initiative include the development of five new residency programs and the expansion of three residency programs. The collaboration between the AHEC and CHCs is the only program to open new residency slots in 20 years. In addition to creating 90 new family medicine residency slots, it has enabled the development of clerkships and payment for faculty time. The Clinic Consortia has also been initiated, which is comprised of 13 administrative umbrella agencies for 330 clinics throughout the State. Seven of the ten California AHEC centers are now located within Clinic Consortia or CHCs. Future directions include initiating a statewide collaboration with the California Primary Care Association, the AHEC, and CHCs to improve access to and the quality of care to medically underserved populations.

### **GEC/HC Linkages**

Presenter: Ronni Chenoff, PhD

Arkansas GEC

Every county in Arkansas is designated as medically underserved at some level, with a large percent classified as HPSAs. In efforts to provide adequate health care services to this population, GEC and CHC linkages have been developed to provide: quality education in geriatrics to rural health professionals; education to faculty in the health professions; and training to primary health care providers to serve as student training sites. Community Health Centers of Arkansas is a collaboration of 11 FQHCs that manage approximately 50 rural-based health clinics.

The collaboration provides training to physicians, nurses, social workers, pharmacists, dietitians, physical therapists, occupational therapists, dental health professionals, speech and hearing professionals, and psychologists. Health professions training is conducted via CE/CME symposia on nutrition and aging, geriatric medicine, and best practices in the continuum of care, including other courses co-sponsored with the Geriatric Research Education and Clinical Center (GRECC). Other trainings include: AR-GEM self study curriculum in geriatrics; mandatory and elective modules; coaching and mentoring workshops; clinical observation and mentoring; and curriculum development (dental, nutrition, surgery). Training is conducted by various means such as interactive video teleconferences, VHS, DVDs, and online audio and PowerPoint lectures. Evaluation of

this collaboration is done through the biannual needs assessment, alternate year surveys, program evaluations, follow-up phone surveys, HRSA annual reports, Institute on Aging reports, GRECC annual reports, and management briefings.

### **Challenges Associated with Building Linkages among Academic Institutions and Medical Facilities**

Presenter: Mary Amundson, MA  
Center for Rural Health, North Dakota

In 2005, funding under the Quentin N. Burdick Program was provided to 17 States—Arizona, Georgia, Hawaii, Idaho, Illinois, Kansas, Kentucky, Nebraska, New Mexico, North Carolina, North Dakota, New York, Ohio, Oklahoma, South Carolina, Tennessee, and West Virginia. Funded programs work to increase access to health care and to build the health care workforce. For example, 4,303 trainees have provided over 300,000 health service encounters. Training covers multiple disciplines—94 percent of funded programs provide training in social work, psychology, and/or counseling, 89 percent of funded programs provide nursing training, 61 percent provide training in medicine, 58 percent provide training in occupational and physical therapy; and over 40 percent provide training to nutritionists, physician assistants, and professionals in public health.

An example of a Burdick-supported program is North Dakota's Project CRISTAL, which includes the University of North Dakota (medicine, nursing, social work, psychology, clinical lab science, nutrition, dietetics, occupational therapy, physical therapy), Turtle Mountain Community College, Fort Berthold Community College, Minot State University (radiology technology), health care facilities, and community agencies. Project CRISTAL's main goal is to improve health care services to populations residing on the Turtle Mountain Indian Reservation in Belcourt and New Town by developing a curriculum designed to provide interdisciplinary training. As a result of the program, an interprofessional course was developed and 80 students from different disciplines participated in the course. In addition, students were provided the experience of working with Native American populations.

### **The National Health Education and Training Centers Program: Linkages with the Community Health Centers**

Presenter: Rosebud Foster, EdD  
Nova Southeastern University

HETCs are funded to improve the health of low-income and minority populations in severely underserved border and non-border areas through use of incentives to attract and retain health care personnel and by emphasizing wellness in public health education. HETCs encourage communities to utilize their own resources to enhance public health, provide community health education and health provider training, and target special populations such as people of color, the disadvantaged and culturally and linguistically diverse communities.

In FY 2005, five border HETCs and six non-border HETCs received funding. Border HETCs are located in States within 300 miles of the US-Mexico border and in Florida. The non-Border HETCs are located in States with severely disadvantaged, underserved populations in rural and urban areas. In 2005, non-Border HETCs included Arkansas, Georgia, Hawaii, Kentucky, Washington, and Wisconsin. HETC programs establish an advisory board of health service providers, educators, and consumers from the service area. Programs provide: training and education programs for health professions students; training in health education services, including training to prepare CHWs; and support through education and other services.

In their work to address unmet health care needs, HETCs work with CHCs. In FY 2005, HETCs worked with approximately 100 CHC sites, providing over 219,000 contact hours of CE to over 20,000 participants, of which 3,000 were from CHC sites. In addition, HETCs enabled community-based training of nearly 7,500 health professions trainees including: 2,057 allopathic and osteopathic medical students; 2,130 nursing, APN, and PA students; 1,259 dental, pharmacy, public health, mental health, and other allied health students; and 2,020 CHWs. HETCs also reached nearly 13,000 9-12 grade students with health professions career enrichment services.

An example of a HETC-CHC linkage is the Florida Border HETC Program, which is a statewide partnership between Nova Southeastern University, the University of Florida, University of Miami, and the University of South Florida. The program includes eight local, community-based HETCs serving urban, rural agricultural and migrant communities. The Florida HETC program works with approximately 40 community/migrant health centers and county health department sites, in which training is provided to medical students and residents, dental students and residents, nursing students and nurse practitioners, and numerous students in other disciplines.

### **Allied Health Linkages**

Presenter: Richard Oliver, PhD  
University of Missouri–Columbia

The Certification in Interdisciplinary Geriatric Assessment Program is a 3-year program for allied health professionals, which offers a 25-hour certificate from the School of Health Professions. It is funded through HRSA's Allied Health Program. The certificate program primarily targets professionals in the fields of health psychology, occupational therapy, physical therapy, respiratory therapy, and speech language pathology. The program delivers educational programming in research, assessment, and treatment information to health professionals providing services in underserved or un-served areas of Missouri and promotes the use of an interdisciplinary team with patients that have complex medical issues. Educational programs include: geriatric lecture series; geriatric resource library; a newsletter; virtual health care team; website; and workshops.

## **Health Disparities Collaborative: Workforce Development Collaborative**

Presenter: Ahmed Calvo

Bureau of Primary Health Care, Health Resources and Services Administration

The Workforce Development Collaboratives are designed to build partnerships between health centers, residency training programs, AHECs, GECs, and the NHSC. These collaboratives address the recruitment and retention of health care professionals and explore the development of interdisciplinary education and training models.

An example of a collaborative is the Grown-Our-Own Program at San Ysidro Health Center (SYHC), which focuses on the development of a long-term strategy to identify and recruit medical students interested in working with communities and health centers. It is a partnership between Scripps, UCSD School of Medicine, and the San Ysidro Health Center Network. Scripps developed a curriculum and a GME apparatus to provide structure and accreditation opportunities. UCSD faculty provided lectures as well as advanced electives and research opportunities. Medical students in the program provide care to SYHC patients, many of whom face multiple challenges in accessing and remaining in the health care system. The creation of this residency program has affected recruitment and retention of clinicians at SYHC—graduates remain within the community, as do the practitioners involved in the Grow-Our-Own Program. The residency program has helped to attract internists, pediatricians, and other physicians dedicated to serving in health centers. Many also maintain a focus on research and teaching.

## **CHC Workforce**

Presenter: Gary Hart, Ph.D.

Rural Health Research Center, University of Washington

The National Health Center Workforce Survey Study was conducted collaboratively by the University of Washington Rural Health Research Center, the University of South Carolina Rural Health Research Center, and the National Association of Community Health Clinics. The study was funded by HRSA's Office of Rural Health Policy, Bureau of Primary Health Care, and Bureau of Health Professions. The study explored: 1) staffing needs of federally funded health centers by provider type; 2) health center recruitment issues; and 3) workforce issues for health centers depending on characteristics and locations.

The survey findings indicate that the most common health centers are community based. Others include centers serving the homeless, migrant health centers, and health centers based in schools or public housing. A majority of the grantees (n=731) in the study were urban health centers with large populations and general care sites.

The majority of FTE providers in health centers were "other" nurses, followed by registered nurses (RNs) and family practitioners (FPs). Health centers have high vacancy rates for psychiatrists, obstetricians/gynecologists, dentists, FP/general practitioners,

pharmacists, RNs, nurse practitioners (NPs), general medicine, general pediatricians, and physician assistants (PAs). All these professionals are actively recruited by health centers. Overall, 30 percent of all physicians in health centers have an obligation, with half committed to NHSC and others with J-1 visa waivers, scholarships, or state loans. Provider vacancy rates differ by provider type and location. The vacancy rate is highest for family practitioners in isolated small mountainous rural areas. Dentist vacancies are highest in small and isolated rural areas of the West Coast. In urban areas, RNs are the most difficult to recruit, followed by FPs and NPs. In large rural areas, both FPs and RNs are equally hard to recruit. In small rural and isolated small rural areas, FPs are the hardest to recruit followed by RNs and NPs. Some challenges to recruitment are spouse employment, lack of cultural activities, compensation, housing, workload, schools, and facility conditions. Strategies to improve recruitment include: higher salaries; more loan repayment opportunities; greater visibility; more minority training; better job banks; portable benefits packages; better recruitment tools; and more residency slots. Formal retention plans are also needed.

### **HRSA – Supported Health Centers**

Presenter: Richard Lee

Bureau of Primary Health Care, Health Resources and Services Administration

HRSA provides Federal grant funding to over 1,000 health center grantees, with a total of over 3,800 comprehensive service sites that deliver primary and preventive care. Health centers that receive Federal Section 330 grants through HRSA are identified by CMS as FQHCs and receive cost-based Medicare/Medicaid reimbursement. These centers are required to include the involvement of the community and consumers, primarily through governing boards. Other fundamental principles include: focusing on the needs of the underserved; providing care regardless of the ability to pay; providing comprehensive primary health care; assuring high quality care delivered by professional staff; and establishing partnerships in the public and private sectors.

In FY 2006, 1,006 grantees received \$1.8 billion in funding, served 13.1 million patients, and provided 52.2 million patient encounters. Slightly over half the health centers are in rural areas. Forty (40) percent of patients are uninsured, 91 percent having incomes below 200 percent of poverty level, and 63 percent of the patients are minorities.

A typical health center has an annual budget of \$6 million and provides general primary care, preventive screenings, chronic disease management, and enabling services. On average, health centers employ 90 staff members—25 clinicians, 17 clinical support staff, 29 enabling patient support staff, and 19 administrative staff. A major source of funding for health center programs is Medicaid, which makes up 36 percent, followed by Federal grants, which account for 22 percent of funding. Other sources include State/local contributions, a small percentage from Medicare, self pay, public contributions, and other third party payments.

An FQHC Look-Alike program is a health center that operates under the same fundamental principles as health center grantees, but does not receive grant funds. Such a program must be governed by a board where the majority of members are consumers. In addition, it must serve all individuals regardless of their ability to pay and provide comprehensive primary care. FQHC Look-Alike program benefits include enhanced Medicaid and Medicare reimbursement, participation in discounted drug pricing programs, and eligibility to receive NHSC providers. Currently, there are 123 Look-Alike programs in 20 States.

## **Appendix 2: Testimony – July Meeting**

### **Interdisciplinary Training Best Practices**

Presenter: Maria A. Castillo Clay, PhD

Office of Clinical Skills Assessment and Education, East Carolina University, Division of Health Sciences

Interdisciplinary education is a vision for education in which all health professionals are educated to deliver patient-centered care as members of an interdisciplinary team. The Interdisciplinary Rural Health Training Program, funded under the Quentin N. Burdick Program, incorporates multiple disciplines: medicine; nursing; pharmacy; nurse practitioners; physician assistants; social work; nutrition; occupational therapy; physical therapy; clinical lab science; and health information. The program started in one site and has expanded to cover four counties in eastern North Carolina, all of which are rural, poor, underserved HPSAs. The program's Burdick funding will continue until January 2007.

The curriculum includes four major items: an interdisciplinary case conference; community projects; community site visits; and team visits. The interdisciplinary case conference is a cornerstone of the program. Teams of students are asked to identify patients from their own clinical caseloads. The team, using the traditional patient case conference model, discusses the patient and develops a care plan. The care plan is given to the provider and whether the provider implements the recommendations is tracked. In addition, all teams are required to carry out a community project. For example, a community assessment of asthma incidence in schools was conducted by one team and educational materials for children and an educational puppet show was developed.

### **GEC Best Practices**

Presenter: Elyse Perweiler, MPP, RN

Associate Director for Planning, Development, and Public Policy, New Jersey Institute for Successful Aging, UMDNJ – SOM

The goal of the GECs is to facilitate training of health professional faculty, students, and practitioners in the diagnosis, treatment, and prevention of disease, disability, and other health problems of the elderly. The program has five statutory purposes: 1) improve training of health professionals in geriatrics; 2) develop and disseminate curricula related to treatment of health problems of the elderly; 3) support training and retraining of faculty in geriatrics; 4) support continuing education in gerontology; 5) and provide students with clinical training across the geriatric continuum. GECs are not permitted to train paraprofessionals directly. It must be done using a train-the-trainer model.

Since 1983, the grant program has established over 57 GECs. Fifty (50) are currently funded through December 2006. The geriatric programs, which include the Geriatric

Training Fellowship Program, the GEC Program, and the Geriatric Academic Career Awards, were de-funded for Fiscal Year 2006.

GECs serve a very diverse population. Two-thirds provide education in areas that are more than 50 percent rural and 25 percent serve areas that are 25 to 49 percent rural. They work in 13,091 HPSAs and 3,665 medically underserved areas (MUAs). GECs have trained more than 50,665 health care professionals in 35 disciplines and 9,000 students in underserved areas. They have provided more than 8.5 million patient encounters in ambulatory hospitals, long-term care settings, and senior centers. The GECs have developed and disseminated more than 2,500 curricular materials.

An example of the activities supported by the GEC Program is the Delirium Reduction Program, conducted by the Des Moines GEC. This program was implemented on an orthopedic ward in an acute care facility. The program trained nursing and support staff on issues relating to the prevention of delirium and appropriate interventions. Staff throughout the hospital received the training, which is important since patients enter the facility through various access points such as the emergency room. As a result, there was a 40 to 50 percent reduction in delirium. There was also a reduction in the length of hospital stay by 6.9 percent, increased resident and family satisfaction, improved staff teamwork, and a decrease in overall facility costs. The program has been recognized as a best practice and is being implemented in nursing homes as a quality improvement program. The training is available on CD ROM.

### **HETC Best Practices**

Presenter: Teresa M. Hines, MPH

Program Director, Health Education and Training Centers Alliance of Texas, Texas Tech University Health Sciences Center

The HETC Program serves the most resource-poor populations and addresses their health concerns at the local level. This is done by: providing training to community members, especially CHWs; providing health education programs; providing learning opportunities to health professions students; acting as a liaison between the community and available health services; and providing opportunities for families and children to explore health professions. In 2005-2006, 11 HETCs served 32.6 million individuals. The majority of those served are Hispanics along the US-Mexico border (41%).

HETCs are federally mandated to train CHWs and almost 60 percent of funds are dedicated towards this activity. In FY 2004-2005, HETCs trained more than 1,000 CHWs. The Texas CHW training program provides a good success story. The State of Texas has adopted legislation to certify CHWs and this model has been adopted by three other States. In addition, Texas won an innovative practice award from CMS for enrolling uninsured children into the SCHIP Program—57,000 children in 6 months with a 90 percent retention rate. As part of this effort, 200 CHWs were trained and each was provided a portable copier, self-addressed, stamped envelopes, and applications. The

CHWs went door-to-door and helped families complete and mail their applications. The CHWs also followed up with these families to ensure that they attended scheduled appointments. These CHWs provided health education messages to 500,000 community members.

Other successes of the HETCs include the participation of 19,000 children, K-12<sup>th</sup> grade, in health career programs with 9,000 participating in programs longer than 20 hours in 2004–2005. In addition, HETCs supported or facilitated clinical experiences for over 8,600 health professions students and provided 10,000 student weeks of training supervised by over 1,400 community preceptors. Residents and students on rotations of a full week or more are estimated to have provided more than \$5.6 million in services to underserved sites. Additional training on a variety of topics was delivered to 14,960 community health providers, including 2,857 CHWs, 2,792 nurses, 2,282 emergency medical technicians, 1,945 physicians, and 5,084 other health professionals. A total of 7,300 hours of continuing education were provided.

Forty-two (42) best practices from 13 programs have been compiled in a document that was created for the annual HETC meeting in 2004.

### **AHEC Best Practices**

Presenter: Janet Head, RN, MS

President, National AHEC Organization, A.T. Still University of Health Sciences

AHECs support multiple activities. These include: connecting students to health careers; recruitment and placement of health professionals; and improvement of health services within communities.

AHECs target racial/ethnic minorities and disadvantaged white students through health careers and academic enhancement programs. Approximately 300,000 students ranging from kindergarten through college were introduced to health careers through AHEC programs and nearly 45,000 high school students completed health career or academic enhancement programs. An example is the Arkansas AHEC and its Medical Application of Science for Health (M\*A\*S\*H) Program, which has enabled over 3,200 students (15% minorities) to interact with a large number of health care experts. Each professional provides students with practical information concerning basic scientific theories relevant to their fields.

Accomplishments in the area of recruitment and placement of health professionals include: training of nearly 90,000 students; training of almost 40,000 health professions students in medically underserved and other community-based sites; supporting health professional training in almost 25,000 sites; and supporting the activities of almost 19,000 community preceptors, the majority of whom were physicians, in mentoring and training activities to students in community sites. An example of connecting professionals to communities comes from the State of Washington. Two AHEC programs work closely with safety net providers in all 39 counties of the State and have

clinical training/service delivery sites in the following safety net programs: 40 community/minority health centers; 40 NHSC sites; 39 local health departments; 30 tribal health clinics; and 110 rural clinic sites. Approximately, 65 percent of the students who participate in AHEC clinical rotations return to work with underserved populations. In 2003-2004, the Washington AHECs expanded the delivery of direct patient care through over 6,000 hours of service/learning by health professions students in over 250 safety net clinical sites.

Additionally, a number of strategies and programs are designed to improve health services within communities. AHECs are heavily involved with community implementation, literature and information access, cultural competency training, and preceptor training. Over 322,000 health professionals received continuing education through AHECs.

### **Examples of Interdisciplinary and/or Community-Based Training Programs that Address the Needs of Rural Populations and Rural Providers**

Presenter: Hilda Heady

2005 President, Current Vice President for Rural Health, National Rural Health Association, Executive Director, WV Rural Health Education Partnerships, Program Director of the WV AHEC, Robert C. Byrd Health Sciences Center, West Virginia University

West Virginia's efforts to meet the health care needs of rural areas are highly dependent on collaboration and partnerships. What makes the program work is that the State of West Virginia pays for the infrastructure and private foundations and the Federal government supply content and special programs that are integrated into the infrastructure. There are 11 regional consortia, four AHECs covering 50 of the 55 counties, 640 field faculty members with adjunct appointments, ten disciplines, and 19 participating universities, professional schools, and programs. Out of the 442 rural training sites, 215 are located in HPSAs or MUAs. Sites include CHCs, rural health clinics, dental offices, pharmacies, and others.

Part of the program is made up of the Health Career Opportunity Program (HCOP) and another State-funded program called the Health Sciences Technology Academy (HSTA), which focuses on reaching high school students early through math and science enhancements. Since 1994, 2,100 students have participated and 580 have graduated. The students in the program are primarily underrepresented minorities from very rural areas. Of the program graduates, 96 percent enter college as compared to only 56 percent of students that are not in the program. The State Legislature provides full tuition to any West Virginia student who completes the HSTA Program and maintains a B average in a West Virginia school with a health/science major. There are currently seven students in medical schools that went through the program and had their education paid for by the State. Of the 625 HCOP students, 90 percent have successfully graduated from college or are on track toward graduation and 95 percent have successfully graduated in health

professions or allied health programs. As a result of the funding cuts, 300 HCOP students are unable to complete the program.

West Virginia's GEC also uses the existing infrastructure. Geriatric education is available in 23 counties. The GEC provides a specialized curriculum to all interdisciplinary health profession students and it provides campus and field faculty continuing education.

The dental program consists of 26 private dental offices as well as dental offices that are part of CHCs. When the program started, the capital items were expensive and it was necessary to build and expand buildings. It was also necessary to get a commitment from dentists that they would continue to serve a certain number of underserved patients and that they would continue to work with students. In the 8 years of the program, \$7 million in uncompensated dental care has been provided.

All the partnerships that have been created help to maximize and leverage other funds. This includes: \$1.4 million per year for the statewide HSTA program; \$1.4 million per year for the statewide Cardiology Artery Risk Detection in Appalachian Communities (CARDIAC) Program; \$1.35 million over 5 years from the Robert Wood Johnson Foundation for the statewide dental pipeline program; and \$6.3 million over 7 years from NIH to WVU School of Dentistry and the University of Pittsburgh School of Medical Dentistry. West Virginia lost a total of \$7 million as a result of the eliminated Title VII Interdisciplinary, Community-Based Training Grant Programs.

### **Linking Interdisciplinary Dental Care with Systemic Care**

Presenter: Casey Hein, BSDH, MBA

Chief Editor, Grand Rounds in Oral Systemic Medicine, President, PointPerio

Presenter: JoAnn Gurenlian, PhD

The number of older Americans will double over the next 30 years. As people live longer, there is a greater likelihood of lasting damage as a result of chronic inflammatory diseases or conditions. This translates into dramatic increases in multiple-risk factor syndromes. The most common chronic conditions among elderly nursing home residents are cerebrovascular and cardiovascular diseases and cognitive, musculoskeletal, and endocrine disorders. All of these are associated with chronic inflammatory periodontitis or gum disease.

Aging translates into the added burden of periodontal disease, increasing the risk of systemic inflammation and exacerbating existing chronic conditions. For example, diabetes is often accompanied by increased risk for periodontal disease and other associated infections. This has been labeled "systemic periodontitis" since it is not a localized infection and it has ramifications beyond the oral cavity. Systemic periodontitis is believed to worsen the clinical course of multiple-risk factor syndromes, such as obesity, type 2 diabetes, hyperlipidemia, hypertension, and atherosclerosis. Periodontal disease also poses a risk for respiratory infection. The bacterial component in dental

plaque is a major cause of respiratory infection in older adults, especially those in institutions. It has been associated with pneumonia and pneumonitis. There is also a connection between periodontal disease and rheumatoid arthritis and a possible connection with Alzheimer's disease is being explored.

Because of these connections, focusing on distinct diseases is no longer sufficient. A model is needed that overlaps these boundaries and is focused on the prevention and treatment of inter-related inflammatory disease and conditions. An effective approach must include progressive diagnosis and treatment of periodontal disease and it must be a part of a chronic disease management strategy in nursing home facilities. A possible model for addressing this growing need is collaboration between nursing and dental hygienist professionals, based on a public health model that includes assessment, diagnosis, planning, implementation, and evaluation. During the intake evaluation, the new patient would be evaluated by a nurse practitioner and an advanced dental hygiene practitioner. Together, these two professionals would assess and diagnose the patient and develop a long-term plan of care. The model would also include an evaluation component to monitor practice and patient outcomes. The benefits of the proposed model include: provision of comprehensive care; focus on preventive care; and cost effectiveness.

### **Impact of Interdisciplinary Training and Care on Provider Reimbursement**

Presenter: Thomas Meyers

Executive Director – Product Policy, America's Health Insurance Plans

The dental insurance industry has responded to the emerging oral-systemic evidence in several ways. The responses include: incorporation of dental information into medical disease management educational materials; outreach encouraging dental visits to at-risk members; enhanced benefits for at-risk members (i.e., periodontal benefits at 100 percent reimbursement instead of 50 to 80 percent); and waiving the frequency on preventive services for at-risk members.

The insurance industry will continue to review the research and participate in the discussion of this issue. It also plans to: maintain an active awareness program that helps educate consumers; participate at the national level with cross-disciplinary groups to explore areas of common interest regarding oral and systemic health issues; monitor the evolution occurring at the dental benefit plan level to encourage the adoption of best practices throughout the industry; and remain focused on delivering products and services of value to consumers.

### **Appendix 3: Title VII Interdisciplinary, Community-Based Training Grant Programs**

The legislation set forth in Title VII, Part D, of the Public Health Service Act identified five programs, all with the central mission of training and education, and deemed to have the potential to support linkages that can have positive impact upon the quality and availability of health care services to populations that have traditionally been underserved or are otherwise medically vulnerable. These programs are 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 common elements; 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. They all provide training in community settings for health professions students, medical residents, and local providers. In addition, they provide key links between the academic health institutions, federally qualified health centers, and communities. They all are an integral part of the health safety net system.

Goals shared by all the programs include:

- Increasing 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;
- Promoting a redistribution of the health care workforce to underserved areas within our Nation; and
- Improving the health status of the most vulnerable of our citizens by providing them access to 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 care as part of an interdisciplinary team.

## Characteristics of Individual Programs

### Area Health Education Centers (AHEC) - (Section 751)

<b>Funding Levels for the AHEC Program</b>	
FY 2002	\$33,346,000
FY 2003	\$32,946,000
FY 2004	\$29,206,000
FY 2005	\$28,971,000
FY 2006	\$28,681,000
FY 2007	0

The goals of the AHEC Program are to: 1) improve the recruitment, distribution, supply, quality, and diversity of personnel who provide health care services in underserved rural and urban areas, or to populations with demonstrated serious unmet health care needs; 2)

increase the number of primary care physicians and other primary care providers who provide services in such areas and to such populations; and 3) increase health careers awareness among individuals from underserved areas and underrepresented populations.

To accomplish these goals, AHECs carry out the following activities.

1. Develop and support the community-based, interdisciplinary training of health professions students, particularly in underserved rural and urban areas. Exposing health professions students to underserved communities increases the likelihood that they will return to these communities to practice.
2. Provide continuing education and other services that improve the quality of community-based health care. Improving the quality of care also enhances the retention of providers in underserved communities, particularly in federally qualified community health centers.
3. Recruit underrepresented minority and disadvantaged students into the health professions through a wide variety of programs targeting elementary through high school students. Minority and disadvantaged students are grossly underrepresented in the health professions. These students are more likely to practice in underserved communities upon completion of their training.
4. Facilitate and support practitioners, facilities, and community-based organizations in addressing critical local health issues in a timely and efficient manner. AHECs often focus on interdisciplinary education in which multifaceted education programs are developed and are implemented at community-based training and service delivery sites.

<b>AHEC Program Outputs</b>			
	<b>FY 2005 Actual</b>	<b>FY 2006 Appropriation</b>	<b>FY 2007 Estimate</b>
Number of medical students trained in community sites in rural/underserved areas	16,000	17,000	--
Number. of associated health professions students trained in community sites in rural/underserved areas	14,000	20,000	--
Number of training linkages with community/migrant health centers and other underserved area sites	1,000	1,500	--
Number of local providers who received continuing education on women's health, diabetes, hypertension, obesity, health disparities, cultural competence, and bioterrorism response	310,000	315,000	--
Number of elementary/high school students receiving health career guidance and information from the Kids into Health Careers in the AHEC programs	300,000	330,000	--
Number of minority/disadvantaged students participating in a health career training and/or academic enhancement experience	36,000	42,000	--
Number of States with AHEC Programs	46	46	--

Source: <http://www.hrsa.gov/about/budgetjustification07/interdisciplinary.htm>

### **Health Education and Training Centers (HETC) – Section 752**

<b>Funding Levels for the HETC Program</b>	
FY 2002	\$4,400,000
FY 2003	\$4,371,000
FY 2004	\$3,851,000
FY 2005	\$3,820,000
FY 2006	0

The goals of the HETC Program are to: 1) improve the supply, distribution, quality, and efficiency of personnel providing health services in the United States along the border of Mexico and in the State of Florida; 2) improve the supply, distribution,

quality, and efficiency of personnel who provide services in other urban and rural areas, including frontier areas, of the United States and health services to any population group, including Hispanic individuals, that has demonstrated serious unmet health care needs; and 3) encourage health promotion and disease prevention through public education in the areas described above.

To accomplish these goals, HETCs carry out the following activities.

1. Conduct training and education programs for health professions students in the assigned service area.
2. Conduct training in community-based health education services, including training to prepare community health workers.
3. Provide education and other services to health professionals practicing in the area.

<b>HETC Program Outputs</b>			
	<b>FY 2005 Actual</b>	<b>FY 2006 Appropriation</b>	<b>FY 2007 Estimate</b>
Number of minority/disadvantaged elementary/high school students receiving a health career experience	7,500	--	--
Number of local residents trained as community health workers	600	--	--
Number of local providers or health professions students receiving a public health training experience at an underserved area site	300	--	--
Number of new health professions training sites to be established in underserved areas	20	--	--
Number of health professions students trained at new sites	80	--	--

Source: <http://www.hrsa.gov/about/budgetjustification07/interdisciplinary.htm>

### **Geriatric Programs – Section 753**

<b>Funding Levels for the Geriatric Programs</b>	
FY 2002	\$20,400,000
FY 2003	\$27,818,000
FY 2004	\$31,805,000
FY 2005	\$31,548,000
FY 2006	0

The goal of the Geriatric Programs is to improve the training of health professionals in geriatrics, through three specifically-funded programs.

1. Geriatric Education Centers – are dedicated to the interdisciplinary geriatric education and training of all health professionals.
2. Geriatric Training for Physicians, Dentists, and Behavioral/Mental Health Professionals – ensure that physicians, dentists, and behavioral/mental health professionals become experts in geriatrics in order to serve as faculty for other trainees in their respective health professions.
3. Geriatric Academic Career Awards – are designed to increase the teaching of geriatrics in medical schools through the development of junior faculty who are committed to academic careers teaching clinical geriatrics.

To accomplish these goals, grantees carry out the following activities.

1. Improve the training of health professionals in geriatrics by providing geriatric residencies, traineeships, or fellowships.
2. Develop and disseminate curricula to health professionals on the treatment of health problems of the elderly.
3. Support the training and retraining of faculty to provide instruction in geriatrics.
4. Support continuing education of health professionals who provide geriatric care.
5. Provide students with clinical training in geriatrics in nursing homes, chronic and acute disease hospitals, ambulatory care centers, and senior centers.

<b>Geriatric Program Outputs</b>			
	<b>FY 2005 Actual</b>	<b>FY 2006 Appropriation</b>	<b>FY 2007 Estimate</b>
Number of health care providers receiving training in geriatrics	50,665	--	--
Number of GECs	50	--	--
Number of dollars leveraged from other sources by each dollar of Federal funding	3	--	--
Number of geriatric fellowship trainees	66	--	--
Number of GACAs	104	--	--
Number of Patient Encounters	8,554,951	--	--

Source: <http://www.hrsa.gov/about/budgetjustification07/interdisciplinary.htm>

### **Quentin N. Burdick Program for Rural Interdisciplinary Training – Section 754**

<b>Funding Levels for the Quentin N. Burdick Program</b>	
FY 2002	\$6,996,000
FY 2003	\$6,954,000
FY 2004	\$6,125,000
FY 2005	\$6,076,000
FY 2006	--

The Quentin N. Burdick Program is designed to support the interdisciplinary education and training of health professional teams to enter into practice and/or remain in rural areas. Program goals are to: 1) use new and innovative methods to train health care professionals to

provide services in rural areas; 2) demonstrate and evaluate innovative interdisciplinary methods and models designed to provide access to cost-effective comprehensive health care; 3) deliver health care services to individuals residing in rural areas; 4) enhance the amount of relevant research conducted concerning health care issues in rural areas; and 5) increase the recruitment and retention of health care practitioners in rural areas and make rural practice a more attractive choice for health care practitioners.

To accomplish these goals, Quentin N. Burdick Programs carry out the following activities.

1. Provide interdisciplinary learning experiences for health professions students designed to enhance their understanding of the contribution that each discipline brings to the solution of health problems.
2. Conduct educational workshops and activities in rural communities for health professionals and residents.
3. Provide information and awareness activities for students, grades K-12, concerning career opportunities in the health professions.

<b>Quentin N. Burdick Program Outputs</b>			
	<b>FY 2005 Actual</b>	<b>FY 2006 Appropriation</b>	<b>FY 2007 Estimate</b>
Number of students and rural health care providers trained in community interdisciplinary rural settings	831	--	--
Number of interdisciplinary rural clinical training sites	135	--	--
Percent of program completers that will work in rural areas	50	--	--

Source: <http://www.hrsa.gov/about/budgetjustification07/interdisciplinary.htm>

### **Allied Health and Other Disciplines – Section 755**

<b>Funding Levels for the Allied Health and Other Disciplines Program</b>	
FY 2002	\$9,495,000
FY 2003	\$11,922,000
FY 2004	\$11,849,000
FY 2005	\$11,753,000
FY 2006	\$3,960,000
FY 2007	--

While the main intent of this section addresses the allied health professions, it also includes the education and training of podiatric physicians, chiropractors, and behavioral/mental health practitioners.

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

Chiropractic demonstration grants help to build collaborative efforts between chiropractors and physicians for patient care, and develop research protocols that will significantly expand documented research in the chiropractic field.

The Graduate Psychology Education Program addresses the interrelatedness of behavior and health and the critical need for integrated health care services. The program aims to train psychologists to work with underserved populations, including children, the elderly, victims of abuse and the chronically ill or disabled. The program emphasizes an integrated approach to health care services that underscores the connection between behavior and health.

Note: The FY 2006 budget for “Allied Health and Other Disciplines” included funds only for the Chiropractic Demonstration Program and the Graduate Psychology Education Program; the Allied Health Projects Program and the Podiatric Program were not funded.

The goal for the Allied Health Program is to increase the supply of allied health professionals, which is accomplished by supporting the following activities.

1. Support programs training professionals, especially those most needed by the elderly.
2. Develop and support programs that enable the transition of baccalaureate graduates into an allied health profession.
3. Support programs linking academic centers to rural clinical settings through a community-based setting.
4. Support career advancement training programs for allied health professionals.
5. Support programs that:
  - provide clinical training sites in underserved or rural communities;
  - provide interdisciplinary training to promote the effectiveness of allied health professionals in geriatric care;
  - establish centers that apply innovative models that link practice, education, and research around the allied health field; and
  - provide financial assistance to allied health students in fields in which there is a demonstrated shortage and who agree to practice in a medically underserved community.

<b>Allied Health and Other Disciplines Program Outputs</b>			
	<b>FY 2005 Actual</b>	<b>FY 2006 Appropriation</b>	<b>FY 2007 Estimate</b>
Allied Health Number of graduates			
Number of URM graduates	2,388	--	
Percent of URM graduates	972	--	
Number of graduates entering practice in MUCs	41	--	--
Percent of graduates entering practice in MUCs	1,150	--	
48		--	
Graduate Geropsychology			
Number of Grantees	7	--	--
Graduate Psychology			
Number of Grantees	20	20	--
Chiropractic Demonstration Projects			
Number of awards			--
Number of chiropractors involved in research projects	3	4	
	21	28	
Podiatry			
Number of Grantees	2	--	--

Source: <http://www.hrsa.gov/about/budgetjustification07/interdisciplinary.htm>

## **Appendix 4: Previous Recommendations**

The Committee has produced five previous reports. In these reports, recommendations are presented regarding the Title VII Interdisciplinary, Community-Based Training Grant Programs. These recommendations are provided below.

### ***First Report***

1. Reauthorization of the Title VII Interdisciplinary Training Grant Programs.
2. Increasing appropriations for Title VII Interdisciplinary Training Grant Programs.
3. Encourage collaboration between Title VII Interdisciplinary Training Grant Programs and local institutions that train minority/immigrant populations, community organizations representing those who will be served, and community health centers where primary care is provided.
4. Establish a grant program for “Interdisciplinary Education Demonstration Projects” to support cooperative community-based ventures among Title VII Interdisciplinary Training Grant Programs and establish administrative “preferences and priorities” for funding programs that are truly interdisciplinary in scope.
5. Establish an Office or Division of Allied Health within HRSA.
6. Reallocate one percent of National Institutes of Health, Agency for Healthcare Research and Quality, Centers for Disease Control and Prevention, Food and Drug Administration, Department of Education, and Department of Labor annual appropriations to support formal collaborative programming with the Title VII Interdisciplinary Training Grant Programs.
7. The Health Education and Training Centers Programs should not be required to meet criteria for “self-sufficiency.”
8. Legislative authority for the Podiatric Medicine Program should be placed in Part D, Section 747 (discipline-specific programs for physicians).

### ***Second Report***

1. Restructure Section 755 to specifically support allied health education and training programs (delete all other disciplines). Additionally, Sections 792 (Health Professions Data) and 799b should be redefined to employ the new list of recognized allied health professions. Create a new Section 756 to support chiropractic research and training in addition to demonstration projects. Create a new Section 757 (through removal of Section 755b1j) to support behavioral mental health for graduate psychology education (Section 757a), geriatric psychology education (Section 757b), and graduate social work education (Section 757c). Section 758 should be created for reauthorization of the Advisory

- Committee on Interdisciplinary Community-Based Linkages by moving the committee authorization from Section 756 to Section 758. Podiatric medicine should be removed from Part D Section 755b2 and placed in Part C (family medicine, general internal medicine, general pediatrics, physicians assistants, general dentistry, and pediatric dentistry) and receive a separate appropriation from the allied health budget.
2. The Secretary should adopt measures to encourage collaboration among Title VII Interdisciplinary Training Grant Programs that enhances the diversity of the health professions educational pipeline, strengthens minority-serving institutions, and increases the development and exchange of culturally sensitive and appropriate health information.
  3. Congress and the Secretary should take action to strengthen the capacity of the Allied Health Program in Title VII, Part D, Section 755 of the Public Health Service Act by reserving Section 755 for allied health education and training for the full range of allied health professions. Funds should be directed to those allied health professions demonstrating workforce shortages and serving unserved, underserved, and vulnerable populations.
  4. Title VII Interdisciplinary Training Grant Programs should receive funding to partner with other agencies to educate and disseminate bioterrorism and emergency preparedness education and training.
  5. The Secretary should strengthen the capacity of Title VII Interdisciplinary Training Grant Programs by creating new and enhancing existing linkages between these programs and federally qualified community health centers, rural health clinics, and the National Health Service Corps.
  6. The Secretary should appoint a member of the Advisory Committee on Interdisciplinary, Community-Based Linkages to the DHHS Rural Task Force.

### ***Third Report***

1. The HRSA Administrator should convene national health professions associations to develop consensus regarding core competencies and curricula for bioterrorism and emergency preparedness.
2. Federal funding should be continued for quality continuing education in bioterrorism and emergency preparedness for practicing health professionals in every State.
3. Federal funding should be available to develop new curricula or adapt existing curricula in bioterrorism and emergency preparedness for students in health professions schools.
4. Federal agencies should coordinate their efforts regarding bioterrorism and emergency preparedness and establish linkages with Title VII Interdisciplinary Training Grant Programs as well as State programs.
5. BHPPr should work with other Federal agencies, such as the Office of Management and Budget and the Congressional Budget Office, to develop additional performance measures, including the use of qualitative data, for Title

- VII Interdisciplinary Training Grant Programs that specifically evaluate impact on the community health status and economy.
6. Develop a process for sharing data from all Title VII Interdisciplinary Training Grant Programs within BHPPr, among interested Federal agencies, and across the programs.
  7. Congress should appropriate funding for the purposes of evaluation, development of educational research models, and tracking long-term outcomes specific to Title VII Interdisciplinary Training Grant Programs.

### ***Fourth Report***

#### Cross-Cutting Recommendations

1. Congress should reauthorize the Title VII Interdisciplinary, Community-Based Training Grant Programs.
2. The Secretary and Congress should require Federal agencies, including the Department of Labor, the Department of Education, the National Institutes of Health, the Agency for Healthcare Research and Quality, the Centers for Disease Control and Prevention and others to establish formal funding-based links with HRSA to leverage the resources of the Title VII Interdisciplinary, Community-Based Training Grant Programs and to enhance their reach in the recruitment, training, and retention of the health workforce across the nation.
3. The Secretary and Congress should encourage linkages and collaboration between the National Advisory Committee on Interdisciplinary, Community-Based Linkages and U.S. Department of Health and Human Services (DHHS), HRSA, BHPPr and national advisory committees and commissions addressing similar topics.

#### Cultural Competence and Diversity

4. The Secretary and Congress should include legislative language, applied uniformly, that requires Title VII Interdisciplinary, Community-Based Training Grant Programs to address cultural competency.
5. The Secretary and Congress should include legislative language requiring Title VII Interdisciplinary, Community-Based Training Grant Program grantees to address, as appropriate, faculty development in cultural and linguistic competence. This training should be done in partnership with students, when possible.
6. The Secretary and Congress should strengthen HRSA reporting requirements to include, where appropriate, collection of qualitative and quantitative data relating to the cultural competence efforts of Title VII Interdisciplinary, Community-Based Training Grant Programs.

7. The Secretary and Congress should through legislative language require Title VII Interdisciplinary, Community-Based Training Grant Program grantees, where appropriate, to conduct program evaluation to support the development of evidence-based strategies for the incorporation of cultural competence efforts in health professions education and training.
8. The Secretary and Congress should appropriate funding incentives to health professions education and training programs focused on culturally relevant health promotion and disease prevention activities targeting diverse, unserved, underserved, vulnerable, and disadvantaged populations.
9. The Secretary and Congress should encourage Title VII Interdisciplinary, Community-Based Training Grant Program grantees to form partnerships with providers at the State and local level to prepare a culturally competent and diverse workforce.

#### Health Disparities

10. The Secretary and Congress should through legislative language mandate that HRSA reporting requirements include, where appropriate, collection of qualitative and quantitative data relating to efforts carried out by Title VII Interdisciplinary, Community-Based Training Grant Programs to contribute to a reduction in health disparities. Linkages should be established that provide access to other HRSA data sources related to health disparities to enhance assessment and evaluation activities of Title VII Interdisciplinary, Community-Based Training Grant Program grantees.
11. The Secretary and Congress should through legislative language, applied uniformly, require Title VII Interdisciplinary, Community-Based Training Grant Programs to address the recognition and elimination of health disparities.
12. The Secretary and Congress should through legislative language require Title VII Interdisciplinary, Community-Based Training Grant Programs to provide educational and clinical experiences for students, faculty, and/or practitioners that increase awareness and demonstrate how appropriate, evidenced-based interventions can be used in combination with other measures to identify and lessen health disparities unique to their region or local area.
13. Congress should restore funding for Title VII Interdisciplinary, Community-Based Training Grant Programs to FY 2003 funding of \$89.7 million. Further, the Committee encourages Congress to consider additional funding of \$50 million for these programs to enable programmatic growth to further the reduction of health disparities through the continued preparation of a diverse health workforce.
14. Congress should appropriate \$2 million to HRSA to conduct a study to investigate community health workers/patient navigators in terms of: 1) utilization and cost effectiveness; 2) education and training expectations including career advancement pathways; 3) roles and responsibilities; and 4) their contributions to the reduction of health disparities.

## Health Workforce

15. The Secretary and Congress should encourage Title VII Interdisciplinary, Community-Based Training Grant Programs to enhance the use of information technology (IT), tele-education, and telehealth in education and training strategies in order to reach and retain health care professionals in remote and underserved areas.
16. The Secretary and Congress should include legislative language that requires Title VII Interdisciplinary, Community-Based Training Grant Programs to utilize strategies to promote effective participation and representation by members of underrepresented racial/ethnic groups to increase the diversity of the health care workforce and reduce health disparities and to improve recruitment, retention, and distribution of the health care workforce.
17. The Secretary and Congress should require the HRSA Administration to change the application review and progress report review criteria to emphasize the use of strategies aimed at increasing the diversity, recruitment, and retention of the health care workforce.
18. The Secretary and Congress should include legislative language that requires Title VII Interdisciplinary, Community-Based Training Grant Programs to design education and training programs that promote effective participation and representation by members of multiple health professions disciplines and their effective interdisciplinary interaction on behalf of patients, special populations, and/or diverse communities.
19. The Secretary and Congress should include legislative language requiring Title VII Interdisciplinary, Community-Based Training Grant Programs to incorporate geriatric education and training in their programs and activities and encouraging collaboration with Geriatric Education Centers to improve the skills and knowledge of the workforce in the care of our aging population.
20. The Secretary and Congress should expand the Geriatric Academic Career Awards Program by allocating increased funding and legislating increased authority to include other doctoral-level health professions disciplines that care for aging populations and to provide mid-career awards to create academic leaders in geriatrics.
21. The planning committee for the “BHPPr All Grantee” meeting in June 2005 should consider creating a venue to explore strategies to share information, data, and resources among BHPPr grantees.
22. Congress should expand the legislative authority of the Chiropractic Demonstration Projects Program to establish and include training programs to integrate chiropractic health care with other Title VII Interdisciplinary, Community-Based Training Grant Programs.

## Health Workforce Pipeline

23. Funding should be appropriated to support a HRSA consensus conference to include, at a minimum, Title VII Interdisciplinary, Community-Based Training Grant Programs, the National Health Service Corps, and Division of Health Care

- Diversity and Development Programs. The purpose of the conference will be to identify successful and effective program models that encourage, on an ongoing basis, children and young adults to consider a broad range of health careers.
24. Make a statutory change to all Title VII Interdisciplinary, Community-Based Training Grant Programs to permit, but not require, a portion of grant dollars to be utilized to focus on pipeline programs encouraging young people to enter a full range of health careers.
  25. The Secretaries of DHHS, Education and Labor should convene a meeting to develop collaborative approaches across their Departments to recruit, educate, and retain greater numbers of children and young adults (K-20) into the health professions. Special emphasis should be placed on program models that target students from disadvantaged and underrepresented backgrounds.
  26. The Committee encourages linkages and collaborations with DHHS, HRSA, BHP, Department of Labor, Department of Education, professional associations, and national committees and commissions that are addressing Kids into Health Careers.
  27. An additional scholarship and/or loan repayment program should be established through BHP that is based on community needs and workforce assessment and would apply to the full range of health professions not currently supported by BHP funding mechanisms. Based on the large number of health professions involved, the Committee recommends starting with an appropriation of \$10 million.
  28. Additional funding should be allocated to Title VII Interdisciplinary, Community-Based Training Grant Programs to support their efforts in the development and maintenance of academic enrichment programs for students in the health professions pipeline.

#### Faculty Development

29. The Secretary and Congress should authorize and fund institutions with accredited health professions programs to meet the costs of projects to:
  - Plan and develop interdisciplinary faculty development programs to include 1) post-doctoral fellowships, 2) scholarship, teaching, and service training for junior faculty, and 3) mentoring and retention support through demonstration models; and
  - Provide financial assistance to fellows and faculty enrolled in such programs.
30. The legislative language relating to geriatric faculty as currently enacted in Section 753 should be revised.
  - Revise 753(b) to read: Geriatric Training Regarding Physicians, Dentists, and Behavioral Health Professionals, including social workers and nurses.
  - Revise 753(b)(3)(A)(iii) to read: have completed graduate medical education or doctoral training in behavioral and mental health services, including social workers and nurses.

- Revise 753(b)(4)(c) to read: The term "graduate and post-doctoral training in behavioral and mental health services" means training experiences that include graduate training resulting in a PhD., an internship accredited by the American Psychological Association, and post-doctoral training that qualifies a person for designation as a health service provider.

## *Fifth Report*

### Programmatic Recommendations

1. The Committee recommends that the statutory authorization of the Advisory Committee on Interdisciplinary, Community-Based Linkages be reauthorized.
2. The Secretary and Congress should amend Section 755(b)(3) to read, "Carrying out demonstration projects in which chiropractors and physicians collaborate to identify and provide effective treatment for spinal and lower-back conditions or planning and implementing interdisciplinary projects for chiropractic students in programs collaborating with other health professions and at least one allied health profession."
3. The Committee supports its previous recommendation to move podiatry to Section 747. The Committee requests an additional \$1 million to support program development for podiatric students and residents to participate in interdisciplinary education models as part of their education track.
4. The Committee supports its previous recommendation in the Second Report that states, "Create a new Section 757 (through removal of Section 755(b)(1)(j)) to support behavioral mental health for graduate psychology education (Section 757a), geriatric psychology education (Section 757b), and graduate social work education (757c). The Committee also requests an increase in appropriations to \$7.7 million.

### Recommendations for Allied Health

5. The Secretary and Congress should appropriate funding, no less than the previous level of \$35 million, under Title VII, Section 755 specifically for allied health programs to support interdisciplinary, community-based education and training projects. With this additional funding, HRSA should consider funding traineeships as authorized under Section 755(b)(1)(i).
6. Congress should expand the legislative authorities in Title VII, Section 755(b)(1) to include:
  - Innovative projects designed to meet specifically defined and well justified local and regional allied health training needs (L);
  - Faculty development demonstration grants to address severe faculty shortages in allied health profession programs including interdisciplinary, community-based faculty fellowships in allied health (M);

- Projects that establish partnerships with existing HRSA workforce centers to collect, analyze, and report data on the allied health workforce, access, and diversity and provide reports on workforce issues to Congress (N);
  - Projects that provide incentives for partnerships with local higher education institutions such as 2-year community colleges, tribal colleges, historically black colleges and universities (HBCUs), and Asian/Pacific Islander and/or Hispanic-serving institutions (O);
  - Projects that provide rapid transition training programs in allied health fields to individuals who have certificate, associate, and baccalaureate degrees in health-related sciences (B); and
  - Projects that expand or establish demonstration centers to emphasize best practices and innovative models to link allied health clinical practice, education, and research (H).
7. Congress should enact the Allied Health Reinvestment Act (AHRA) with the inclusion of Title VII, Section 755 with the revisions proposed by this Committee in this report.

#### Interdisciplinary Education and Training

8. The Committee recommends that the following definition for interdisciplinary educational development and training be used by BHPPr for all Title VII Interdisciplinary, Community-Based Training Grant Programs.

Interdisciplinary educational development and training is defined as the collaborative process by which an interdisciplinary team of health care professionals—faculty, clinical preceptors, community health care providers—collaborate, plan, and coordinate an interdisciplinary program of education and training. The collaborative process requires the preparation and functioning of interdisciplinary teams who share knowledge and decision making with the purpose of creating solutions to health care problems that transcend conventional discipline-specific methods and work together in service of patient-centered and/or community-centered health care needs.

9. BHPPr should require through the grant guidance application process that applicants describe the interdisciplinary learning objectives, identify the interdisciplinary competencies, describe how these will be evaluated and measured in all Title VII Interdisciplinary, Community-Based Training Grant Programs, and discuss plans for institutionalizing these interdisciplinary education and training projects.
10. BHPPr should develop common interdisciplinary performance and outcome measures to evaluate the effectiveness of interdisciplinary education and training programs funded by Title VII, Part D.
11. BHPPr should support interdisciplinary education in all programs through its guidance, technical assistance, and creation of opportunities for mentorship, networking, and dissemination of best practice models.

12. Based on the growing body of evidence, including multiple Institute of Medicine (IOM) reports, that interdisciplinary care results in increased patient satisfaction and improved health outcomes, the Committee recognizes the importance of interdisciplinary education and training and recommends that BHPr facilitate a joint meeting of appropriate advisory committees or advisory committee representatives to discuss interdisciplinary education and training.
13. The Committee recommends that HRSA convene a consensus conference on interdisciplinary professional education and training or make interdisciplinary professional education and training a significant topic of the next BHPr all grantee meeting.

## Appendix 5: Committee No-Cost Extension Letter



SCHOOL OF  
OSTEOPATHIC  
MEDICINE

University of Medicine & Dentistry of New Jersey

August 3, 2006

The Honorable Michael Leavitt  
Secretary  
The U.S. Department of Health and Human Services  
200 Independence Avenue, S.W.  
Washington, D.C. 20201

Dear Secretary Leavitt:

RE: Request for 12-month No-Cost Extension

As Chair of the Advisory Committee on Interdisciplinary Community-Based Linkages, I am writing to express the unanimous view of our committee members. It is a view tempered by urgency and one that respectfully requests your consideration of a 12-month no-cost extension for Geriatric Education Centers (GECs), Health Education and Training Centers (HETCs), and the Quentin Burdick Rural Training Programs, rather than the 6-month extension under which they are currently operating.

We are aware that OMB rules permit a no-cost extension of up to 12 months. Given that it takes years to build strong community partnerships, a 12-month extension would promote continuity and ensure continued collaboration as the programs reposition themselves.

Thank you for your immediate consideration of a 12-month no-cost extension and your timely response to this matter.

Very truly yours,

Thomas A. Cavalieri, D.O., FACOI, FACP  
Chair, Advisory Committee on  
Interdisciplinary, Community-Based Linkages

TAC✪wnmc

C: Elizabeth Duke, Ph.D., Administrator  
U.S. Department of Health and Human Services  
5600 Fishers Lane, Room 14-05  
Rockville, MD 20857

A. Michelle Snyder, Associate Administrator  
U.S. Department of Health and Human Services  
5600 Fishers Lane, Room 17-105  
Rockville, MD 20857

