2005
Fifth Annual Report
to the SECRETARY of the
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
and to the
CONGRESS

RECOMMENDATIONS

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

Advisory Committee on
Interdisciplinary, Community-Based Linkages

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

Advisory Committee on Interdisciplinary, Community-Based Linkages
Fifth Report

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Appendices

I. Executive Summary

The Advisory Committee on Interdisciplinary, Community-Based Linkages (the Committee) provides advice and recommendations on programs authorized under Title VII, Part D of the Public Health Service (PHS) Act, as amended. The Committee is governed by provisions of Public law 92-463, as amended (5 U.S.C. Appendix 2).

The Committee views community-based, interdisciplinary training as the most effective way to prepare the Nation's health care workforce to meet the health care-related needs of our Nation's most vulnerable populations including the socio-economically disadvantaged and geographically isolated, as well as the elderly, children, chronically ill, and disabled persons. Federal Title VII, Part D, Section 751 through 756 Community-Based, Interdisciplinary Training Grant Programs, hereafter referred to as the Title VII Interdisciplinary, Community-Based Training Grant Programs, ensure that health care professionals are able to address the many challenges related to providing high-quality services to unserved and underserved populations and communities. The efforts of the Title VII Interdisciplinary, Community-Based Training Grant Program grantees, as educators and providers of ongoing training, ensure that sufficient numbers of providers are well-qualified to meet the diverse health care needs of our Nation.

In 2005, the Committee met three times to hear testimony, discuss findings, and develop recommendations for the guidance of HRSA staff and the Title VII Interdisciplinary, Community-Based Training Grant Programs. This Fifth Report of the Committee focuses on two issues: 1) the allied health professions, which comprises approximately two-thirds of the Nation's health workforce; and 2) interdisciplinary education and training, which are unique elements of the Title VII Interdisciplinary, Community-Based Training Grant Programs.

Both of these issues have significant impact on the training of health care professionals, the future availability of health care professionals, and the quality of their skills. Throughout the testimony, the Committee heard of the current shortages of health care providers, as well as the challenges to the adoption of innovative and effective approaches, which may result in a reduction of the overall quality and availability of care.

Brief summaries of the Committee's recommendations are listed below.

Allied Health

- Congress should enact the Allied Health Reinvestment Act with revisions as proposed by the Committee. The Act seeks to address the profound shortages of qualified health professionals to care for a bourgeoning population of aging and/or disabled persons. Enhancement of the health care workforce depends upon an investment in the education and training programs that will produce competent and qualified allied health professionals to provide needed services. Inclusions of the Allied Health Reinvestment Act into Title VII, Section 755, will require creation of additional sections.

- The Congress should appropriate no less than the previous funding level of $35 million specifically for allied health programs to support interdisciplinary, community-based education and training projects. The current shortage of trained health professionals, particularly in certain allied health fields, reflects a declining level of support from prior years since 1972. The Title VII Interdisciplinary, Community-Based Training Grant Programs can be expanded and augmented to support the kinds of interdisciplinary education and training necessary to increase the number of allied health providers in the workforce. This will require additional efforts to recruit, develop, and retain faculty in the allied health professions.

- The Committee recommends expansion of the Title VII Interdisciplinary, Community-Based Training Grant Programs, including innovative projects for defined local and regional training needs; faculty development demonstration grants; workforce data centers; partnerships with higher education institutions (such as 2-year community colleges, tribal colleges, historically Black colleges and universities, Hispanic serving institutions, and Asian/Pacific Islander education institutions); rapid transition training programs for individuals in health-related sciences; and demonstration centers to emphasize best practices and innovative models to link clinical practice, education, and research in allied health services.

- Congress should support demonstration projects in which chiropractors and physicians collaborate with other health professions, including allied health in the delivery of effective treatments for spinal and lower back conditions.

- The Committee supports previous recommendations to move the field of podiatry to Section 747. An additional funding increment for interdisciplinary education involving podiatric students and residents is requested, which would enhance integration of podiatric training and education into interdisciplinary primary care venues.

- The Committee re-states its previous recommendation to create a new Section 757 to support behavioral mental health through graduate psychology education, geriatric psychology, and graduate social work education. Additional funding is recommended to meet increasing needs for those health problems that have a strong behavioral basis for which mental and behavioral health services are essential.

- The Committee recommends that the statutory authorization of the Committee be continued, in order that the Secretary, Congress, HRSA staff, and Title VII Interdisciplinary, Community-Based Training Grant Programs may have access to a knowledgeable, broad-based, and coordinated consultative body for review and recommendations. Given the current uncertainties of this and related legislation, the Committee strongly urges the Congress to continue to support and build upon this essential group of interdisciplinary, community-based education and training programs.

Interdisciplinary Education and Training

- The Committee recommends that the following definition for interdisciplinary educational development and training be used by the Bureau of Health Professions (BHPr) 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."

- BHPr should facilitate and strengthen the grant application process by requiring applicants to identify interdisciplinary competencies, describe how proposed learning objectives and competencies will be evaluated and measured, and discuss plans for institutionalizing interdisciplinary education and training projects.

- BHPr should develop common interdisciplinary performance and outcome measures to evaluate the effectiveness of interdisciplinary education and training programs funded by Title VII, Part D.

- BHPr should provide more technical assistance to grantees in the areas of mentorship, networking, and dissemination of best practice models.

- BHPr should facilitate a joint meeting of appropriate advisory committees or advisory committee representatives to discuss interdisciplinary education and training.

- HRSA should 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.

II. Editorial Comment

As this report is written, the Administration has just released the proposed Federal budget for FY 2007. Under the President's budget, discretionary spending within the Department of Health and Human Services would be cut by 2.3 percent to $67.6 billion.

All Title VII Interdisciplinary, Community-Based Training Grant Programs would be eliminated, with the exception of one scholarship program, which would sustain a 79 percent cut. The Health Professions and Nursing Education Coalition has said the elimination of all Title VII Interdisciplinary, Community-Based Training Grant Programs would 'decimate' efforts to train minority health professionals and hurt the Nation's most vulnerable.

In view of the health challenges presented by an aging population and the great socio-demographic changes taking place in our Nation, which the Title VII Interdisciplinary, Community-Based Training Grant Programs are designed to address, the loss of support for these programs appears short-sighted in the extreme. The Committee is not unbiased in its perspective--it is committed to the promotion of interdisciplinary education for health care providers. However, the Committee feels it would be derelict in its duty if it failed to express its strongest concern regarding the proposed cuts that will decimate the Title VII Interdisciplinary, Community-Based Training Grant Programs.

For the Advisory Committee:

Gordon Green, MD, MPH
Editor, Fifth Report

Thomas Cavalieri, DO, FACOI, FACP
Chairman, Advisory Committee on
Interdisciplinary, Community-Based Linkages

III. Structure of Report – Committee Recommendations

The Committee is charged with providing advice and recommendations to the Secretary concerning policy and program development and other matters relating to Section 756, Title VII, Part D of the PHS Act. In this capacity, the Committee makes two types of recommendations: programmatic and topic specific. ***Programmatic recommendations*** address proposed revisions to the legislative language and the administration of the Title VII Interdisciplinary, Community-Based Training Grant Programs. These recommendations are intended to enhance and/or facilitate administration of grant programs by both BHPr and grantees. ***Topic-specific recommendations*** address specific topics relevant to interdisciplinary, community-based training of health care professionals. Two topics, allied health and interdisciplinary education and training, are addressed by the Committee in this report. For these two topics, a narrative description of the Committee's findings, based on testimony provided at Committee meetings, is provided to add context to the Committee's recommendations.

The sections of this report relating to the Committee's recommendations are as follows:

IV. List of Recommendations – A complete list of both programmatic and topic-specific recommendations.

V. Programmatic Recommendations – Programmatic recommendations and narrative text describing the Committee's rationale for developing each recommendation and the anticipated benefits.

VI. Allied Health Findings and Recommendations – Findings related to allied health based on testimony provided to the Committee, recommendations related to allied health, and narrative text describing the Committee's rationale for developing each recommendation and the anticipated benefits.

VII. Interdisciplinary Education and Training Findings and Recommendations - Findings related to interdisciplinary education and training based on testimony provided to the Committee, recommendations related to interdisciplinary education and training, and narrative text describing the Committee's rationale for developing each recommendation and the anticipated benefits.

IV. List of Recommendations

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 certificates and/or 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 revisions proposed by this Committee in this report.

Recommendations for Interdisciplinary Education and Training

8) The Committee recommends that the following definition for interdisciplinary educational development and training be used by BHPr 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) BHPr 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) BHPr 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) BHPr 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.

V. Programmatic Recommendations

1.) The Committee recommends that the statutory authorization of the Advisory Committee on Interdisciplinary, Community-Based Linkages be reauthorized.

The Committee continues 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.

The Title VII Interdisciplinary, Community-Based Training Grant Programs' focus is unique. The training assists health professionals respond to the demands of the evolving health care system. The Title VII Interdisciplinary, Community-Based Training Grant Programs provide an infrastructure for the recruitment, training, and retention of the Nation's health care workforce. The emphasis on recruiting and training racial/ethnic minorities and individuals from unserved and underserved areas is particularly important, as these individuals are more likely to provide services to underserved populations and communities. The Committee provides an important mechanism for continuous assessment of the outcomes and effectiveness of these Title VII Interdisciplinary, Community-Based Training Grant Programs and recommends enhancements that will address the health care needs of the Nation.

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."

Although chiropractors are developing more interdisciplinary practices, implementation of interdisciplinary training and collaboration is difficult for chiropractic training institutions since all are private and not formally associated with other health professions institutions. Expanding the scope of Section 755(b)(3) will facilitate better integration of chiropractic with other health care professions. It will also help to increase the availability of services in underserved areas. While at least 25 percent of chiropractors practice in small towns and rural areas, chiropractic services are not readily available to other underserved populations. The proposed change will also help in the recruitment of more diverse students to chiropractic programs, which will ultimately result in a more diverse chiropractic workforce.

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.*

Due to the relatively small number of podiatric practitioners, most health professionals have limited contact with, and as a result limited knowledge of, podiatric medicine. Increasing the involvement of podiatric students and providers in interdisciplinary training and care can expand provider, patient, and community knowledge regarding the benefits of podiatric care.

Through Title VII, Section 747, approximately 480 grants and multi-year contracts totaling $82 million dollars annually are awarded in support of various primary care and family medicine training programs. The Committee believes that removal from Part D, Section 755(b)(2) and placement in Part C, Section 747 (family medicine, general internal medicine, general pediatrics, physician assistants, general dentistry, and pediatric dentistry) will increase the integration of podiatric training and education into interdisciplinary primary care venues. In addition, greater availability and integration of podiatric care could have an impact on minority health issues as minority populations are disproportionately affected by some conditions, such as diabetes and HIV/AIDS, which may require podiatric care.

Podiatric Primary Care Residency Training Grants should be supported on a continuing and, if possible, expanded basis. Further development of podogeriatric cooperative agreements will allow development of podogeriatric curricula to train primary care and podiatric residents. The curricula should focus on the medically underserved geriatric population with chronic conditions, such as diabetes, that limit their mobility and self-care abilities.

The appropriations directed to allied health are not adequate to address program needs and demands. Therefore, current appropriations to Section 755 should not be redirected to Section 747 with the relocation of the podiatric medicine training programs. A new allocation, in the amount of $1 million, should be directed to support program development for podiatric students and residents to participate in interdisciplinary training programs.

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."

Behavior and health are inextricably intertwined. An integrated, interdisciplinary approach to health care, which includes mental and behavioral health, is the most cost effective and efficient health delivery system, especially for underserved populations.
Social workers should be considered to be behavioral health care providers and social services should be included in interdisciplinary models of care addressing behavioral health and primary care.

The creation of a new Section 757, which includes the graduate psychology, geriatric psychology, and graduate social work education programs, will strengthen interdisciplinary education and enable health practitioners to ensure more effective and efficient services in support of behavioral mental health. The new Section 757 will promote health professions working together to enhance health promotion, public health and prevention, interdisciplinary research, and many other related behavioral health activities.

In addition to recommending the creation of Section 757, the Committee has identified the following actions that will promote the integration of behavioral health into the overall health care delivery system.

- Include psychology training in other HRSA and PHS health projects to strengthen interdisciplinary collaboration.
- The Advisory Committee on Training and Primary Care, Medicine and Dentistry should be renamed to recognize the importance of behavioral health.
- Psychology should have representation on the Advisory Committee on Training in Primary Care Medicine and Dentistry in the form of at least two members, to include a psychologist in the graduate psychology education (GPE) program and a psychologist involved in primary care physician training (e.g., pre-doctoral and residency training projects for pediatrics, family medicine, and internal medicine).
- The term “clinical psychologist,” instead of “health service psychologist,” should be used.

VI. Allied Health Findings and Recommendations

Allied Health Findings

Allied health encompasses a diverse array of health care professions. Unfortunately, there is no agreement as to what professions comprise allied health and multiple definitions of allied health exist. Some definitions, such as the one developed by the Health Professions Network, which represents over 75 organizations of allied health providers, educators, and accreditors, seek to describe specific attributes and qualifications of allied health professionals (see below). Other definitions are based on exclusion and are mostly developed for funding purposes. These definitions identify specific health professions, such as medicine and nursing, which are not allied health professions. Many health care professions resist being classified as allied health, preferring to be viewed as distinct professions.

Definition of Allied Health – One of Many

Allied health professionals are health care practitioners with formal education and clinical training who are credentialed through certification, registration, and/or licensure. They collaborate with physicians and other members of the health care team to deliver patient care services for the identification, prevention, and treatment of diseases, disabilities, and disorders.

--Developed by the Health Professions Network

Because there is no clear agreement on what professions make up allied health, it is difficult to count the number of allied health professionals. The U.S. Bureau of Labor Statistics reports that allied health care professionals make up approximately one third of the health care workforce, about 3 million workers. Others use a broader definition of allied health, including over 200 different health professions, and estimate that there are about 6 million workers—two thirds of the entire health care workforce.

Regardless of the definition used, the professions that make up allied health are very diverse. Education levels among allied health professionals vary from certificate to doctorate and salaries can range from minimum wage to over $100,000 a year. The level of supervision required for allied health workers also varies, with some professions able to work and bill independently. This diversity has created challenges in terms of increasing awareness about the important role of allied health providers within the health care system. There is a perceived lack of awareness and understanding about the vital contribution made by allied health professionals on the part of the general public, policy makers, and other health care professionals.

This lack of awareness has translated directly into a lack of financial support for the training of allied health professionals. During the 1970s, funding for allied health training ranged from $17.9 million in 1971 to a high of $35.6 million in 1973. By 1980, funding had dropped to $9.5 million and no funding was provided from 1982 to 1990. In 2005, funding for allied health training was $11.9 million. In 2003, Congress appropriated ten times more funding to nursing education than to allied health education. Although allied health workers make up an estimated

30 to 60 percent of the health care workforce, they do not receive proportionate levels of funding to support training.

Shortages of Allied Health Professionals: Now and in the Future

There is an impending health care crisis in the United States. It is forecasted that there will be insufficient numbers of health care professionals to meet increasing demand for care—driven primarily by an aging population. Much of the attention relating to the crisis has focused on shortages of physicians and nurses. Similar, if not greater shortages are predicted in allied health professions.

Fastest Growing Health Care Occupations, 2002-2012

Rank	Occupation	% Growth Expected
1	Medical Assistants	59
3	Physician Assistants	49
4	Social and Human Service Assistants	49
5	Home Health Aides	48
6	Medical Records and Health Information Technicians	47
7	Physical Therapist Aides	46
10	Physical Therapist Assistants	45
15	Dental Hygienists	43
16	Occupational Therapist Aides	43
17	Dental Assistants	42
18	Personal and Home Care Aides	40
21	Occupational Therapist Assistants	39
28	Physical Therapists	35
29	Occupational Therapists	35
30	Respiratory Therapists	35

Source: U.S. Bureau of Labor Statistics

Health care is the largest industry in the United States, representing an estimated 16 percent of the national gross domestic product in 2004 and providing 12.9 million jobs. According to the U.S. Bureau of Labor Statistics, the health care industry is predicted to add nearly 3.5 million new jobs between 2002 and 2012, an increase of 30 percent. A large majority of these new jobs will be in allied health professions.

At the same time that demand for allied health professionals is expected to grow, there are a variety of challenges relating to the training and retention of these professionals. Should these challenges go unaddressed, it is highly unlikely that there will be sufficient allied health professionals to keep pace with growing demand.

The impact of the shortage of allied health professionals is evident. Currently, many allied health professions have very high vacancy rates. Occupational therapy has a vacancy rate of 15.7 percent. In the imaging sciences, such as radiography and ultrasonography, there is a vacancy rate of 15.3 percent. Other professions with high vacancy rates include respiratory and physical therapy, and clinical laboratory sciences. Limited availability of these services can result in increased costs, limited access to services, and reduced quality of care.

These shortages come at a time when there is increasing need and demand for allied health providers. For example, the President's Health Centers Initiative, which began in FY 2002, is a 5-year initiative that will significantly impact 1,200 communities by creating new or expanded access points, which will enable community health centers to reach an additional 6.1 million patients by the end of FY 2006. This increased capacity requires significant numbers of allied health professionals, as the community health care model relies heavily on interdisciplinary teams of providers.

There are various factors responsible for current and anticipated shortages of allied health professionals.

Aging Workforce – Many allied health professionals are nearing retirement age—the average age of allied health professionals is 40 years old.

High Attrition – There is high turnover among allied health professionals, especially in low-wage positions. According to the Bureau of Labor Statistics, wages have not increased for most allied health professionals (when adjusted for inflation, wages have decreased in some professions), despite vacancies and forecasted shortages. In addition, many of the allied health professions are physically demanding. These factors, paired with the stressful and fast-paced environment of most health care settings, can result in burnout, which may lead allied health professionals to leave the profession. Strategies are needed to increase the job satisfaction of allied health professionals.

Shrinking Applicant Pool – For a variety of reasons, fewer students are entering allied health professions. Traditionally, women have made up the vast majority of allied health professionals. As additional opportunities have become available for women in non-health professions, allied health professions have become less attractive. Other professions, such as information technology, are more appealing to students and offer higher pay and less demanding work environments. Also, with greater resources available to support training in medicine and nursing, qualified students who may have considered careers in allied health in the past are drawn to nursing and medicine professions. Allied health training programs report that many applicants are unprepared for college-level work, resulting in high attrition rates. Since health career curricula are often demanding and may focus heavily on science, even greater pressure is placed on poorly prepared students.

Lack of Career Ladders – Many allied health professions offer little opportunity for advancement. For those that do have career ladders, each step requires significant commitments of time and money.

Degree Creep – For many allied health professions, a masters degree is now required for entry-level positions. The cost of this training constitutes a significant barrier. Limiting the scope of practice for allied health professionals with associate degrees (2-year degrees) will further reduce the availability of providers.

Expanding and Improving Allied Health Training

According to the Health Professions Network, there are over 1,000 programs in the United States providing training in allied health professions. These programs are staffed by 3,000 allied health faculty and enroll over 30,000 students each year. Educational requirements vary among allied health professions. Some programs provide specialized training right after high school. Other programs lead to a certificate or a degree at the associate, baccalaureate, or graduate level.

Expanded and improved training opportunities will help to address current and future shortages of allied health professionals. Multiple factors currently impact the training pipeline. Allied health programs may not accept all qualified students due to a lack of funding, training facilities, and faculty. While increasing the availability of training opportunities is imperative, there are other training-related challenges that must be addressed. These include improved recruitment efforts and programs to better prepare students for allied health training and to support them through the training process.

Barriers to the training of allied health students are listed below.

Faculty Shortages – Lack of faculty is one of the most significant barriers to the training of allied health professionals—fewer faculty means fewer students can be trained. As with providers, current faculty members are aging and nearing retirement. However, replacements may be hard to find. Faculty salaries are not competitive with the salaries of those providing clinical care and often faculty positions require a higher level of education than is necessary to provide clinical care. Schools of allied health have seen a significant drop in applicants for faculty positions and existing faculty have become more difficult to retain.

Lack of Clinical Training Sites – The lack of clinical training sites is the second most frequently cited barrier to increasing enrollment in allied health programs. Partnerships with hospitals and community-based organizations can serve to increase clinical training sites for allied health students.

Cost of Training – The cost of higher education has increased significantly, making it beyond the reach of many Americans. Students are often attracted to professions that offer higher pay than most allied health professions in order to ensure that they can repay student loans after graduation. Federal funding to support training of health professionals focuses on baccalaureate (4-year) and graduate-level programs. Allied health scholarship and loan repayment programs would help make training more accessible to students.

Lack of Awareness of Allied Health Careers – Many students interested in health careers focus on medicine, dentistry, and nursing and many of the "Kids into Health Careers" programs emphasize these three professions. Awareness must be increased regarding the wide range of opportunities in allied health.

Students are Unprepared for Health Careers Curricula – Rigorous, science-based curricula prove too challenging for many students, especially those who come from underserved populations and communities. Programs to prepare high school students for allied health training and to support them once they enter training are lacking. Mentoring programs, focused on allied health careers, are exceedingly rare.

Title VII Allied Health Program

The main intent of Title VII, Section 755 is to address the allied health professions. However, it also includes the education and training of podiatric physicians, chiropractors, and behavioral/mental health practitioners. The goal for the Allied Health Program (AHP) is to increase the supply of allied health professionals, which is accomplished by supporting the following activities.

1. Support programs training professionals most needed by the elderly.
2. Develop and support programs that transition 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.

Since 1999, HRSA has funded 84 AHP grants.

Fewer Training Opportunities – For many institutions, State budget cuts have reduced the ability to expand existing programs and establish new ones. Many programs have been cut. Some allied health training programs are high cost and enroll and train few students, making them prime candidates when cuts are necessary.

Articulation – There is a rupture in the training pipeline between 2-year institutions and advanced education programs. The articulation process for associate degree graduates must be streamlined so that associate degrees can serve as a stepping stone to advanced education and not be seen as an educational dead end.

Role of Community Colleges in Training Allied Health Professionals

As the most accessible and affordable entry into higher education, community colleges are a critical resource to ensure adequate numbers of well-prepared health care professionals. The overwhelming majority of allied health professionals are educated via associate degree programs. According to the National Network of Health Career Programs in Two-Year Colleges:

- 43.7 percent of all accredited allied health educational programs are located in 2-year community colleges and schools; and
- 97,206 students in various allied health professions and fields graduated from colleges, universities, medical schools, proprietary schools and hospital-based programs in 2002. Of these students, 58,068 or (63%) graduated from 2-year colleges and schools.

The American Association of Community Colleges reports that associate degree programs are more time and cost efficient. The cost of training in an associate degree program is an average of $1,379 per year vs. $3,746 for 4-year programs.

Historically, there has been a lack of participation in Title VII Interdisciplinary, Community-Based Training Grant Programs by 2-year community colleges. For example, the number of Title VII Allied Health Program grants awarded to 2-year colleges is significantly out of balance with the level of allied health education delivered in this setting. Since 1999, only 14 of 84 grants have been awarded to community colleges. Funding is needed to allow community colleges to increase their training capacity. In addition, providing financial support to allied health students receiving their training at community colleges will help to increase the accessibility of training.

Diversifying the Allied Health Workforce and Serving Underserved Areas

Efforts are necessary to increase the number of racial/ethnic minorities in the allied health professions—as the population of the United States becomes more diverse, the allied health workforce must reflect these demographic trends. Recruitment efforts that target these populations and programs to prepare students for higher education will be necessary. While these programs are in place and have been successful in increasing the numbers of minority students entering medicine and nursing, they are lacking in allied health. Expansion of existing health care pipeline programs to include allied health professions would build on existing infrastructure and expertise. Another strategy is to support allied health programs at historically Black colleges and universities, tribal colleges, and Hispanic institutions and to recruit more students into these programs.

Allied health professions can play an important role in expanding the availability of health services in rural and underserved areas. According to HRSA's Bureau of Health Professions nearly 3,000, mostly minority and rural, communities throughout the United States do not have enough health care providers to meet basic medical, dental, and mental health needs. Allied

health professionals can help to meet the health care needs in these communities. Some rural states are expanding the scope of practice for allied health professionals and removing supervision requirements so that they can provide a greater range of service to patients.

Research indicates that students from rural and underserved areas are more likely than other students to practice in these areas. However, providing training in rural areas can be difficult. Students face transportation issues and small rural colleges cannot offer a full range of allied health training programs. Technological advances, such as distance learning, can greatly increase training options for students in rural areas.

Tracking Outcomes and Identifying Best Practices

There is a general lack of data regarding workforce, access, and diversity issues in the allied health professions—existing data from the Bureau of Labor Statistics is outdated. Development of specific data collection methods and the identification/dissemination of best practices that demonstrate effective interdisciplinary allied health programs are necessary.

An infrastructure is already in place to facilitate the collection and analysis of data. There are six existing HRSA Workforce Centers capable of researching allied health shortages and recruitment/retention issues. Title VII Interdisciplinary, Community-Based Training Grant Programs should more actively include allied health in their data collection and evaluation activities and develop partnerships with the HRSA Workforce Centers.

The Allied Health Reinvestment Act

There is growing recognition among policy makers concerning the shortage of allied health professionals and the impact this shortage will have on the availability and quality of health care in the United States. The Allied Health Reinvestment Act (AHRA) (H.R. 215; S. 473) is designed to increase the number of allied health professionals. It is modeled on the Nursing Reinvestment Act, which has been successful in increasing the number of students in nursing programs.

The proposed AHRA legislation addresses health care workforce issues including current and projected personnel shortages; lack of qualified, doctoral-educated faculty; declining enrollment in health care preparation programs; and demographic and epidemiological trends with an aging population with multiple chronic conditions and disabilities. The AHRA legislation specifically requests funding for public service announcements to inform potential students about careers in health care fields; grants for health care practice, education, and retention; student and faculty education loans; establishment of Centers of Excellence and a Council on Allied Health Education to focus on the need to enhance workforce diversity and the establishment of best practice models; internships and residency opportunities; and collection and analysis of health care workforce data.

Recommendations on 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 funding, HRSA should consider providing traineeships as authorized under Section 755(b)(1)(i).

The existing infrastructure of Title VII Interdisciplinary, Community-Based Training Grant Programs within Area Health Education Centers, Health Education Training Centers, and Geriatric Education Centers should be used to support interdisciplinary education and training. Increased funding for Title VII Interdisciplinary, Community-Based Training Grant Programs will allow implementation of faculty development initiatives that address existing faculty shortages, and ensure adequate recruitment and retention of faculty in the future. It has been demonstrated that interdisciplinary, community-based traineeships are an effective approach to placing allied health professionals in underserved areas. Additional funding would also increase opportunities for collaboration between Title VII Interdisciplinary, Community-Based Training Grant Programs and community health centers.

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).*

Expansion of Title VII's legislative authority to support greater diversity across trainees, career ladders, and data collection regarding the allied health workforce and interdisciplinary best practices will increase the availability, impact, and effectiveness of allied health services in unserved and underserved areas. Community college programs and baccalaureate degree programs must be better integrated into the overall training process to create a seamless transition into or advancement within allied health professions and to increase the number of future allied health professionals. Development of a pipeline from 2-year community colleges and colleges that serve primarily underrepresented minority groups represents a significant

opportunity for increasing the number of allied health professionals, including those who will choose to practice in underserved areas. Flexibility to develop programs that meet documented local and regional needs will allow for targeted responses to the health needs and disparities of the Nation's diverse populations.

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.

The AHRA legislation seeks funding to resolve the current shortages of allied health professionals and prevent shortages in the future. The AHRA should be incorporated into Title VII, Section 755. Creation of additional Sections will be required with the passage of the legislation.

VIII. Interdisciplinary Education and Training Findings and Recommendations

Interdisciplinary Education and Training Findings

As with the term "allied health," there is no widely accepted single definition of the term "interdisciplinary." There are many terms—interdisciplinary, multidisciplinary, transdisciplinary, crossdisciplinary, and interprofessional—that are often used interchangeably to describe a health care team composed of professionals from various disciplines. However, the actual responsibilities of health care professionals participating on such teams and the expected outcomes have not been clearly or consistently defined—there is no universally accepted definition of interdisciplinary care.

In its First Report, released in November 2001, the Committee wrote, "Interdisciplinary implies educational objectives and outcomes that relate to practice between or among professions and disciplines."

The First Report goes on to state:

> A multidisciplinary group becomes interdisciplinary when its members transcend their separate disciplinary perspectives and attempt to weave together their unique tools, methods, procedures, examples, concepts, and theories to overcome common problems or concerns. Members of the interdisciplinary team perform their work in a collaborative fashion, with team members providing the group with the knowledge and skills of their disciplinary perspective while they incorporate that perspective with others. Ultimately, the team should create solutions to health care problems that transcend conventional, discipline-specific methods, procedures, and techniques (Hirokawa, 1999). Teaching how to effectively communicate with professionals in other disciplines is a worthy objective in training providers who can be successful in delivering the highest quality health care to the Nation.

Development of Interdisciplinary Care

The interdisciplinary approach was developed in the field, by clinicians facing complex patient-care issues, not in academic settings. In 1915, Dr. Richard Cabot of Massachusetts General Hospital introduced the concept of interdisciplinary care by forming teams of a doctor, social worker, and educator to promote clinical efficiency. Following World War II, the provision of interdisciplinary care continued to increase, especially in the specialties of rehabilitation, chronic care, family health, primary care, psychiatry, mental retardation and developmental disabilities, geriatrics, and end-of-life care. In the early 1970s, the first evidence supporting the effectiveness of interdisciplinary care was released in the Institute of Medicine (IOM) report "Education for the Health Team." The rise of health maintenance organizations has in some cases resulted in an increase in interdisciplinary care.

Challenges to Greater Acceptance of the Interdisciplinary Care Model

Despite research indicating the cost effectiveness of interdisciplinary care, such as the savings resulting from interdisciplinary care models designed to reduce hospital stays for frail elderly patients, and increased patient satisfaction resulting from interdisciplinary care, it has not been widely integrated throughout our Nation's health care system. Various barriers impede the integration of interdisciplinary care. Significant barriers are listed below.

Compensation/Reimbursement - Perhaps the most significant barrier is the issue of reimbursement for team members—systems are not in place to compensate all the disciplines providing care. Additionally, interdisciplinary care is seen by many to be more time consuming, although this isn't necessarily the case with some models. For those models that do require additional time on the part of team members, improved patient outcomes and higher patient satisfaction may balance out these costs.

Resistance by Health Professionals - Some disciplines have been reluctant to share responsibilities and decision making. In particular, many physicians and medical students have negative perceptions of interdisciplinary care, which have been attributed to the culture of autonomy and the hierarchical structure in medicine, as well as the "hidden curriculum" in medical school that instills cynicism and arrogance in students.

Resistance to Change in the Health Care Industry - Change comes slow to bureaucracies and there are few bureaucracies that are more entrenched and rife with special interest groups than the health care industry. Integration of interdisciplinary models requires resources, such as time, space, and incentives. The provision of such resources may not be attractive in an industry that focuses on the bottom line. Commitment at the highest institutional levels will drive acceptance of and help legitimize interdisciplinary care. Greater use of technology, such as telehealth and high-tech communications, can greatly facilitate interaction across disciplines. Embracing innovative approaches can facilitate the integration of interdisciplinary care.

Lack of Skills and Training - It is unrealistic to expect that a group of health care professionals representing various disciplines can be assigned to work together and positive outcomes will result. Successful participation as a member of an interdisciplinary team requires a unique skill set including group, communication, conflict resolution, and leadership skills. While some professionals possess these skills, many require training in one or more of these areas. In addition, many disciplines "speak their own language." The lack of common definitions across disciplines can impede communication by team members. Finally, many health care professionals do not have an in-depth understanding of the roles of other health care professionals. This can limit their ability to work together as a team.

Need for More Research - There is a growing body of evidence supporting the effectiveness of interdisciplinary care in improving patient outcomes, increasing cost effectiveness, and increasing patient satisfaction. However, more evidence is necessary if

these practices are to be widely integrated into the health care system. Outcome measures are needed to determine the impact of interdisciplinary care. Best practices must also be identified to facilitate the adoption of evidence-based approaches.

Integrating Interdisciplinary Education and Training into Academic Settings

For there to be greater integration of interdisciplinary care in the overall health care system, health professions students require training in the provision of interdisciplinary care. Contemporary academic institutions are not characterized by a great deal of flexibility. Universities are made up of different colleges and specialized schools, all with their own bureaucracy and numerous departments. This results in multiple academic silos, which are not conducive to fostering an interdisciplinary approach. In order to foster cooperation across disciplines there needs to be greater interaction among them. However, challenges exist to the greater integration of interdisciplinary education and training opportunities.

Integration into the Curriculum **-** Courses that incorporate interdisciplinary approaches are often offered as electives, attracting only those students that already have an interest in interdisciplinary approaches. Few institutions have stand-alone courses on interdisciplinary care or have integrated the concept of interdisciplinary care into the overall curriculum. Initiating curricular change can be difficult. Curricula in many health professional schools are already very crowded and the addition of another topic is often met with resistance. Greater integration of interdisciplinary courses and concepts will require convincing decision makers, such as curriculum committees and accrediting agencies, of the importance of education and training in interdisciplinary care.

Lack of Institutional Support - Just as in the real world, integration of interdisciplinary approaches into health professions education and training requires resources. Unfortunately, many institutions of higher education are experiencing significant budget constraints. Programs are being cut, not expanded. To initiate change in academic settings, the administration must foster top-down support and make the necessary resources available to implement and institutionalize the changes.

Faculty Support - The teaching of interdisciplinary practice is vastly different from traditional didactic lectures. Team approaches to education include problem-based, case-based, and service-learning models as well as multi-specialty team diagnosis and management clinics. To effectively teach interdisciplinary practice, faculty will require training and support in order to adopt new teaching methods. Some institutions utilize consultants to build skills. For example, consultants have been used to provide teamwork training. It is important to note that currently, many interdisciplinary opportunities, whether required or elective, are the result of the efforts of a single individual, either a faculty member or a student, who is passionate about interdisciplinary care. These efforts are often tenuous, since faculty members and students may leave or interests may shift.

Need for Community Partners - Interdisciplinary education and training lends itself to a service-learning approach. Providing students with clinical opportunities in community settings can benefit students, community-based organizations, and patients. This experience is especially valuable if students work in communities with underserved populations—populations that students might not ordinarily serve. Academic institutions need to create linkages with community organizations. It is important to acknowledge that community organizations require resources to support the training opportunities provided to students.

Outcome Measures - Interdisciplinary education and training programs must evaluate the effectiveness of their efforts. Most of the outcome measures currently used by the Title VII Interdisciplinary, Community-Based Training Grant Programs do not assess the quality of education and training efforts. This type of program evaluation can be challenging. The 3-year funding cycle for many of the Title VII Interdisciplinary, Community-Based Training Grant Programs makes outcome assessment difficult, since the cycle does not provide enough time to demonstrate outcomes. Graduates must be tracked into professional practice to measure the impact of programs. Also, the measurement of outcomes requires both resources and expertise. Many Title VII Interdisciplinary, Community-Based Training Grant Programs do not possess the expertise to carry out sophisticated outcome analysis. Finally, quantitative data do not tell the whole story. Qualitative data need to be collected to help programs more effectively demonstrate the impact of their efforts.

Best Practices
Education and training programs need effective models that can be utilized in the development of interdisciplinary courses and the integration of interdisciplinary practices within curricula. Multiple disciplines should participate in the development of these best practices. The identification of core interdisciplinary learning objectives, applied across all disciplines, would assist in the integration of interdisciplinary practices in health professions education and training programs.

From Training to the Real World

The Committee is charged with providing advice on the Title VII Interdisciplinary, Community-Based Training Grant Programs and interdisciplinary health professions education policy and program development. However, it is important to note that throughout the testimony it was emphasized that system-wide change is necessary within the Nation's health care system if interdisciplinary care is to become a reality. Currently, interdisciplinary opportunities in the "real world" are rare. Health professions students, even if they are receptive to interdisciplinary practice, may not avail themselves of interdisciplinary training if there are no opportunities to apply these skills once they graduate and begin their professions. The greater integration of interdisciplinary practices in health professions education is dependent on opportunities to participate on interdisciplinary teams in professional life. All grantees are required to

incorporate interdisciplinary practice into their education and training efforts, but the degree of success varies significantly.

Role of Title VII Interdisciplinary, Community-Based Training Grant Programs in Providing Interdisciplinary Education and Training

As the name implies, Title VII Interdisciplinary, Community-Based Training Grant Programs focus on the training of health professionals at various levels, from pipeline programs to undergraduate, graduate, post-graduate, and continuing education programs.

Allied Health Projects

The program requires grantees to train a minimum of two or more distinct allied health disciplines in interdisciplinary health care. In FY 2006, more interdisciplinary interaction will be required.

Area Health Education Centers Program

AHEC grantees are required to conduct and participate in interdisciplinary training that involves physicians and other health personnel including, where practical, public health professionals, physician assistants, nurse practitioners, nurse midwives, and behavioral and mental health providers.

Geriatric Education Centers Program

The program is designed to strengthen interdisciplinary training of health professionals in the diagnosis, treatment, and prevention of disease and other health concerns of the elderly.

Geriatric Academic Career Award Program

The program is designed to increase the number of junior faculty at accredited schools of allopathic and osteopathic medicine and to promote the development of their careers as academic geriatricians who emphasize training in clinical geriatrics, including the training of interdisciplinary teams.

Geriatric Training for Physicians, Dentists, and Behavioral/Mental Health Professions Program

The program provides support, including fellowships, for geriatric training projects to train physicians, dentists, and behavioral and mental health professionals who plan to teach geriatric medicine, geriatric behavioral or mental health, or geriatric dentistry.

Graduate Psychology and Geropsychology Training Program

The program trains health service psychologists to work in primary care settings and as members of collaborative, multidisciplinary health care teams. It also teaches other health care providers to work with and utilize the skills of psychologists, which is a significant issue for psychologists given the lack of a common language and culture with health care.

Quentin N. Burdick Rural Program for Interdisciplinary Training Program
The program provides support for the interdisciplinary education and training of health care professionals that encourages and prepares them to enter into and/or remain in practice in rural America.

Sources

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Marino C. The case for interdisciplinary collaboration. *Nursing Outlook* (6):285-288, 1989.

McCallin A. Interdisciplinary practice – a matter of teamwork: an integrated literature review. *Journal of Clinical Nursing* (10):419-428, 2001.

Recommendations for Interdisciplinary Education and Training

8) The Committee recommends that the following definition for interdisciplinary educational development and training be used by BHPr 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."*

The lack of a single definition for interdisciplinary education and training has led to a lack of understanding and misconceptions about what constitutes interdisciplinary education and training and the benefits it can provide. Adoption of a single definition will help increase understanding about interdisciplinary education and training. Greater understanding will hopefully facilitate the broader integration of interdisciplinary approaches throughout the education and training of health care providers.

9) BHPr 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.

In its discussions, the Committee noted that the interdisciplinary education and training opportunities are rarely a required part of the curriculum, receive minimal support from the administration, are ignored by curriculum committees, and are often the work of a single "champion" who is committed to the concept. As a result, interdisciplinary education and training opportunities can be short lived.

Requiring grantees to develop a plan for institutionalizing interdisciplinary education and training projects, which includes specific learning objectives, identifies competencies to be obtained by trainees, and has an evaluation strategy to measure impact, will help projects take the necessary steps that will lead to the integration of interdisciplinary education and training on a permanent basis.

10) BHPr should develop common interdisciplinary performance and outcome measures to evaluate the effectiveness of interdisciplinary education and training programs funded under Title VII, Part D.

There is a lack of data demonstrating the effectiveness and impact of interdisciplinary education and training programs, which makes it difficult to demonstrate the value of these programs. While BHPr is taking steps to strengthen program evaluation through the development of logic models, few of the performance and outcome measures proposed address interdisciplinary education and training.

Given that the interdisciplinary emphasis is a key element of the Title VII Interdisciplinary, Community-Based Training Grant Programs, BHPr should develop common interdisciplinary performance and outcome measures that all Title VII Interdisciplinary, Community-Based Training Grant Programs can use to demonstrate the impact of their efforts. The measures should focus on learning outcomes to help programs assess their impact on students. Such findings could also be used to enhance education and training efforts.

11) BHPr 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.

There is an inconsistent and varied use of the term "interdisciplinary" throughout BHPr programs, which adds to the confusion surrounding the term, creates challenges to cooperation and collaboration across programs on interdisciplinary projects, and makes it difficult for programs to identify appropriate interdisciplinary activities. Because the interdisciplinary aspects of the programs are what make Title VII Interdisciplinary, Community-Based Training Grant Programs unique, BHPr should provide greater support to grantees and applicants in this area. This can be done through technical assistance, revision of program guidance, and the creation of mentorship and networking opportunities. Key areas for support include:

- Use of a single definition of "interdisciplinary" throughout BHPr guidances and clear descriptions of interdisciplinary requirements within the guidances;
- Establishment of mentorship opportunities focusing on interdisciplinary education and training;
- Development and dissemination of best practice models that Title VII Interdisciplinary, Community-Based Training Grant Programs can integrate into their programs; and
- Technical assistance for applicants, especially for the Geriatric Academic Career Award Program, to help them develop applications that are responsive to the interdisciplinary requirements in the guidances.

Increased support for interdisciplinary education and training will result in greater integration of interdisciplinary approaches by Title VII Interdisciplinary, Community-Based Training Grant Programs, more effective programs, and better education and training outcomes.

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.

Some health care disciplines appear more receptive to participating as part of interdisciplinary care teams than others. Even when providers are receptive, they may not possess the skills necessary to effectively participate because they have not received the necessary training. Participation in interdisciplinary training opportunities can often lead to continued use of interdisciplinary approaches after graduation.

The Committee focuses on programs that already include a significant interdisciplinary component in their education and training. In order to explore how interdisciplinary education and training is addressed by other health discipline training and education programs, the Committee would like to hold a joint meeting with the National Advisory Council on Nurse Education and Practice (NACNEP), the Advisory Committee on Training in Primary Care Medicine and Dentistry, and the Council on Graduate Medical Education (COGME). Such a meeting may result in joint recommendations addressing 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.

A consensus conference on interdisciplinary education and training could bring together experts and stakeholders—those people who are able to bring about change to the overall education and training system—such as representatives of accrediting bodies. Such a meeting could also serve as a forum for identifying best practices and establishing outcomes. While the meeting may lead to the development of consensus statements and/or white papers, it could also result in the development of tools that can be of use to providers in the field.

VIII. Current Work and Future Directions

Current Work

In FY 2005 the Committee focused on the topics of 1) allied health, and 2) interdisciplinary education and training. The topic of allied health was addressed over the course of two meetings, held on January 31-February 2, 2005, and May 1-3, 2005. The meeting held September 12-14, 2005 addressed interdisciplinary education and training. For each topic area, the Committee identified key questions to address and invited experts, program staff, and Title VII providers to give testimony in response to the questions. The questions are listed below.

Allied Health

- What are HRSA/BHPr's Allied Health Projects and what does the legislation dictate?
- What is the past history, current status, and future outlook of allied health?
- What is the Allied Health Reinvestment Act and what are the ramifications for the professions?
- What are effective allied health interdisciplinary training programs and how are they achieved?
- Are allied health interdisciplinary training programs meeting the needs of employers and what do employers seek in allied health professionals?

Interdisciplinary Education and Training

- What are Title VII Interdisciplinary, Community-Based Training Grant Programs doing in terms of interdisciplinary training and practice?
- How is interdisciplinary training and practice woven into their organization's mission and goals?
- What interdisciplinary training and practice projects are woven into their organizational structure?
- How is interdisciplinary training and practice woven into the programs?

As part of the meeting on interdisciplinary education and training, the Committee explored program models for interdisciplinary training and practice within Title VII, using examples provided by grantees. In addition, reimbursement practices (billable hours models) and outcomes of interdisciplinary training and practice were addressed. Testimony was provided on a study of collaborative models between Area Health Education Centers and Health Education Training Centers; interdisciplinary issues; and a report on an international meeting addressing interprofessional education and practice. The Committee plans to incorporate into future discussions the identification of core competencies relating to interdisciplinary training and practice.

This Fifth Report of the National Advisory Committee on Interdisciplinary, Community-Based Linkages reports the findings and recommendations that resulted from the testimony provided at the three meetings.

Future Directions

The Committee's charge, to make recommendations to strengthen the competence and capacity of the health care workforce through effective interdisciplinary, community-based programs, will be pursued in 2006 by gathering information and analyzing selected priority topics. Most importantly, the Committee hopes to review and provide input on BHPr's new evaluation strategy and the implications of performance measures for BHPr and grantees.

Building upon the information presented at BHPr's All Grantee meeting, held in the summer of 2005, the Committee will address how performance measures may be better applied by BHPr to ensure grantee accountability. More in-depth information will be sought on the logic models and performance measures proposed by BHPr so that the Committee can make recommendations on their effectiveness in measuring effort and impact and the feasibility of implementing the measures at the programmatic level.

Other topics that the Committee plans to address are listed below.

Leveraging and Linking Higher Education Financing

This topic will encompass the various sources of support for higher education (states, Federal agencies [not just HHS], private foundations, and faith-based organizations) and explore the relationships between these sources. It would focus on linkages, both across funders and between grantees and funders, as well as strategies for leveraging funds. Possible sources of testimony include provosts, since they are responsible for building linkages with foundations, and the Rural Assistance Center, which can provide information on foundations and their funding priorities.

Public Health

This topic would explore responsive public and community health programs. Public health is becoming an increasingly popular field for students, who see it as an opportunity to explore the field of health in general before committing to a specific discipline. At the same time, public health departments and programs are being cut at the state and local level. Emergency preparedness and bioterrorism are two growing areas for public health.

One of the benefits of the Committee meeting on a regular basis is that it can be responsive to current issues and conditions and can address emerging topics that have an impact on Title VII Interdisciplinary, Community-Based Training Grant Programs. While the Committee hopes to be able to address long-range issues of importance to the training of health care providers, the Title VII Interdisciplinary, Community-Based Training Grant Programs are dynamic, as are political realities, and recommendations will no doubt reflect new and emerging issues. Members of the Committee wish to continue to address Federal support for these programs. Consequently, the agenda proposed above is subject to change.

IX. Background of 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 23, 2004.

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Appendix A: Testimony – Allied Health

January 31 – February 20, 2006
Rockville, MD

What are HRSA/BHPr's Allied Health Projects and what does the legislation dictate?

Overview of HRSA's Allied Health Projects Legislation, Section 755 of the Public Health Service Act

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Summary of the Advisory Committee's Recommendations in the Second Report Regarding Allied Health

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What is the past history, current status, and future outlook of Allied Health?

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American Speech-Language-Hearing Association

Helena Gallant-Tripp, RDH
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Kenneth Harwood, PT, PhD, CIE
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Caroline Baum, PhD, OTR/L, FAOTA
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Glenn Gastwirth, DPM
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American Podiatric Medical Association

Kay Hoffman, PhD, MSW
President
Julia M. Watkins, PhD, MSW
Executive Director
Council on Social Work Education
Roxanne Fulcher

Director, Health Professions Policy
American Association of Community Colleges

Cynthia Belar, PhD
Executive Director of Education
American Psychological Association

What is the Allied Health Reinvestment Act and what are its ramifications for the profession?

Thomas W. Elwood, DrPH
Executive Director
Association of Schools of Allied Health Schools

May 1 – 3, 2005
Rockville, MD

What are effective allied health interdisciplinary training programs and how are they achieved?

Allied Health Projects Program: Allied Health Center for Excellence in e-Health,
Kevin J. Lyons, PhD, FASAHP
Thomas Jefferson University
Promotion Programs for Underserved Populations

Allied Health Projects Program: Allied Team Training for Parkinson
Gladys Gonzalez-Ramos, PhD
Assistant Project Director, Associate Professor of Social Work, NYU
Elaine V. Cohen, PhD
Program Evaluation Consultant, National Parkinson Foundation

Allied Health Projects Program: Certification in Interdisciplinary Geriatric Assessment Program
Richard E. Oliver, PhD
University of Missouri-Columbia

Graduate Psychology Education Program: UCHSC Collaborative Health Services Psychology Internship Program
Hal C. Lewis, PhD
University of Colorado Health Sciences Center

Graduate Geropsychology Education Program: Post-Doctoral Public Sector Interdisciplinary Training
Victor Molinari, PhD, ABPP
University of South Florida

Podiatric Primary Care Residency Training Grant Program: University of Texas Health Science Center of San Antonio Podiatric Residency Program
Kathleen Satterfield, DPM, FAPWCA, FACFAOM
University of Texas Health Science Center of San Antonio

Are allied health interdisciplinary training programs meeting the needs of employers and what do those employers seek in allied health professionals?

Lisa Cox
Assistant Director for Public Health Policy
National Association of Community Health Centers

Public Comment

Dan Rode, MBA, FHFMA
Vice President, Policy and Government Relations
American Health Information Management Association

Appendix B: Testimony – Interdisciplinary Education and Training
September 12-14, 2005
Arlington, VA

Collaborative Practice and Interprofessional Education: Are We in a New Place?

Madeline H. Schmitt, PhD, RN, FAAN, FNAP
Professor Emeritus, School of Nursing
University of Rochester

What are Title VII programs doing in terms of interdisciplinary training and practice?

Allied, Geriatrics, and Rural Health Branch
Joan Weiss, PhD
Branch Chief, Allied, Geriatrics, and Rural Health Branch
DSCPH, BHPr

Area Health Education Centers Branch
Marion Aldrich
Program Officer, Area Health Education Centers Branch
DSCPH, BHPr

Dentistry, Psychology and Special Projects Branch
Christopher J. McLaughlin
Branch Chief, Dentistry, Psychology and Special Projects Branch
Division of Medicine and Dentistry, BHPr

How is interdisciplinary training and practice woven into your organization's mission and goals?

Denise Holmes, JD, MPH
Assistant Vice President and Director of Global Health
Association of Academic Health Centers

What interdisciplinary training and practice projects are woven into your organizations?

Linda Lesky, MD
Assistant Vice President, Division of Medical Education
Association of American Medical Colleges

How is interdisciplinary training and practice woven into your program?

Quentin N. Burdick Rural Program for Interdisciplinary Training
Gail M. Jensen, PhD, PT
Creighton University Medical Center

Area Health Education Centers
Tiffany Lowe, DO, Claudia A. Switala, M.Ed, Lucia B. Weiss, MS,
University of Medicine and Dentistry New Jersey

Area Health Education Centers
Ann Bailey Bynum, EdD
University of Arkansas for Medical Sciences

Health Education Training Centers
Heather Karr Anderson, MPH
University of California, San Francisco (UCSF), Fresno Medical Education Program

Geriatric Education Centers
Philip G. Clarke, ScD
University of Rhode Island

Geriatric Education Centers
Karl Eric De Jonge, MD
Washington Hospital Center

HRSA/Association for Medical Education and Research in Substance Abuse (AMERSA)/Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Treatment (CSAT) Interdisciplinary Program to Improve Health Professions Education in Substance Abuse
Marianne Marcus, PhD
University of Texas

Geriatrics Faculty Training for Physicians, Dentists and Behavioral Mental Health Professionals, Geriatrics Academic Career Awards, and Geriatric Education Center
Tom Cavalieri, DO,
University of Medicine and Dentistry of New Jersey

Allied Health Special Projects
Rebecca H. Hunter, MEd,
University of North Carolina School of Medicine

Graduate Psychology
Joseph H. Evans, PhD
University of Nebraska Medical Center

Appendix C: 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 sets of programs, all with the central mission of training and education and deemed to have the potential to support linkages that can 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 a common element; each has the potential for fostering the development and application of interdisciplinary, community-based linkages. This occurs in areas where such linkages are most urgently needed, on health care delivery issues of greatest concern from a community standpoint. They all provide training for health professions students, medical residents, and local providers in community settings. In addition, they provide a key link between the academic health institutions, 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 with health care professionals who are technically well-trained, culturally competent in the care they provide, responsive to the needs of the communities where they work, and comfortable providing care as part of an interdisciplinary team.

Characteristics of Individual Programs

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

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 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.

Health Education Training Centers (HETC) – Section 752

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 with 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.

Geriatric Education Centers (GECs) – Section 753

The program goal for the GECs is to improve the training of health professionals in geriatrics through three specific programs.

1. Geriatric Education Centers – dedicated to the interdisciplinary geriatric education and training of all health professionals.
2. Geriatric Training for Physicians, Dentists, and Behavioral/Mental Health Professionals – ensuring 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 – 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, GECs carry out the following activities.

1. Improve the training of health professionals in geriatrics by providing geriatric residencies, traineeships, or fellowship.
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.

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

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 from 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 the understanding of the contribution that each discipline brings to the solution of health concerns.

2. Conduct educational workshops and activities in rural communities for rural health professionals and the community.
3. Provide information and awareness activities for students, grades K-12, concerning career opportunities in the health professions.

Allied Health and Other Disciplines – Section 755

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.

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

1. Support programs training professionals most needed by the elderly.
2. Develop and support programs that transition 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.

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

Chiropractic demonstration grants 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.

Behavioral and mental health training grants provide for training in residential care, faculty support for training and/or retraining, continuing education for certified/licensed paraprofessionals, and clinical training of students in senior centers and ambulatory care settings.

Appendix D: Previous Recommendations

The Committee has produced four 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 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. BHPr 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 BHPr, 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, BHPr 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 "BHPr All Grantee" meeting in June 2005 should consider creating a venue to explore strategies to share information, data, and resources among BHPr 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, BHPr, 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 BHPr that is based on community needs and workforce assessment and would apply to the full range of health professions not currently supported by BHPr 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.