

A Call for Action: Advocating for Increased Funding for the Allied Health Professions

ASAHP Leadership Development Program

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Allied health professionals are a diverse group of health care workers who provide necessary services to patients in addition to, or in place of, services provided by physicians, nurses, and medical paraprofessionals. Two forces generating increased demand for allied health professionals are the aging of the US population and health care reform associated with the implementation of the Patient Protection and Affordable Care Act. Although the allied health professions comprise nearly 60% of the health care workforce, the funding to support workforce training, faculty development, and research in the allied health fields lags substantially behind funding for the physician and nursing professions. Increased advocacy efforts are needed to increase the awareness of what the allied health professions contribute to health care and to expand funding across all health care professions. *J Allied Health* 2015; 44(1):57-62.

OF THE MANY FIELDS that comprise health care in the United States, the medical and nursing fields have strong and relatively cohesive lobbying entities through their professional associations, in part because of their size and in part because of their long history as health professions. Health fields such as physical therapy, occupational therapy, speech-language pathology, medical laboratory sciences, and dental hygiene also have organized lobbying efforts through their professional associations. However, the focus of these professional organiza-

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tions' lobbying efforts is narrower, and each has a lower membership enrollment when compared to the professional organizations representing medicine or nursing. As a result, state and national legislation and funding have primarily focused on the fields of medicine and nursing with only occasional inclusion of the other health professions. More advocacy efforts are needed for allied health. The Association of Schools of Allied Health Professions (ASAHP) serves as a coalescing body to broadly advocate for the allied health professions in the areas of common interest of the membership. Advocacy is one of five strategic initiatives of ASAHP.¹

Allied Health Defined

There are many definitions, but less agreement, regarding criteria that uniquely describe allied health. The Patient Protection and Affordable Care Act (P.L. 111-148) provides a definition with legal and financial implications:²

The term allied health professional means an allied health professional as defined in section 799B(5) of the Public Health Service Act (42, U.S.C. 295p(5)) who—(A) has graduated and received an allied health professions degree or certificate from an institution of higher education; and (B) is employed with a Federal, State, local, or tribal public health agency, or in a setting where patients might require health care services, including acute care facilities, ambulatory care facilities, personal residences, and other settings located in health professional shortage areas, medically underserved areas, or medically underserved populations, as recognized by the Secretary of Health and Human Services.

Other definitions rely on exclusive classifications. For example, the United States Code of Federal Regulations (CFR) stipulates that an allied health professional is not a physician, physician assistant, registered nurse, clinical psychologist, pharmacist, chiropractor, or doctor of dentistry, optometry, osteopathy, podiatric medicine, or veterinary medicine.³ The CFR further excludes health professionals with a degree in social work or counseling, as well as those with graduate degrees in public health or health administration. In

TABLE 1. ASAHP Research Committee Examples of Allied Health Professions

A	Anesthesiology assistant Anesthesia technologist/technician Athletic trainer Audiologist	N	Nerve conduction studies technologist Nuclear medicine technologist Nutritionist
B	Behavioral disorder counselor	O	Occupational therapist Occupational therapy assistant Occupational therapy aide Operating room technician Ophthalmic medical assistant Optometric assistant and technician Orothotist Orthotic and prosthetic technician
C	Cardiovascular technologist and technician Clinical laboratory worker Cytotechnologist	P	Perfusionist Pharmacy assistant, aide or technician Physician assistant Physical therapist Physical therapy assistant Physical therapy aide Podiatric assistant Poetry therapist Polysomnographic technologist Psychiatric aide or technician
D	Dental hygienist Dental assistant Dental laboratory technician Diagnostic medical sonographer Dietitian Dietetic assistant	R	Radiation therapist Radiology assistant, technician or administrator Recreational therapist Rehabilitation counselor Respiratory therapist
E	Electroneurodiagnostic technologist Emergency medical technician Exercise science professional (personal fitness trainer, exercise physiologist)	S	Specialist in blood bank technology/transfusion medicine Speech-language pathologist Substance abuse counselor Surgical neurophysiologist Surgical assistant or technologist
G	Genetic assistant	V	Vocational rehabilitation counselor
H	Health information administrator and technologist Health educator Histotechnologist Home health aide		
K	Kinesiotherapist		
L	Lactation consultant		
M	Marriage and family therapist Magnetic resonance technologist Medical assistant Medical dosimetrist Medical illustrator Medical librarian Medical laboratory technologist Medical transcriptionist Medical health counselor Music therapist		

Adapted from Arena et al. *J Allied Health*. 2011; 40(3):161–166.⁵

order to engage advocacy efforts more effectively, ASAHP needs to promote a strong definition of allied health. In contrast to CFR’s exclusive definition, ASAHP’s definition is intentionally inclusive because of the broad nature of allied health. ASAHP defines the allied health segment of the workforce as those who:

*deliver services involving the identification, evaluation, and prevention of diseases and disorders; dietary and nutrition services; and rehabilitation and health systems management.*⁴

ASAHP specifies a range of professionals that fit the classification (e.g., dental hygienists, diagnostic medical sonographers, dietitians, medical technologists, occupational therapists, physical therapists, radiographers, and speech-language pathologists), while explicitly recognizing that the list is only suggestive and not exhaustive. A special report of the ASAHP Research Committee outlined 66 examples of allied health professions⁵ (Table 1).

Due to the number of entities and regulations defining inclusion or exclusion as an allied health profession, we recommend that ASAHP take the lead in defining and promoting an understanding of the allied health care professions to ensure that they, and their patients, are represented through advocacy efforts. ASAHP extends the efforts of profession-specific advocacy groups by broadly advocating for all allied health professions rather than a specific profession.

Changes in Health Care Necessitating Advocacy for Allied Health Education and Research

Health care reform in the United States, implemented through the Patient Protection and Affordable Care Act (ACA), will further increase the need for allied health professionals. For instance, the Bureau of Labor

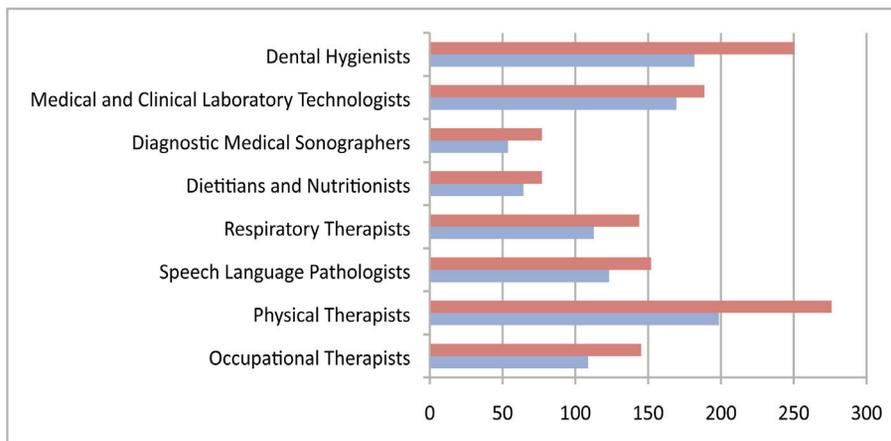


FIGURE 1. Projected growth in the demand for health care professionals from 2012 to 2020 (in thousands). Light gray bars (*red*) indicate 2020 projections, darker bars (*blue*) indicate 2010 actual employment.

Statistics projects job growth between 2012 and 2022 to increase by 29% for occupational therapists, 33% for dental hygienists, 34% for audiologists, and 36% for physical therapists.⁶ The ACA will increase the number of Americans with health care insurance by expanding eligibility and enrollment in Medicaid, growing the number of employees covered through employer-based health plans, and implementing an “Individual Mandate” that requires individuals who are ineligible for government or employer provided plans to purchase private insurance.⁷ Because more Americans will be insured, they will be more likely to seek and receive health care services. For example, approximately 9.3 million people who were previously uninsured enrolled in a health insurance plan between September 2013 and March 2014.⁸ The current number of primary care practitioners may be insufficient to meet the increased demand for health care services. Some allied health professionals have the knowledge and skills to assist in providing primary care services.^{9,10}

Changes in health care service delivery influenced by the ACA include an emphasis on quality, efficacy, and reduced cost of health care delivery.^{7,11} To meet these goals, the ACA promotes the use of a health care team composed of multiple health care professionals well-suited to emphasize prevention and the management of chronic diseases.⁷ Many allied health professionals are known to have the knowledge, skills, and experience working in teams¹² to meet the legislated changes in health care service delivery. Expanding the number and support of allied health professionals will aid in achieving the goals of providing accessible, high quality, effective health care for a lower cost. Additional research also needs to be conducted to determine cost-effective treatment options with high patient outcomes. For example, research is needed to assess whether health education and monitoring programs for patients with chronic diseases have the intended effect of reducing hospital

admissions and increasing quality of life. Thus, implementation of the ACA intensifies the need to support funding for the training of future faculty and health care professionals and for research in the allied health fields.

Funding Needed for Allied Health Training

The Bureau of Labor Statistics projects that the health care and social services sector of the workforce will grow by 2.6% annually between 2012 and 2022, adding 5 million jobs within this sector. This accounts for almost one-third of the expected job growth in this time period.⁶ Currently, allied health professionals comprise nearly 60% of the health care workforce.¹³ Projected workforce needs from the Bureau of Labor Statistics *Occupational Outlook Handbook* for common allied health professions are provided in Figure 1.¹⁴ In all of the professions, the projected need for allied health professionals is higher and, in some cases (e.g., physical therapists and dental hygienists), substantially higher than the current workforce level. The Bureau of Labor Statistics primarily attributes this accelerating need in the allied health workforce to the exponential growth in the aging population.⁶ To put this demographic shift in perspective, in 2011 the US population age 65 years and older was 41.4 million, and this segment is expected to more than double to 92 million by 2060.¹⁵

Assistance will be needed from the federal government to adequately address this workforce shortage in allied health. According to the Health and Human Services Grants Policy Statement, one of the responsibilities of the Health Resources and Services Administration (HRSA) is to “build the health care workforce through many training and education programs.”¹⁶ Historically, funding for allied health training grants has varied widely, with significant support in the 1960s through the Allied Health Professions Personnel Training Act (PL89-751), but only limited support in the

1980s. The Public Health Service Act 796(a) program of Title VII, Disadvantaged Minority Health Improvement Act (PL101-527), and Education Assistance Loans Program provided some funding in the 1990s.¹⁷ In recent years, HRSA grant offerings have focused primarily on nursing and medicine with very limited funds available to address the significant needs of the allied health professions. For example, HRSA postings for training grants available on February 1, 2014, listed only grants targeted for nursing education (Table 2).¹⁸

Although training needs are just as great in the allied health professions as they are in primary care, at present, training grants specifically targeted for allied health professions are not available. To remedy this, training grants are needed to:

- Support expansion of existing programs or development of new programs in allied health
- Support development of additional faculty to meet the expanding teaching needs in allied health fields, and
- Support disadvantaged students to enroll in allied health professional programs.

Currently, faculty shortages exist in most allied health fields, in part due to the expansion of programs and in part due to the need for more highly educated faculty as many professions are requiring more advanced degrees. In a survey of chief executive officers of academic health centers, 77% reported shortages in allied health faculty, particularly in physical therapy, radiological science, and clinical laboratory science.¹⁹

Minority enrollment in allied health programs continues to fall below the percentage of minorities in the overall US population. For example, in 2012, only 16.7% of the students in physical therapy programs were minority students.^{20,21} Similarly, a 2006 survey of dental hygiene education program directors indicated that 88.6% of their students were non-Hispanic white students, meaning that less than 12% of dental hygiene students represented all other racial/ethnic groups.²² The 1995 Pew Health Professions Commission Report *Critical Challenges: Revitalizing the Health Professions for the Twenty-First Century*²³ recommended that every health profession “ensure that the students they train represent the rich ethnic diversity of our society.” Unfortunately, the recent Supreme Court ruling on *Fisher v. University of Texas* and past rulings for the *University of Michigan (Gratz v. Bollinger)* and *Grutter v. Bollinger* call into question the commitment of our court system to uphold affirmative action admissions practices in universities.²⁴ If these challenges to affirmative action continue, regression rather than progress is likely in achieving diversity in allied health education. Clearly, allied health fields have not made adequate progress in this regard over the past two decades, and assistance from the federal government with training grants to support minority and disadvantaged students will be necessary to achieve this goal. ASAHP is in the

TABLE 2. HRSA Training Grants Available on February 1, 2014

Health Professions Open Opportunities
HRSA-14-070 Nurse Education, Practice, Quality and Retention (NEPQR) Program—Interprofessional Collaborative Practice <ul style="list-style-type: none"> • Apply at Grants.gov by February 03
HRSA-14-072 Nurse Faculty Loan Program (NFLP) <ul style="list-style-type: none"> • Apply at Grants.gov by February 03
HRSA-14-071 Nurse Education, Practice, Quality and Retention (NEPQR) Program—Veteran's Bachelor of Science Degree in Nursing <ul style="list-style-type: none"> • Apply at Grants.gov by February 18

best position to advocate for the need to include the allied health professions in HRSA programs.

Funding Needed for Allied Health Research

In a special report of the ASAHP Research Committee published in the *Journal of Allied Health* in 2011, Arena et al.⁵ outlined an extensive research agenda and demonstrated the need to expand research activities across the health professions in areas such as basic, clinical, educational, epidemiological, health services, workforce, and measurement development and validation research. The authors made a convincing argument for both the need to expand research activities and the need to enhance the funding base for research across the allied health professions. Research performed by allied health professionals crosses the lifespan, from developmental disorders in infants to health outcomes and quality of life related to aging. These research projects are science-driven and evidence-based where the objective is to apply research findings to grow capacity and advance best practices in allied health professions. The ASAHP Research Committee Report argued for interdisciplinary collaborations among allied health professions regardless of the specific area of research and suggested that allied health professionals should continually communicate clinical research findings to basic scientists.⁵ Sharing of data across disciplines will lead to safer and more effective patient-centered clinical practice.

Federal funding for allied health research is supported primarily through the National Institutes of Health (NIH). NIH supports and conducts a wide range of basic and clinical research, research training, and health information dissemination across all fields of biomedical and behavioral sciences. Unfortunately, as health professions expanded their workforce, including faculty and researchers, the NIH budget experienced a relative decline. The NIH budget doubled between 1999 and 2003, but since then total NIH appropriations increased only incrementally from \$27.1 billion in 2003 to \$30.9 bil-

lion in 2011, which represents a decrease of 7% in real dollars. For fiscal year 2015, NIH received a budget of \$30 billion, which is a slight increase over its 2014 funding level, but still less than its funding in 2012.²⁵ Importantly, smaller projects in new areas and projects led by new researchers may be least likely to secure funding.

There are no data sources available which distinguish allied health grant recipients from medical or nursing recipients of NIH funding. Across fields, however, the success rate for new R01 applications is a leading indicator of the negative impact of reduced NIH funding levels. Since 2003, the number of new R01 awards has decreased by 18% across the National Institutes of Diabetes and Digestive and Kidney Diseases, National Cancer Institute, and the National Heart Lung and Blood Institute.²⁶ Current NIH funding is focusing in the areas of basic research, accelerating discovery through technology, advancing translational sciences, and encouraging new investigators and new ideas.

Congress has directed NIH to continue its emphasis on support of basic biomedical and behavioral research, which seeks to understand the causes of disease onset and progression. About 54% of the 2013 NIH budget was targeted for basic research in areas such as genetics, regenerative medicine (including stem cells), and environmental and behavioral influences on health.²⁷ Some basic science research in the allied health professions has already begun to target these four areas, but more is needed to take advantage of future funding trends.

NIH has indicated that they will continue to support development and application of advanced technologies (DNA sequencing, microarray technology, nanotechnology, new imaging modalities, and computational biology) to increase understanding of complex diseases and enable development of more effective therapies. A high priority project, the Cancer Genome Atlas, generates maps of genetic changes found in different types of cancer.²⁷ The areas of cancer and genomics are ripe for investigation by allied health researchers. For example, accumulating evidence gathered by allied health researchers suggests that exercise is safe both during and after cancer treatments such as radiology or chemotherapy.²⁸ Regular exercise is associated with improvements in aerobic endurance, muscular strength, flexibility, and balance, leading to improved physical function and quality of life. Additionally, regular aerobic exercise has been shown to play a vital role in cancer prevention and control. Evidence indicates that exercise decreases the risk of many cancers and may extend life for breast and colon cancer survivors.

Other studies have demonstrated that genetic factors influence many, if not most, of the diseases commonly encountered in clinical practice by physical therapists. Genes appear to influence both risk and progression of disease, as well as outcomes and response to rehabilitation interventions. For example, the Trp2 allele in the col-

lagen IX alpha-chain gene (COL9A2) has been associated with a 4-fold increase in the risk of developing annular tears in individuals 30–39 years old, and a 2.4-fold increase in the risk of developing degenerative disk disease and end-plate herniation among individuals 40–49 years old.²⁹ There is evidence that response to rehabilitation after brain injury is poorer among individuals with the APOE e4 variant compared to those without APOE e4.³⁰

Translational medicine focuses on converting basic research discoveries into clinical applications that benefit patients. In 2010, NIH began planning for the creation of the National Center for Advancing Translational Sciences (NCATS). The new entity pulls together a variety of preclinical and clinical translational sciences resources that were scattered across the Institutes. NCATS was established and funded in 2012. The NCATS mission includes exploring more reliable, rapid, and cost-effective ways to test possible new drugs, diagnostics, and preventive measures for human use (or new uses for old products). In addition, NCATS fosters partnerships between extramural researchers, industry, health care, and government entities to speed commercialization of new therapies.³¹ The NCATS budget request for 2013 included a \$463 million request for the Clinical and Translational Science Awards (CTSA) program. CTSA funds a national consortium of medical research institutions engaged in improving clinical research. Participation in translational science provides an opportunity for allied health research in the future.

NIH has several programs to support exceptional young scientists and speed their transition to independent research. The NIH Director's New Innovator Award program provides first-time independent awards to outstanding investigators. The NIH Director's Early Independence Program supports talented junior scientists, allowing them to bypass the traditional postdoctoral training period and move directly to an independent research career. The Ruth L. Kirschstein National Research Service Award provides funding for research training. Funds for most of these programs have remained stagnant or decreased in recent years with the exception of the NIH Director's Early Independence Program. Although NIH has made these programs available to young scientists, new investigators in allied health often lack mentors with experience securing NIH funding who could assist them in developing successful grant applications.²⁷

Advocacy for research funding in allied health is certainly necessary at the federal level to seek more funding through the NIH. Advocacy efforts are also imperative for specific funding needs at the state level and with large foundations which support health care research. For example, the Robert Wood Johnson Foundation has supported a future of nursing initiative for 30 years with a focus on the nursing shortage, professional development, and expanding the scope of nursing practice.³²

Building on prior advocacy efforts,¹⁷ ASAHP should seek and advocate for a foundation funding source willing to support similar interests in allied health.

Conclusion

Although allied health accounts for nearly 60% of the health care workforce,¹³ funding targeted for allied health training and research is strikingly inadequate compared to funding in the medical and nursing fields. Advocacy efforts in these areas will help address existing and projected allied health workforce shortages and increase research in basic, clinical, educational, epidemiological, health services, workforce, and measurement development and validation areas. ASAHP is well situated to play a leading role in advocating for allied health training and research funding.

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