Research

Historical Review of the Commissioning of Health Care Disciplines in the USPHS

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Introduction

The United States Public Health Service (USPHS) cites its earliest beginnings in the 1798 Act for the Relief of Sick and Disabled Seamen, which established a Marine Hospital System and a Marine Hospital Service. The uniformed medical provider component of the Marine Hospital Service became known as the Commissioned Corps in 1889. The name of the service formally changed to the U.S. Public Health Service in 1912, and by the 1930s and 1940s the Commissioned Corps of the USPHS expanded its cadre of Public Health Officer providers from physicians to dentists, nurses, dietitians, engineers, research scientists and other health care specialists.1

As the public health needs of the nation changed and increased in scope, new health care disciplines were commissioned into the Corps. Today the Commissioned Corps of the USPHS includes health care officers in 11 different professional categories, with the Health Services Officer (HSO) category containing 57 different health care disciplines, including physician assistants and dental hygienists.¹

The purpose of this investigation was to examine the history surrounding the commissioning and the procedures followed in the commissioning process of the first physicians, dentists, nurses, nurse practitioners, physician assistants and dental hy-

gienists into the USPHS Commissioned Corps, and to determine a critical pathway to commissioning new health care professions into the USPHS.

Abstract

Purpose: The purpose of this investigation was to examine the commissioning history of the professions of physicians, dentists, nurses, nurse practitioners, physician assistants and dental hygienists of the United States Public Health Service (USPHS), and to determine a critical pathway to commissioning new health care professions into the USPHS. The Advanced Dental Hygiene Practitioner (ADHP), recently developed by the American Dental Hygienists' Association, is an oral health care provider proposed for public health settings that shares the same goal as the USPHS of treating underserved populations in the U.S. With the establishment of the ADHP role, an opportunity for the ADHP to be commissioned into the USPHS may arise.

Methods: Journal articles, books and Web sites documenting the history and commissioning process of the USPHS were researched. Interviews with key USPHS commissioned officers involved with the commissioning process of the selected health care disciplines were conducted. A qualitative comparative analysis to examine published documents and interpret interviews was performed to reveal patterns of events leading to commissioning. Systematic, time-oriented visual displays of data were constructed to identify critical pathways for commissioning new professions into the USPHS.

Results: The need for health care professionals to provide quality health care to the Federal beneficiaries of the USPHS was found to be the driving force behind commissioning the selected health care professions into the USPHS. A critical pathway for commissioning new professions into the USPHS was identified.

Conclusion: Understanding the commissioning process of new health care professions into the USPHS would assist with defining the critical pathway for future USPHS commissioning of the ADHP.

Keywords: United States Public Health Service, Advanced Dental Hygiene Practitioner, Mid-level Health Professions, Access to Care, Dental Hygienists

This study supports the NDHRA priority area, **Health Services Research:** Investigate how alternative models of dental hygiene care delivery can reduce health care inequities.

The USPHS is one of the providers of oral health care services to the underserved populations in the U.S. The majority of the approximately 500 dental

commissioned officers and 60 dental hygienist commissioned officers provide oral health care services through the Indian Health Service, the Federal Bureau of Prisons and the Health Resources and Services Administration.¹ The U.S. Surgeon General's 2000 report titled Oral Health in America defined oral health care and its relationship to general health, emphasizing the disparities of current oral health care among specific populations.² This report also discussed the ineffectiveness of the current dental care delivery system and the problems many populations have accessing dental care.

Healthy People 2010, published by the United States Department of Health and Human Services, developed objectives to address oral health disparities and access to quality health care.³ Adding to the complications of limited access to dental care, the numbers of dentists in the U.S. is declining. Approximately 2,000 more dentists are retiring each year than are graduating from dental school, while the population is growing and living longer.⁴

New workforce models are being developed and utilized to help facilitate access to oral health care. A new workforce model currently under development by the American Dental Hygienists' Association (ADHA) is the Advanced Dental Hygiene Practitioner (ADHP), a mid-level oral health care provider of dental services. In May 2009, Minnesota became the first state in the U.S. to pass legislation allowing licensing of the ADHP, called the Advanced Dental Therapist in Minnesota.⁵ The introduction of the ADHP to the oral health care workforce could increase the numbers of dental providers practicing in the public health setting, thereby helping to increase access to oral health care services.

As the role of the ADHP becomes established, opportunities may become available for the ADHP to be commissioned into the USPHS, thus increasing the numbers of oral health care providers and increasing access to oral health care services to the underserved. Understanding the history of the USPHS and the commissioning process of health care providers into the USPHS could provide a critical pathway for the future commissioning of the ADHP into the U.S. Public Health Service.

Review of the Literature

A review of the literature provided the basic description and historical background of the professions of physicians, dentists, nurses, nurse practitioners, physician assistants and dental hygienists. Current professional demographics provided a view of future workforce implications.

Physician

A physician is defined as one who is educated and trained to "diagnose illnesses and prescribe and administer treatment for people suffering from injury or disease." References to physicians and the use of medicines are found in the ancient history of many civilizations, with the earliest known surgical operations depicted in the tomb of the Pharaohs of Saggarah in Egypt, dating back to 2500 B.C.⁷

Dentist

A dentist is defined as one who is educated and trained in "the evaluation, diagnosis, prevention and/or treatment ... of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body." Oral health has its earliest documented beginnings in an ancient Sumerian text dating back to 5000 B.C., describing tooth worms as the cause of dental decay.

Nurse

The American Nurses Association defines nursing as "the protection, promotion and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response and advocacy in the care of individuals, families, communities and populations."¹⁰ Early historical documentation detailing nursing practices is lacking, and it is only speculative to say that nursing practice began in the home with family members caring for the sick. As societies grew, nursing practices developed in conjunction with medicine and religion. Houses for the sick and dying were associated with temples in Egypt and Persia.¹¹

Nurse Practitioner

The American College of Nurse Practitioners defines nurse practitioners as "registered nurses who are prepared, through advanced education and clinical training, to provide a wide range of preventive and acute health care services to individuals of all ages." An emerging shortage of primary care physicians limiting health care access by the disadvantaged, rising health care costs and the quest for autonomy of the nursing profession in the 1960s brought about the creation of the nurse practitioner profession in 1965.13

Physician Assistant

A physician assistant is a health care provider credentialed and licensed to practice medicine un-

der the supervision of a physician, and is considered part of a physician–directed team. ¹⁴ The physician assistant profession was established in 1965 as an answer to the increased need for primary care providers, the rising cost of health care and need for comparable jobs for returning Vietnam War corpsmen and combat medics. ¹⁵

Dental Hygienists

"The dental hygienist is a licensed primary health care professional, oral health educator and clinician who provides preventive, educational and therapeutic services, supporting total health for the control (and prevention) of oral diseases and the promotion of oral health." The early history of the practice of dental hygiene is combined with that of dentistry and medicine. Aristotle and Hippocrates made references to the treatment of oral disease as well as the link between oral health and systemic health. The support of the professional disease as well as the link between oral health and systemic health.

Future Workforce Implications

In recent decades, the increasing U.S. population, the aging health care workforce and increasing demand for health care services has prompted the development of new workforce models of health care delivery, specifically the nurse practitioner and physician assistant models, to meet the demands of access to primary health care. The nurse practitioner health care model has proven to be effective in providing primary health care at a lower cost with an equivalent quality of care to physicians, as well as providing increased access to primary health care to the disadvantaged. 13 Physician assistants have also been shown to consistently provide cost-effective quality primary care and have become well respected by both physicians and patients.15

Current data suggests a shortage of nurses in the U.S. that is projected to reach over 500,000 by 2025, due to nursing school faculty shortages and budget constraints,¹⁸ while the Association of American Medical Colleges warns "the United States will face a serious doctor shortage in the next few decades. Our nation's rapidly growing population, increasing numbers of elderly Americans, an aging physician workforce and a rising demand for health care services all point to this conclusion."¹⁹

In the 2000 report, Oral Health in America,² the Surgeon General reported the existence of disparities in access to oral care and the prevalence of oral disease. It is projected that with the increasing overall U.S. population and the increasing number of older Americans keeping their teeth longer, the

number of dentists will fall short of the current and future demands for dentistry.²⁰

The demand for dental services is projected to exceed the capabilities of the dental profession to produce adequate numbers of dentists to provide basic dental care – the resulting shortage of dentists will further limit access to dental care by the disadvantaged. These projections, coupled with rising dental care costs and the desire for autonomy by the dental hygiene profession, prompted the ADHA in 2004 to develop the ADHP, a new workforce model to help facilitate access to oral health care. Similar to the nurse practitioner in medicine, the ADHP could increase the number of dental providers practicing in the public health setting, helping to increase access to oral health care services.²¹

Methods and Materials

The purpose of this investigation was to examine the history surrounding the commissioning, and the procedures followed in the commissioning process, of the professions of physicians, dentists, nurses, nurse practitioners, physician assistants and dental hygienists into the USPHS Commissioned Corps, and to determine a critical pathway to commissioning new health care professions into the USPHS. The professions of physicians, dentists and nurses were chosen as representative examples of long established professions within the USPHS. The professions of nurse practitioners, physician assistants and dental hygienists were chosen for their interrelatedness to the professions of physicians, dentists and nurses, and their relatively new commissioning into the officer ranks of the USPHS.

Forty-five journal and Web site articles were collected and evaluated, with 30 providing relevant information of the history of the USPHS, the events leading to the commissioning of the professions of physicians, dentists, nurses, nurse practitioners, physician assistants and dental hygienists within the USPHS and the commissioning process of the USPHS. The USPHS Web site revealed early history and details about the USPHS.1 The Office of the Public Health Service Historian Web site contained several scholarly documents chronicling and interpreting the early history of the USPHS.²² Three texts documenting the early history of the USPHS were acquired and researched - these texts by Ralph C. Williams, Bess Furman and Fitzhugh Mullan, MD are considered to provide an authoritative history of the USPHS.23-25

Twenty e-mails requesting information related to the establishment of the selected health care professions in the USPHS were sent to the chief officer and the professional advisory committee chair for each of the professions being researched, as well as officers who are colleagues and professional acquaintances in the professions being researched. The e-mail recipients were asked, "Do you have knowledge of the decision making process and the public health needs that led to the commissioning of the first (physician, dentist, nurse, nurse practitioner, physician assistant or dental hygienist) into the USPHS Commissioned Corps, and the steps that were followed in the commissioning process?" Officers were asked to either provide the requested information by e-mail, arrange to be interviewed or provide a reference to an officer who may know the requested information. Ten referred officers were sent e-mail requests for information. Of the 30 e-mail requests, a total of 27 responses were received (90% response rate), furnishing links to resources and relevant data, other persons or corroborating data. Five responses led to interviews with 3 key commissioned officers. Interviews were conducted using an open-ended questioning technique utilizing the same questions asked of the e-mail recipients. CAPT Emmett Knoll PA, MPH, USPHS (retired), who was involved with the commissioning process of physician assistants, was interviewed twice via telephone. CAPT Candace Jones, RDH, MPH, who was involved with the commissioning process of dental hygienists, was interviewed twice - once in person and once via telephone. CAPT Meribeth Reed, RN, PhD, USPHS (retired), a PHS nurse historian, was interviewed via telephone.

The data analysis advocated by Miles and Huberman, as described in Research for the Health Professional - A Practical Guide, was used for the qualitative research discussed in this paper.²⁶ A qualitative comparative analysis was conducted to examine and interpret previously published documents, e-mail correspondence and personal interviews to discern patterns or commonalities in events leading to commissioning and the commonalities of the commissioning process. Contact summary sheets were constructed to aid in data collection and interpretation for each interview, e-mail and document. These contact summary sheets outlined the needs, events, dates, processes and persons involved with developing the commissioning of each of the selected health care professions into the USPHS. Questions and comments that occurred during the course of data collection were notated on the summary sheets for further followup. Reflections and ideas that occurred during the research process that demonstrated patterns found throughout data collection were also recorded on the contact sheets. Important variables and patterns were identified from the collected data and organized into a time-oriented visual display table to present the data systematically.

For the purpose of this investigation, it was assumed that persons interviewed had accurate recollections of the commissioning process of the selected profession and provided accurate, informative answers during the interviewing process. The current and historical documents and resources utilized during this investigation were assumed to provide accurate data on the commissioning of the health care professions into the USPHS.

Limitations

Although there are many published documents relating to the USPHS, there are few documents pertaining to the professions of nurse practitioners, physician assistants and dental hygienists within the USPHS. There was a lack of published documentation of the development of the commissioning of the selected health care professions into the USPHS. The National Archives and the National Library of Medicine houses the archived files of the USPHS in a non-digitized format that only allows for physical viewing from the sites. These were not accessed by this researcher. It is not known whether information on the development of the commissioning of the selected health care professions is contained in these files.

Results

Early history of the health care professions of physicians, dentists, nurses and nurse practitioners within the USPHS was collected from the aforementioned authoritative texts written on the history of the USPHS, published journal articles, the USPHS Web site and the Office of the PHS Historian Web site, as well as a personal interview with a nurse historian. The early history of the professions of physician assistant and dental hygienist within the USPHS was collected during personal interviews with the creators of the commissioning process for that profession.

Physicians

The USPHS began with the Marine Hospital Service, which was established in 1798. For nearly 100 years the Marine Hospital Service functioned with varying levels of success, establishing more than 30 hospitals coast to coast. In 1871, Dr. John Maynard Woodworth was appointed the first supervising surgeon of the Bureau of the Marine Hospital Service and was responsible for its reorganization. Woodworth created a "cadre of competent, mobile, career service physicians," following the

military model with regulations and procedures for appointment, promotion, discipline and separation of medical officers. Congress authorized the commissioning of physicians into the Marine Hospital Service in 1889.²⁵

Dentists

As the responsibilities of the USPHS increased due to a growing body of scientific knowledge, a need for other health care services was recognized. With the onset of World War I, large numbers of civilians were enlisting in the military, increasing demand for health care services. Congress passed legislation in 1918 establishing the Reserve Commissioned Corps of Public Health Service officers, which included dentists. The War Risk Hospital Act of March 3, 1919 authorized the Public Health Service to provide health care, including dental care, to the disabled veterans of World War I, necessitating the establishment of the commissioning of dentists into the USPHS. The first dental officer to be commissioned (Reserve) into the USPHS was Ernest E. Buell, DMD in 1919. In 1923, the U.S. Veterans' Bureau was established, taking with it 146 of the 169 Public Health Service dental officers.²⁷ Williams identifies Dr. Clinton T. Messner, Chief of the Dental Service, as the person who "furnished leadership for the development of the dental group in the commissioned corps."23 Under the leadership of Dr. Messner, "the fledgling dental section maintained and expanded its program of care for Federal beneficiaries, through the detail of dental officers to the Marine Hospitals."27 The Parker Act of April 9, 1930 allowed for dentists to be commissioned into the Regular Commissioned Corps of the U.S. Public Health Service.²⁷

Nurses

The Public Health Service employed nurses since the inception of the Marine Hospital Service in 1798. These early nurses had no formalized professional training and were mostly former seamen. By 1912, professionally trained female nurses were employed by the USPHS. In 1933, Pearl McIver, public health nursing analyst, was hired to address the needs for public health nursing in the USPHS.²⁸ A shortage of nurses nationwide was realized with the onset of World War II, prompting the 1943 Nurse Training Act, which created the Cadet Nurse Corps of the Public Health Service, a scholarship program to recruit more nurses for both civilian and military service. Lucile Petry was appointed the Director of the Division of Nurse Education within the Office of the Surgeon General to administer the Cadet Nurse Corps program. 24,28,29 The Public Health Service Act of 1944 served to strengthen the Commissioned Corps by expanding the commissioning of officers to include nurses and other specialists in public health.^{30,31} Lucile Petry and Pearl McIver were among the first of 18 nurses to be commissioned into the USPHS on August 16, 1944, (Meribeth Reed, personal communication, January 2009).

Nurse Practitioners

New technologies and social changes during the 1940s and 1950s enabled an increase in the scope of nursing practice and the expansion of the nursing profession. During the 1950s and early 1960s, a shortage of primary care physicians limited access to health care. The establishment of the Medicare and Medicaid programs in 1965 greatly increased the demand for primary care providers. The nurse practitioner was developed in 1965 to help meet the demand for an increase in primary care providers.³² In 1970, the Emergency Health Personnel Act, known as the National Health Service Corps (NHSC), was enacted to provide health care to underserved areas of the U.S. The expansion of the NHSC provided scholarships to student dentists, physicians, nurse practitioners, physician assistants and certified nurse midwives for service in the NHSC upon graduation.33 Nurse historian CAPT Meredith Reed, RN, PhD, BC and COHN-S, USPHS (retired) asserted that the success and acceptance of nurse practitioners, both in civilian and NHSC practice, created the opportunity for the nurse practitioner to be commissioned into the USPHS (Meribeth Reed, personal communication, January 2009). Nurse practitioners are commissioned into the nursing category in an advanced practice billet, or job description showing a career path with increasing skills and responsibilities for promotion. LCDR David Magnotta, USPHS Office of Commissioned Corps Operations, Division of Commissioned Corps Assignments, stated that the USPHS billeting records were not searchable before the 1979 date, but that an advanced practice nurse was commissioned on September 30, 1979 (David Magnotta, personal communication, February 2009).

Physician Assistants

As with nurse practitioners, the shortage of primary care physicians in the 1950s and 1960s was one of the factors that prompted the development of the physician assistant role. The number of military corpsmen and combat medics returning from the Vietnam War who were seeking comparable jobs equivalent to their military training was another major stimulus for the development of the profession. The physician assistant profession was established in 1965, and by 1972 the NHSC provid-

ed scholarships to student physician assistants for service in the NHSC upon graduation.33 In 1966 the USPHS hospital in Staten Island began a training program for physician assistants.34 CAPT Emmett Noll, PA, MPH, Physician Assistant Program Director (1973-1977), USPHS Staten Island Hospital, further developed the program and advocated for the commissioning of physician assistants into the USPHS. The need for increased numbers of primary care providers in both the Indian Health Service (IHS) and the Federal Bureau of Prisons, both beneficiaries of USPHS medical care, motivated CAPT Noll to begin the process of developing the physician assistant discipline for the USPHS (Emmett Noll, personal communication, January 2009). By 1987, CAPT Noll completed the drafting of the commissioning standards and the billets for physician assistants in consultation with both the American Academy of Physician Assistants and with RADM Kenneth Moritsugu, Assistant Director and Medical Director of the U.S. Department of Justice Federal Bureau of Prisons. CAPT Noll stated that, after preparing the final draft of the billets and commissioning standards, these documents were submitted to the Division of Commissioned Personnel Headquarters for review and final approval (Emmett Noll, personal communication, February 2009). The success of the physician assistant role in the NHSC facilitated the establishment of the physician assistant profession in the USPHS. (Meribeth Reed, personal communication, January 2009.) The first physician assistants, CAPT Don Gabbard, CAPT Stuart Richards and RADM Michael Milner, were commissioned into the USPHS in 1989. (RADM Michael Milner, DHSc, PA-C, Assistant Surgeon General, Chief Health Services Officer, USPHS, personal communication, January 2009).

Dental Hygienists

CAPT Candace Jones, RDH, MPH, USPHS-IHS, National Programs Albuquerque Liaison Officer, commissioned in 1988 as a Dental Prevention Officer with the IHS in Alaska, was instrumental in establishing the dental hygienist profession in the USPHS. CAPT Jones saw the need for providing quality oral health care for the Native American population. Prior to 1991, only a few clinical dental hygienists were employed by the USPHS as civilian contractors. Dental assistants, with only limited training and experience, provided the majority of cleanings and patient oral health education (Candace Jones, personal communication, October 2008). In 1988, CAPT Jones began developing the commissioning standards and billets for dental hygienists, meeting with the Alaska Area Dental Officer for IHS, the Chief Dental Officer for IHS and the Special Assistant to the Chief Dental Officer

for the USPHS. A consensus was established, and the needs statement was developed for the RDH discipline within the HSO category of the USPHS. Working with CAPT Donald Schneider, DDS, MPH, Special Assistant to the Chief Dental Officer, CAPT Jones developed the commissioning standards and billets for dental hygienists. After consulting with the Chief Health Services Officer, the Chief Dental Officer and the HSO Professional Advisory Committee, the commissioning standards and billets for dental hygienists were sent to the Division of Commissioned Personnel for final evaluation and approval (Candace Jones, personal communication, February 2009). According to CAPT Schneider, DDS, MPH, USPHS (retired), Consultant in Health Policy and Dental Health, who assisted CAPT Jones through the development of the dental hygienist discipline, the decision to commission dental hygienists at the baccalaureate level was made between September 1989 and August 1991 (Candace Jones, personal communication, February 2009). Sherry Paxson, RDH, (August 1991) and CDR Beth Finnson, RDH (September 1991) were the first dental hygienists with baccalaureate degrees in dental hygiene to be commissioned into the USPHS to provide clinical dental hygiene services (Sherry Paxson and Beth Finnson, personal communications, February 2009). The research results are provided in Table I.

Discussion

Similarities were found in the commissioning pathways of the selected health care professions. Each profession was in existence in the civilian workforce before it was commissioned into the USPHS Commissioned Corps. The need for well–educated, career–oriented professionals to provide quality health care to the Federal beneficiaries of the USPHS was the stimulus for the development of the health care profession within the USPHS. One or more persons were the driving force behind the development of the commissioning of the selected health care professions into the USPHS. The dates the selected health care professions were established in the USPHS Commissioned Corps were found.

A critical pathway followed in the commissioning process for developing the disciplines of physicians, dentists, nurses, nurse practitioners, physician assistants and dental hygienists was identified. First, each profession was in existence in the civilian population before it was commissioned into the USPHS. Second, a need was recognized for the professional services of that profession within the USPHS and established in consultation with the chief officer for the Area of the Operating Division, the chief officer of the professional category or discipline of the operating

Table I: Summary of the Development of the Commissioning of Health Care Professionals into the USPHS

Health Professions	Need Leading to Commissioning	Date Established	Persons(s) Responsible for Development
Physicians	 Need for competent, mobile, career service professionals 	Congressional Act of 1889	 Assumed: John Woodworth, MD
Dentists	WWI Veteran care	 Congressional Act of 1919 – Reserve Corps Congressional Act of 1930 – Regular Corps 	Assumed: Clinton Messner, DDS
Nurses	WWI Veteran careWWII nurse shortagesPandemic illnessPublic health nursing needs	PHS Act of 1944	Assumed: Pearl McIver, RNLucille Petry, RN
Nurse Practitioners	 Post WWII shortage of primary care physicians Medicare and Medicaid Establishment of NP profession in 1965 Success of NPs in NHSC and in civilian population 	Advanced practice nurse billet added to the nursing category on or before 9–30–1979	Not Found
Physician Assistants	 Need for increased primary care providers in IHS and BOP Success of Pas in NHSC and in civilian population 	• 1989	CAPT Emmet NollRADM Kenneth MoritsuguDCP Headquarters
Dental Hygienists	To provide quality oral health care for the Native American population	• 1991	 CAPT Candace Jones Area Dental Officer Chief DO IHS Special Assistant to Chief DO IHS Chief HSO HSO PAC Chair DCP Headquarters

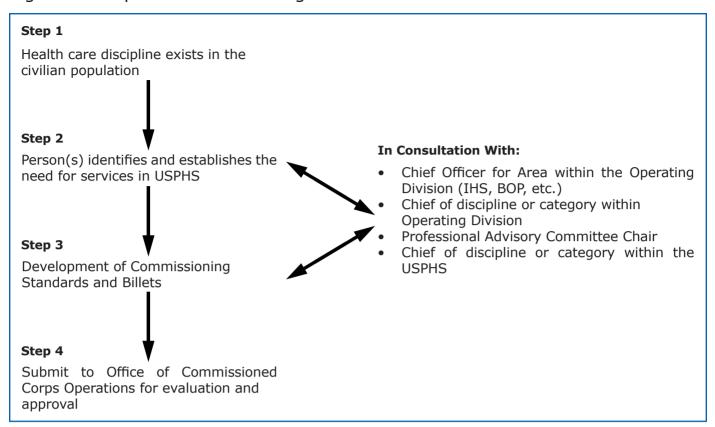
division and of the USPHS and the Professional Advisory Committee Chair. The third step was the construction of the commissioning standards and billets. This was accomplished in consultation with the same representative officers used in step 2 for evaluation. After consultation and completion of revisions, the forth step was to submit the proposal to the Office of Commissioned Corps Operations (OCCO) (formerly the Division of Commissioned Personnel). The OCCO then followed established protocols to evaluate the merits of the proposal for commissioning a new profession. After thorough evaluation of the proposal to provide added value to the Commissioned Corps of the USPHS, permission for the commissioning of the new health care discipline was awarded.

The most important variables identified from the research and the relationships among them allow for inferences to be made for future commissioning of new health care disciplines into the USPHS. The final analysis of the research data proposes a path to commissioning new health care disciplines into the USPHS (Figure 1).

Conclusion

The significance of establishing the pattern followed by the USPHS for commissioning health care professions in the past is to provide guidance to those who will endeavor to establish a new health care profession in the USPHS in the future. With the

Figure 1: Steps to Commissioning New Professions into the USPHS



establishment of the ADHP role, an opportunity for the ADHP to be commissioned into the USPHS may arise. Understanding the commissioning process of new health care professions into the USPHS would assist with defining the critical pathway for future USPHS commissioning of the ADHP.

Further research of the development of the commissioning of other health care professions of the USPHS is warranted to verify the critical pathway to the commissioning of new health care professions into the USPHS. Accessing the archived documents of the USPHS Commissioned Corps housed at the National Archives and the National Library of Medicine might reveal additional primary sources further illuminating the historical processes of commissioning new health care professions into the USPHS.

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