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The Rise of a Career from a Missed Opportunity in Nursing  
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### Abstract

The implementation of the concept of midlevel providers in healthcare have undoubtedly contributed to the solution of the physician shortage, which has posed a problem in healthcare for decades. Nurse Practitioners and Physician Assistants may not have existed without previous groundwork and inspiration. The introduction of the nurse clinician concept by Frances Reiter in 1943 led to the later development of a masters nurse clinician program at Duke University by Dr. Eugene Stead and Thelma Ingles. Despite the denial of accreditation of the program, which led to its demise, interest in a healthcare worker of this type still remained with Dr. Stead. The fundamentals of the nurse clinician program, combined with the proven success of military corpsmen with relatively little training, inspired the creation of a Physician Assistant program at Duke University. Despite the criticisms, and overcoming obstacles placed in its way, the Physician Assistant career has proven to be a successful role in health care, increasing the availability and affordability of healthcare (Holt, 1998).

### Physician Assistants:

#### The Rise of a Career from a Missed Opportunity in Nursing

Physician Assistants, although a relatively new career with its inaugural class being less than 50 years ago in 1965, have come a long way to claim their role in healthcare. This career may not have existed if it hadn't been for the denial of accreditation by the National League of Nursing (NLN) for a masters nurse clinician program created by Thelma Ingles and Dr. Eugene Stead at Duke University in 1958. The failure of this program allowed for the creation of the Physician Assistant program by Dr. Stead. He created this program in an attempt to create a civilian counterpart to that of a medic in the military. Throughout the growth and development of this career there has been a great deal of obstacles and criticism from the American Nursing Association (ANA). Today, Physician Assistants are well-established and are viewed as a valuable part of the healthcare team to enhance the experiences of patients during their visit and reduce the burden of the physician workload. A look back at the failed masters nurse clinician program, which sparked the initiation of the Physician Assistant career, and the events that follow allows for a greater appreciation of the career that could have never existed.

#### **A concept introduced**

Before the Physician Assistant career was introduced, and before the efforts of Thelma Ingles and Dr. Eugene Stead to create a masters nurse clinician program, the concept of a nurse clinician was introduced. Frances Reiter introduced the concept of such healthcare workers in 1943. She viewed this role as embodying clinical expertise, professional maturity (Mick &

Ackerman, 2002), and clinical competence made up of three dimensions which she called “ranges of function, depth of understanding, and breadth of services” (Reiter, 1966, p. 274). This healthcare role would serve as “a master practitioner, competent in care, knowledgeable about care, perceptive about human motivation, and committed to ministrations of the highest quality” (Reiter, 1966, p.275).

This concept was put into practice by Ingles and Stead during Ingles’ sabbatical year at Duke University. Before her time at Duke, Ingles had worked as a Nursing Educator in a variety of settings, including the Boston Nursery, University of Virginia, and Admiral Bristol Hospital, in Istanbul (Sadler & Haradon, 2007). Stead had also held positions elsewhere before his position at Duke University, including a faculty position at Harvard, and the chair of the Department of Medicine as well as the Dean of the School of Medicine at Emory University (Carter, n.d.). Ingles’ association with Dr. Stead was likely influenced by her independent nature (Ingles, 2012). About a month after she asserted herself in front of Dr. Stead, bringing to his attention the way in which his staff addressed nurses, he asked her of her plans for the following year. She informed him that she had planned on taking the year off to travel. At this point, Dr. Stead suggested that she take that year to study with him (Ingles, 2012).

### **Masters nurse clinician program at duke**

Ingles accepted Dr. Stead’s offer, and began a clinical sabbatical year in 1957 (1957 to 1970: The Formative Years, n.d.), studying under his guidance at Duke Hospital. This sabbatical year was used as a sort of pilot study to lead to the eventual initiation of a Master of Science in Nursing program. They used this time to gain knowledge of what understandings and skills are necessary for a nurse to possess in order to function as a clinical specialist in both medical and surgical scopes nursing. This allowed them to determine which experiences might play a

contributing role in acquiring these understandings and skills, and to test out their specific educational philosophy on a student's education (Ingles, 2012).

Ingles expressed her experience during her sabbatical year, saying "I had learned a tremendous amount about clinical medicine. I felt I was prepared as any nurse in the country, and that my learning experience ought to be shared by others. It was obvious that Dr. Stead could not keep on doing the same program with individuals, so we discussed the idea of a group program" (Ingles, 2012, p.115).

The success of the sabbatical year was reassuring. However, in order to continue on with their vision, they needed to find some way to finance their proposed project of creating a successful program. They decided to apply for a grant from the Rockefeller Foundation which was awarded for a total of \$250,000 over a five year period (Pollitt & Reesman, 2011). With the financial assistance of the grant, the masters clinical nursing program was formed in 1957, the first of its kind in the United States. This program prepared students to become nurse leaders using the clinical knowledge and skills acquired in the program (Historical Highlights, n.d.). These students would spend six week periods in various areas of clinical study, including cardiac, gastrointestinal, neurology, and respiratory. In addition, students would choose either two additional clinical areas of study or repeat one of the required areas. Each week was comprised of 12 hours of academic training and 30 hours of nursing (Ingles, 2012).

During the years of the program there was disapproval from the NLN, pointing out Ingles' lack of an advanced degree, the lack of structure in the program, their dissatisfaction with the curriculum, and their view that "the assumption of medical tasks by nurses was inappropriate and potentially dangerous" (Vessey & Morrison, 1997). In order to improve her teaching skills, Ingles traveled to Berkeley for a fellowship. This proved not to be enough because, while Ingles

was away, the NLN visited Duke a second time, denying the nurse clinician program accreditation (Ingles, 2012).

This denial came with one year remaining under the Rockefeller Grant. While trying to figure out who could possibly take her place while she was away, Ingles was approached by several senior year nursing students. These students wanted an opportunity to prove to doctors that nurses had the possibility of making a large difference. Seventeen students became a part of the “Hane’s Project”, directed by Ruby Wilson (Ingles, 2012). These students took over a private ward of the hospital and provided care to patients who paid on a tier system depending on the level of assistance they needed. The profit from this project went towards the nurses’ salaries, and other various purposes contributing to the project (Wilson, n.d.). The nurses were each assigned to provide specific medical services to a specific set of patients during eight hour shifts. Although various small “turf battles” surfaced throughout the project, as can be expected when changing the roles of care providers, the project was a success. Attending physicians claimed that they “loved it, because their patients were getting better care than they had ever had before” (Holt, 1998, p. 256). Although successful, the burden of managing the project had proven too much for Ruby Wilson and, combined with lack of organization for recruitment the following year, the program fell apart (Ingles, 2012).

The idea of a masters level nursing program did not end there, and eventually the Nurse Practitioner role was developed by Loretta Ford, RN and Henry Silver, MD in 1965 (Mick & Ackerman, 2002). The denial of accreditation for the nurse clinician program at Duke from the NLN did not stop Dr. Stead from thinking that there was still a need for this new kind of healthcare worker which he and Ingles had imagined. From this, the idea for Duke’s first Physician Assistant program was born.

### **The Physician Assistant program**

Charles Hudson, MD proposed the concept of providing assistants, which he called “externs”, for physicians. These assistants were to take over routine medical care tasks, such as taking patient’s medical histories and performing basic physical examinations. Physicians could choose to give the assistants more responsibility if they felt the assistants were able to take on more. In exchange for this extension, legal and moral responsibility was to be assumed by the physician. Under this model, and with the success of corpsmen used by the military, Hudson believed that laymen could be trained to perform effectively in this role with relatively little training (Holt, 1998).

In 1965, just four years after the conclusions of the Hane’s Project, Dr. Stead initiated the first class of Physician Assistant students into his newly created program at Duke University. Dr. Stead’s design for the program and for the recruiting pool for this new program was influenced by his previous experience with nursing. Dr. Luther Christman recalls Stead saying, in a conversation between the two of them, “I became very angry at both nurses and women. I concluded that they were interested primarily in maintaining the status quo. I decided to do the program without women” (Holt, 1998, p. 257-258). This led him to view men as ideal candidates for his program. In a letter Dr. Stead wrote to Administrator Charles H. Frenzel, dated April 21, 1964, he stated his intent for the Physician Assistant program:

“During the next ten years I would like to have a hand in training men to be physicians’ assistants. This career would be open to men with high-school or junior-college degrees or to any person sponsored by a physician because of work already performed in a hospital, physician’s office, or laboratory. The physician's assistant would have one year of training in a physician-directed area in the Medical Center and one year of experience

in a community hospital. He would be licensed by an appropriate change in the Medical Practice Act” (Holt, 1998, p. 258).

### **Developing a curriculum**

Stead’s Physician Assistant program put action to the ideas of others and built off of relationships which were similar to that of the Physician Assistant role which we know of today. Stead found relationships of local physicians, particularly that of Dr. Amos Johnson and his assistant Buddy Treadwall, and used them in the modeling of the Physician Assistant program. Dr. Johnson frequently traveled and needed an assistant to be able to provide his patients with uninterrupted medical care. As his assistant, Buddy was able to provide basic medical care for patients while Johnson was in town, and could refer patients while Johnson was away in order to satisfy their medical needs (Holt, 1998). This relationship model was combined with a didactic period of nine months covering general human biology, including anatomy, physiology, pharmacology, pathology, biochemistry, and microbiology, as well as a fifteen month period for clinical training and rotations (Andreoli & Stead Jr., 1967).

### **Seeking a recruiting pool**

In addition to the relationship of Dr. Johnson and Treadwall, Dr. Henry McIntosh and his laboratory staff of firemen helped to inspire a fitting recruiting pool for Stead’s program. McIntosh, a cardiologist at Duke University was faced with a shortage of staff in his cardiac catheterization unit. In his attempt to find alternate staffing sources, McIntosh made a deal with the Durham Fire Department in which the hospital agreed to teach basic emergency medical procedures to the firemen in exchange for providing their off-duty firemen to staff the unit. Building off of the successful use of firemen, McIntosh began experimenting with using Navy corpsmen to assume similar roles (Holt, 1998).

It is the use of ex-military corpsmen that intrigued Stead, and inspired his recruiting pool. The concept of taking corpsmen and training them to become Physician Assistants played a large role in the success of the PA role. Utilizing this group of individuals allowed for a pool of experienced men – most having from 3 to 20 years of experience and some college education – to enter this new career. This prevented individuals from other health care careers which were already experiencing shortages to transfer careers (Ballweg , 2003). Throughout the mid 1960's approximately 30,000 men with some medical experience, and 6,000 with extensive medical experience were coming home from the military every year (Holt, 1998). Due to the training and experience of these men, they would be well qualified to play a role in civilian medical services however, only about ten percent of these men go into healthcare related fields (Ingles, 1968).

Some Physician Assistants at Duke told Thelma Ingles:

“When I first got out of the service, about all that was available for me in a hospital was a job as an orderly. My experience had prepared me to function above the level of an orderly, and I believe I would have found little satisfaction as an orderly” (Ingles, 1968, p. 1059).

“I would have liked to study medicine, but my high school record was poor and I couldn't have gotten into a college or medical school (Ingles, 1968, p. 1059).”

“I thought about becoming a doctor too, but I am married and have children, and I just didn't have the courage or the money to face the long haul through medical school” (Ingles, 1968, p. 1060).

Dr. Stead viewed corpsmen as having desirable characteristics to become a Physician Assistant. These men were intelligent and, in Stead's opinion, many could have become physicians if their social and financial situations had allowed. They were also highly motivated,

had a strong desire to continue working in the medical field, and had gratitude for a professional opportunity (Holt, 1998). According to Brock, “PAs with military experience are especially well-suited to handle the unique challenges posed by practice in primary care, especially in rural areas. This belief is rooted in awareness that these practice settings require tolerance and independence, an ability to work both alone and in teams, and an ability to manage the stresses of uncertainty and complexity of practice” (Brock, et. al., 2011, p. 201).

In addition to the personality traits that made corpsmen an ideal choice for Stead, he had hoped that by putting ex-military in the position of Physician Assistants it would give the profession a “powerful presence” (Holt, 1998, p. 261). He hoped that this presence would decrease skepticism and increase acceptance by doctors and nurses. Even with his image of a powerful Physician Assistant, Stead still maintained the idea that they should be fully dependent on physicians, saying that there were two choices: “the PA can have independence at a low level of performance, or he can accept dependence and achieve a high level of performance” (Holt, 1998, p. 261). This opinion was motivated by his attempt to expand the nursing role and encountering the problems that come with limited autonomy.

With his recruiting pool identified, Stead created the following minimum requirements for applicants to the program (Andreoli and Stead Jr., 1967):

- 1) Demonstrated aptitude for work in the health care field
- 2) Demonstrated satisfaction from rendering services to people
- 3) Good, native intelligence
- 4) Satisfactory high school record

With these relatively loose minimum requirements, and the lack of a required college degree for admission into this program, it served well for Stead's ideal candidates – ex-military corpsmen (Andreoli & Stead Jr., 1967).

### **Obstacles and criticism from the ANA**

With the development of the new Physician Assistant program, many obstacles were presented, accompanied by criticism and negative reactions. The ANA did not view the introduction of the Physician Assistant career in a positive light from the beginning. The ANA viewed the new role of Physician Assistants as a way to sabotage their efforts of defining nurses as independent associates of doctors. Since the end of WWII, the ANA has put emphasis on defining the role of nursing as complementary to, but independent of physicians. Nurses saw attending the Physician Assistant program as abandoning their profession for another, while taking a step back in the history of nursing by accepting dependence on physicians. In their eyes, there was a large difference between being a colleague of a doctor and becoming an assistant. Thus, the ANA assumed their official stance being “If physicians want additional assistance, they can have it, but nurses should not supply the manpower” (Holt, 1998).

An article published in Look magazine called “More Than a Nurse, Less Than a Doctor” fueled the hostility of nurses towards Physician Assistants. The article, sparked by a previous article written in Reader's Digest about new health-care professions, placed Physician Assistants in a tough position. Upon being informed of the article's title, Duke called the magazine and told them that the title was not going to work and that they needed to change it. Look magazine refused to change it, so Duke told them not to run the article. Editors at Look referenced the last group who tried to get them to not run an article, saying that they spent half a million dollars in court and lost. With no hope in getting Look magazine to back down, the story ran, bringing

back the previously waning negative feelings from nurses towards Physician Assistants (Holt, 1998).

Despite the hostility of the ANA against the American Medical Association (AMA), the Physician Assistant program proceeded with little input from the nursing profession. Uncertainty emerged from physicians who were wary of the extent to which an individual with relatively little training could know enough to help them in their practices. Physicians saw Physician Assistants as invading the sacred physician-patient relationship and as a liability that would not outweigh the benefits they could provide. Stead referenced the gap between the number of nurses and rising health care needs, and projected that the same would happen to doctors if they did not utilize Physician Assistants (Holt, 1998).

The need for more medical professional help could not be denied. Factors affecting this need, included the growing population, increase in the number of hospital admissions, and the growing number of procedures per patient (Hudson, 1961). Due to these facts, the attending physician would be required to spend a more significant portion of his time in the hospital, ultimately limiting his availability to devote time to his office practice. If he had an assistant to represent himself at the hospital, he could continue to serve the growing medical needs of the public. According to Ingles, "The physician's assistant is an extra person for the medical service staff. He is a generalist who can carry out a broad spectrum of medically prescribed tasks. His job is designed to save the physician's time and to facilitate his work. In essence, he gathers information for the physician, and does those routine procedures usually done by medical technologists and by interns in teaching hospitals but which are needed in a hurry by the physician" (Ingles, 1968, p.1061).

### **Midlevel healthcare providers thrive**

The need for Physician Assistants and other midlevel providers, such as Nurse Practitioners, has been growing due to several factors: the increase in the elderly population due to the aging of the baby boomer generation, an increase in patients with chronic diseases, and a projected surge in newly insured patients under the Patient Protection and Affordable Care Act (Ponte & O'Neill, 2013). In a study performed by the American Academy of Family Physicians in 2004, one-sixth of the medical workforce consisted of Nurse Practitioners and Physician Assistants (Curren, 2007). Although these two careers share many similarities in education, licensure, scope of practice and satisfaction levels they have their differences and are not interchangeable.

Both a Physician Assistant and Nurse Practitioner obtain a masters degree from their perspective accredited programs. Many Nurse Practitioner programs require the student to be a Registered Nurse (RN) before attending; however other programs accept students with baccalaureate degrees in areas other than nursing. These programs include coursework which allows the students to obtain their RN license while simultaneously working towards their Nurse Practitioner certification. Although Nurse Practitioner programs vary greatly in length, the average is about 24 months. Alternatively, Physician Assistant programs accept students who have at least two years of basic science and behavioral science college courses completed. Many programs, however, require a baccalaureate degree. In addition, it is common for Physician Assistant schools to require medical experience prior to application. Once admitted, the Physician Assistant program is approximately 24 months long, and based extensively on the medical model, borrowing from medical school curriculum (Ponte & O'Neill, 2013).

Following their formal education, both must obtain national certification by examination. The National Commission on Certification of Physician Assistants (NCCPA) is responsible for the administration of the certifying examination for Physician Assistants. Nurse Practitioners “may be certified in both a population-focused area and a specialty area of practice” (Ponte & O’Neill, 2013, p.330), which are certified on a national level, and must be deemed acceptable according to the state in which they practice. The Nurse Practitioner examination is administered by either the American Nurses Credentialing Center (ANCC) or the American Academy of Nurse Practitioners Certification Program (AANPCP). In addition each is licensed by state, Physician Assistants being licensed by the state medical board, and Nurse Practitioners being licensed by the state board of nursing (Curren, 2007).

Physician Assistants are able to practice purely as physician extenders, under the supervision of a physician. The scope of practice and responsibilities that a Physician Assistant can assume, under the state law, is entirely dependent on the scope of practice of their supervising physician and the amount of responsibility that physician feels comfortable delegating to his or her Physician Assistant. Nurse Practitioners can practice in collaboration with physicians or independently, depending on state laws. In 16 states, Nurse Practitioners are able to practice independently. Both careers have made strides in being rewarded more privileges over the years, and in 1969 prescriptive privileges were awarded to both Physician Assistants and Nurse Practitioners (Curren, 2007). Currently, Both professionals are given the authority to prescribe controlled substances in most states. As of 2012, Nurse Practitioners can prescribe controlled substances in all states except Florida and Alabama (Nurse Practitioner Prescriptive Authority, 2012). As of 2013, Physician Assistants can prescribe controlled substances in all states except Florida (PA Prescribing Authority by State, 2013).

Nurse Practitioners and Physician Assistants provide a spectrum of primary and preventative healthcare services in a variety of healthcare settings including clinics, nursing homes, and hospitals (What Nurses Do, n.d.). The majority of Nurse Practitioners and Physician Assistants practice in primary care, which includes family practice, internal medicine, pediatrics, and women's health. Approximately 85% of Nurse Practitioners and 50% of Physician Assistants work in primary care, compared to the 30% of physicians who work in this area. The large difference in the percentage of Nurse Practitioners and Physician Assistants in primary care can be attributed to the tendency for Nurse Practitioners to gravitate towards careers in pediatrics or women's health, while a Physician Assistant tends to gravitate toward surgery (Curren, 2007). In addition to the increased number of Physician Assistants and Nurse Practitioners in primary care, we also see an increase in presence of these careers in rural areas. Twenty-three percent of healthcare in rural areas is provided by Physician Assistants and Nurse Practitioners, compared to 13% by physicians. This difference is due in part to the physician shortage and the growth of the population. In addition to the lack of supply of physicians to meet the growing demands of the population, midlevel providers, such as Physician Assistants and Nurse Practitioners are a more cost-effective option. The amount of patients that can be seen by utilizing these midlevel providers combined with the lower cost of employing such professionals will lead to an increased profit for the facility utilizing them (Curren, 2007).

These midlevel providers can provide care to patients while reducing costs without affecting patient satisfaction levels. In a study by Laurant et al. in 2004, (as cited in Curren, 2007) the impact of substitution of Nurse Practitioners in place of physicians resulted in no difference in patient outcome, process of care, or resource utilization, but did result in a difference in patient satisfaction levels. Patient satisfaction was shown to increase when in the

care of a Nurse Practitioner when compared to care by a physician. This difference in satisfaction is due, at least in part, to the increased time spent with the patient by Nurse Practitioners.

Numerous other studies of similar nature show an increased satisfaction level with both Nurse Practitioners and Physician Assistants when compared to physicians.

This satisfaction experienced by patients is also experienced by employers of such providers. In 2005 the NCCPA administered a survey to employers of Physician Assistants relating to performance and satisfaction of the work that they do. It is evident by the results of the survey that Physician Assistants make a large difference in health care settings and the delivery of care to patients – 94.2% of employers reported that Physician Assistants increased the number of patients they are able to see in a day, 92.5% of employers report a shortened wait time for patients with a Physician Assistant working, and 91.2% of employers report that employing a Physician Assistant allows their patients to ask more questions. In addition, 99% of employers give Physician Assistants high regards, saying that they “provide high-quality health care”, “are compassionate clinicians”, and “are valuable members of the health care delivery team” (Trained, Tested, Trusted, n.d.).

### **Conclusion**

The Physician Assistant career has had a long journey and has overcome many obstacles in the short amount of time that it has been established in the United States. These obstacles and criticism stemmed from its early connection to nursing and its development from a failed attempt at a masters nurse clinician program. The hostility that it faced forced those who had a hand in its early years to form and solidify the career as we know it today. Today, the role of a Physician Assistant is well-established in healthcare. The Physician Assistant offers an affordable solution

to supplying the growing population with their health care needs without sparing patient outcomes or satisfaction.

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