

CARDIOLOGY AND THE ROOTS OF THE PHYSICIAN ASSISTANT PROFESSION

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During October we honor a profession founded on the concept of team based practice, the Physician Assistant (PA). Physician Assistant's are highly skilled health care professionals who practice medicine in a team based setting with their supervising physicians. They are socio-philosophically trained to practice with all members of the cardiovascular team including physicians, nurses, pharmacists, researchers, and technologists. The Physician-Physician Assistant Team has been delivering health care in all areas of medical practice for almost 50 years.

The Physician Assistant profession was developed by the medical community in the mid-1960's to address a health care shortage especially in primary care medicine. Dr. Eugene Stead, Jr., a cardiologist, initiated the first Physician Assistant Program at Duke University utilizing highly experienced military corpsman and medics returning from the Vietnam War. The curriculum of the PA program was based on Dr. Stead's knowledge of the fast-track training of doctors during World War II. The first PA class graduated from Duke University on Oct. 6, 1967 (1).

Since that first class the profession has grown to over 90,000 Physician Assistants (2) trained in 173 PA programs nationwide (3). Physician Assistants are licensed to practice in all 50 states. The average entering student into a PA educational program has at least 4 years of undergraduate (many with graduate level college), with most programs requiring a Bachelors degree to enter, and the student has previous health care experience in areas such as nursing, EMT,

medical assisting, pharmacology, and radiologic or laboratory sciences. The PA graduate educational program is approximately 25 – 34 months in length (average 27 months) with intensive didactic and clinical education designed in the medical model similar to physicians. The clinical education phase includes over 2,000 hours of medicine and surgical rotations. After graduation the Physician Assistant must pass a board certification exam in general medicine and surgery. To maintain this certification the PA must obtain at least 100 continuing medical education hours every two years and retest every ten years. Though clinical post-graduate education is not required for a PA there are over 42 post graduate PA programs with several offering post-graduate doctorates.

Physician Assistants practice in every medical and surgical specialty area including Cardiology. The American College of Cardiology Physician Assistant Work Group drafted and approved in 2011 the following definition of the Physician Assistant in Cardiology:

“A Physician Assistant is a highly skilled health care professional who practices medicine in a team based setting with Physicians. The Physician-Physician Assistant relationship is a proven approach to the health care needs of the United States and increasingly internationally. In the cardiology practice setting the Physician-PA team is able to expand access and provide high quality, cost-effective care to patients with cardiovascular disease.”

Thousands of Physician Assistants practice in cardiology across the nation and the PA profession has recognizable roots to cardiology. Dr. Stead has played a significant role in advancements in cardiovascular medicine as well as his work in development of the PA profession. But key founding physicians of the

profession along with Dr. Stead were other cardiologists such as Dr. E. Harvey Estes, Jr.

Cardiology and the Roots of the PA Profession

While most PAs are well aware of the leading role played by Eugene Stead, Jr. of Duke University, few are familiar with the interconnections of Stead, cardiology, and the emergence of the PA profession. There is now a firmly established role for Physician Assistants in Cardiology and associated subspecialties, and PAs make significant contributions to patient care (5). As a 20th century pioneer in academic internal medicine, Stead obtained training in cardiology as part of his residency at Harvard and advanced the science with discoveries in the development of cardiac catheterization and heart failure treatment. He also trained and hired dozens of cardiology fellows at Duke and while Dean at Emory University. Among these cardiologists was E. Harvey Estes, Jr., who after medical school at Emory, trained in electrophysiology at Duke and NIH. His career as a leading academic cardiologist was re-directed by Stead who asked Estes to head up a newly formed department at Duke (the Department of Family and Community Medicine) that became the home base of the Duke PA Program (6).

One of the residents trained by Drs. Stead and Estes was Hillman Castle. Castle completed his cardiology fellowship at Duke and migrated westward to the University of Utah. At the School of Medicine at Utah, Castle obtained a grant to begin the Utah Physician Assistant Program in 1974 and for many years served as the Program's Medical Director. He was President of the Association of Physician Assistant Programs from 1975 to 1977.

A friend and contemporary of Stead was J. Willis Hurst of Emory University. Hurst was a cardiology fellow with Dr. Paul White at Harvard, the father of American academic cardiology, and was Chief of Cardiology at the United States Naval Hospital in Bethesda, where he was responsible for the care of many senators and congressmen, among them President Lyndon Baines Johnson. Hurst was Chair of Medicine at Emory for more than 30 years, wrote five editions of what many regarded as the definitive textbook in cardiology, and was a force in the establishment of the Emory University PA program.

The Role of the PA in Cardiology

A critical shortage of cardiologists in the United States has been observed for over a decade by the ACC (7). One of the solutions recommended by an ACC Board of Trustees Task Force has been to encourage team based practice with clinicians such as physician assistants and advanced practice nurses (7). The role of the PA in cardiology has evolved to work with cardiologists to improve cardiovascular health care access and delivery. A Physician Assistant Work Force survey of PAs was conducted by the ACC in 2012 which looked at the role of PAs in cardiology. Most PAs had both inpatient and outpatient duties according to the survey. The most common sub-specialty practice areas of care provided by PAs were in general cardiology, heart failure, and preventive cardiology but were also used in essentially all areas of cardiology sub-specialty practice (8). The most common outpatient duties of Physician Assistants were routine follow up visits, medication titration and initiation, patient education, new patient consults, supervising stress tests and coumadin management. The most common in-patient duties included making rounds, admission histories and physicals, new patient consults, discharge summaries, post cardiac

procedure management, supervising stress tests, and critical care unit management.

From the origins of the PA profession to now the PA role has evolved and the PA has become an integral member of the cardiovascular team. Physician Assistant ACC membership has grown tremendously over the past 5 years. During October the ACC and cardiovascular PAs will be marking PA month with insights to the professional contribution of Physician Assistants. Commitment to team based care is at the foundation of the physician assistant profession. PAs look forward to furthering their contribution to cost effective, quality cardiovascular care as the importance of team based care continues to be recognized and valued by the ACC.

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