

“A PERSPECTIVE ON THE HEALTH CARE SYSTEM”—Role of Spiritualism

Today, I will review the spiritual and professional influences that encouraged me to challenge the medical care system, particularly with the subsequent development of a prototype ambulatory cardiac hospital which I established in 1972 as the Virginia Heart Institute. The initial purpose of this facility was to validate the safety and cost effectiveness of outpatient cardiac catheterization as a possible solution for the 4,000 U.S. citizens who either have cardiac arrest or myocardial infarction on a daily basis.

I was born on August 7, 1931, at Stuart Circle Hospital in Richmond, and my father had entered the U.S. Army Medical Corps in 1929 upon his graduation from the Medical College of Virginia. We were subsequently stationed and transferred from Walter Reed Hospital (Washington, DC), Fort Benning (Georgia) and Schofield Barracks (Oahu, Hawaii). Interestingly enough, in Oahu, I was observed at the age of five to attend church unescorted and this could be construed as an early sign of spiritualism. However, this interpretation, naturally, could be argued. My first recollection of an increased awareness of my concern for others, occurred one late, chilly afternoon near Walter Reed Hospital in Washington, DC when I rescued a lost child. The memory of this event has been pivotal in my desire to promote public health activities in spite of criticism that continues to exist today. Interestingly enough, Dr. Richard P. Wenzel, present chairman of the Department of Medicine at the Medical College of Virginia,

established a chair for the cardiovascular division to promote innovative cardiology after he explained that many of the projects I initiated were scoffed at but now accepted. He suggested that the chair that was established three years previously be entitled the Dr. Charles L. Baird, Jr. Chair for Innovative Cardiology.

At the beginning of World War II, my mother and I returned to Richmond while my father commanded the Fifth Evacuation Hospital of the First Army that landed shortly after D-Day on Omaha Beach in Normandy. During this time, in Richmond, I was confirmed at the Church of the Epiphany by the Rev. Rufus J. Womble, who touched my shoulder one day 15 years later while I was strolling outside the buildings at the Medical College of Virginia. He stated: "You don't think you are really providing a cure for these patients, do you?" I sheepishly responded that it was God who was the true healer. Rev. Womble subsequently became leader of the Order of St. Luke of the Episcopal Church, whose major mission has been to promote healing through Christianity. We again joined forces in the late 80s as he became a patient at the Virginia Heart Institute and, through his teaching, we created conferences to educate patients and physicians in regard to spiritualism in the management of medical illnesses. It was at this time that I became acquainted with the Rev. Stanley Baird, an Episcopal minister from Dublin, Ireland, who worked closely with Rev. Womble in Christian healing. I bring this out, since an acquaintance of Rev. Baird was Dr. J. Frank Patridge of

Belfast, Northern Ireland, who was the pioneer of portable defibrillators and the developer of the mobile coronary care system in Belfast in 1965.

At the end of World War II and my father's rehabilitation at McGuire's Army Hospital for which he was hospitalized for rehabilitative management of an injury that occurred during the Battle of the Bulge, I matriculated in 1949 as a freshman in the University of Richmond. It was at this time that I attended St. Stephen's Episcopal Church, located a short distance from the University of Richmond campus and became aware of the major contributions of the Rev. Reno S. Harp and Mr. Granville Munson (the rector and director of music respectively). Dr. Harp delivered outstanding sermons that combined current events, art, literature and history with Christian teachings that created a very potent message—particularly to an undergraduate teenage student such as myself. In addition, Granville Munson created masterful accomplishments with the choir and under his astute guidance blended the total experience at St. Stephen's Church and provided a deep and broad spiritual foundation that could be applied to the practice of medicine in the distant future. The subsequent clergy at St. Stephen's have also been outstanding in this regard, providing enthusiastic and intellectual activity during formal teachings. Major contributions have been provided by the music and choral activities. Interestingly enough, the present rector at St. Stephen's Church, the Rev. Thom Blair, attended one of my early cardiac catheterizations at the Virginia Heart Institute approximately 25 years ago, at which time, a mother of a U.S. senator from the Commonwealth of Virginia underwent this procedure. At that time, I wondered why support from the

clergy was necessary, but if you contrast a walk-in/walk-out procedure with the then current standard of 3 – 5 days in the hospital due to the seriousness of the procedure, one can understand the skeptical behavior of physicians as well as other groups in regard to the appropriateness of what I was trying to accomplish.

I will now shift my discussion to the colleagues who taught me much in the area of clinical medicine as well as those who introduced me into the area of the development of innovative techniques—particularly in the bioengineering field. I subsequently attempted to create a biomedical division as well as a school of engineering. However, physicians and administrators at that time, did not see the major role that bioengineering was to have on the progress and development in the medical field.

In the mid 50s, I was a medical student and deeply impressed by the new professor of surgery, Dr. David Hume, who was also to become a member of St. Stephen's Episcopal Church. One of my favorite activities as a medical resident was to attend the Saturday morning Ground Rounds which were very stimulating under Dr. Hume's leadership. One morning, a cardiovascular surgeon from southern California presented rather dismal results on his attempt to correct multiple blockages by direct repair of the coronary arteries. It was clear that an improvement in this approach could be established if the patient had adequate evaluation of the degree of blockage prior to surgery. I was subsequently a cardiovascular fellow in training at the Cleveland Clinic when Dr. Hume was a

visiting professor of surgery. I invited him to Dr. Sones' laboratory so that he could observe first-hand the role of cardiac catheterization and ciné coronary arteriography in the current development of anatomic analysis of patients with both valvular and coronary disease problems. Unfortunately that day, Dr. Hume was very inquisitive and disrupted the trend of the operator, Dr. Earl K. Shirey (one of Dr. Sones' able associates). Dr. Shirey asked Dr. Hume to leave the laboratory, which was very embarrassing to me, but I did realize that Dr. Hume had the opportunity to see the very best in preoperative diagnostic work and this would be employed at his institution, the Medical College of Virginia, in a short time following.

In 1965, Dean Kinloch Nelson invited me to become a member of the faculty at the Medical College of Virginia, to supervise the medical clinics in the ambulatory division as well as to allow me to develop the areas of interest I had in cardiovascular medicine. The initial area of interest was in the development of a coronary care unit, as this was not available at the Medical College of Virginia. Therefore, I went to Dr. Hume and Dr. Lower and requested that I be permitted to admit medical patients to the surgical intensive care unit in order that prompt defibrillation, pacemaker insertion and other life-saving measures be promptly instituted to the inpatient population suffering from cardiovascular events such as heart block or myocardial infarction. I was granted the opportunity to do this, and within a year, the Department of Medicine developed their own similar unit. At this time, I realized that simple defibrillation and drug management were not

going to appreciably reduce the 30% inpatient mortality recorded in the management of myocardial infarction patients at the Medical College of Virginia Hospital prior to the institution of the coronary care unit. It was apparent that the majority of deaths were due to mechanical failure, and I recommended that emergency coronary arteriography be provided in order to entertain the option of cardiovascular surgery, thrombolytics and circulatory devices—projects that were rejected in 1968 but were to become routine within 10 – 20 years. I can recall one day seeing a friend of mine who was cared for by one of my cardiovascular colleagues. He had incapacitating chest pain, however, the cardiologist decided that there was nothing that could be done. I felt so bad that coronary arteriography had not been applied to this gentleman, as his life could have been saved and prolonged by the use of cardiac surgical techniques.

Furthermore, I began to look outside of the hospital, stimulated by Dr. J. Frank Pantridge's work at the Royal Victoria Hospital in Belfast, Northern Ireland. I attempted to duplicate this project in Richmond, as had been done in several other sites in the United States. However, state and local administrative bodies (including physicians) were generally unsupportive of such programs. The Jewish Community Center arranged for a public forum to be held in the fall of 1971, at which time these issues could be reviewed. Two days prior to the meeting, I was provided the opportunity to demonstrate the portable defibrillator on local TV and how it could be used by rescue squad operators. My wife and I attended a party at the Country Club of Virginia before going to the television

studio, and while we were there, a gentleman had cardiac arrest. I was able to resuscitate him with the defibrillator from my car. To further expand the application of public defibrillators in the emergency medical field, I obtained a grant from Fidelity Insurance Company. However, the Richmond Heart Association would not accept the \$50,000 grant from Mr. Richards to improve the emergency system, a position similar to rescue squads at the time of the public meeting at the Jewish Community Center. This frustration led me to develop an alternative plan in the management of sudden death through the development of an ambulatory system, whereby screening, invasive and electrophysiologic studies could be established to determine the risks and the benefits in the management of these patients—particularly when death and myocardial infarction represented the first symptoms in over 60% of males.

In order to validate cardiac catheterization on an ambulatory basis and subsequently in a free-standing non-hospital unit, I went to Dr. F. Mason Sones, Jr., my former mentor and chief of the cardiovascular laboratory at the Cleveland Clinic in 1971, to present this concept to him. He agreed to support the quality assurance necessary to validate the safety of this procedure, and I agreed that the data would be withheld in order to minimize its impact on the practice of other physicians and hospitals—particularly if done for entrepreneurial activity solely. After ten years of collecting data and providing presentations, I began to provide consultation and advice to several of the major medical centers in the United States. In 1988, the U.S. Public Healthcare Service reviewed the data

from the Virginia Heart Institute as well as multiple other ambulatory programs that had been developed, and advised that full payment for outpatient catheterization was to be implemented based upon this survey. In 1975, it became apparent that ambulatory cardiac catheterization provided observations that individuals with minimal complaints could have severe angiographic disease. This led to the development of an outpatient staging concept (i.e. modified cardiac rehabilitation program) where these patients, upon completion of cardiac catheterization, could enter pharmacologic control of arrhythmias, ischemia and heart failure in an objective way. It became apparent that those who were at low to moderate risk (yet with severe angiographic narrowing) would respond quite well to pharmacologic intervention. At the present time, there is a major shift to the medical conservative management of such patients, as the larger clinical trials show that in certain subsets of patients, neither angioplasty nor surgery are of benefit in these groups. Unfortunately, at the time of construction of the cardiac rehabilitation addition at 102 Berrington Street in Richmond, Virginia, the building burned down, and we moved two blocks away to a new site that was opened at 205 North Hamilton Street in 1977.

Although I achieved acceptance of ambulatory cardiac catheterization both at the hospital and ambulatory levels, the major reason for the implementation of this aggressive approach (i.e. identification of those prior to death or myocardial infarction) had not been accepted or even considered by the medical profession. I began to review this concern with varying leaders in the United States such as

Dr. Henry Heimlich who, while visiting the Virginia Heart Institute, stated that “if all parties begin to agree, then you really aren’t accomplishing anything.” He stated that in order to create a broader and more rapid acceptance, efforts should be directed not only at the physician groups but also through public education efforts. At that time, we increased our public education program in order that individuals without symptoms but who were at risk for death or myocardial infarction, could be identified and enter into aggressive programs that would be life-saving. I also discussed with Dr. Irvine H. Page, director of research at the Cleveland Clinic and my former mentor, this particular problem of lack of acceptance in physician groups concerning sudden death problems. He stated that it requires 30 years to accept such a change. “And if it is correct, it will be accepted and you will be forgotten,” said Dr. Page, “but we at the Cleveland Clinic will always remember you.” Unfortunately, Dr. Page died in his early 90s several years later and I will be forever grateful for his long-term participation in the educational aspects of hypertension control and its growth and applications to other phases of cardiovascular medicine. A third person that was instrumental in the application of biotechnology and engineering was Mr. Earl Baaken, founder of Medtronic, the world’s largest pacemaker firm. Upon retirement, he transferred his interest from engineering to holistic medicine, which I found intriguing, and met with him on several occasions, as we now had a common interest. We were a relatively small group of individuals who both had backgrounds in biotechnology and engineering, but had shifted to holistic

medicine—looking at the broad aspects and the improvement of the healthcare system.

Several years after the Virginia Heart Institute was established, and I had not been active in the out-of-hospital management of acute myocardial infarction, a gentleman collapsed at a restaurant, and a physician accompanying this patient, asked me to admit him (which I did). His further hospital course was uneventful. I told the patient, however, that I believed in aggressive screening and I knew that his physician would not appreciate an evaluation post discharge, but that I felt it was important. This gentleman did have multi-vessel disease, and even though the physician in charge was extremely unhappy that such a diagnosis had been established, the patient eventually underwent coronary arteriography which showed a previous unrecognized heart attack, complicated by severe multi-vessel blocked arteries, and underwent successful cardiac surgery, even though he had never experienced chest pain; his initial event was most likely cardiac arrest.

The Virginia Heart Institute continues to provide non-invasive screening and outpatient coronary arteriography with the emphasis on pharmacologic management in a structured outpatient program, previously described as cardiac rehabilitation. The next step is to develop an acute chest pain center, including the opportunity to use non-invasive imaging such as multi-slice CT and/or magnetic resonance imaging, which will localize the site of obstruction without

the use of a catheterization. This particular center will be done in conjunction with existing hospitals in order to have earlier risk analysis of these patients, in order that treatment be given in the appropriate time. Treatment for stroke and heart attack must begin within a short period of time.

My only regrets with regard to the development of such alternative programs has been the isolation and separation from physician camaraderie that I had created by following this aberrant path. However, this may be the same path that I took at age five, going to church alone.

On a happy note, however, concepts do sometimes take up to thirty years to evolve, and I have seen some of these come to fruition. I am glad that I have been able to be a part of such exciting work, and look forward to being a part of medicine in the new millennium.

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