## What is the future of the practice of phlebology if the status quo is left untouched?

Michael Richman M.D., F.A.C.S The Elite Laser Vein Center Los Angeles, Ca.

Nearly one year ago, I wrote an article for WebMD regarding the medical training that interns and residents must endure on their journey to gain board certification as a physician or a surgeon. This was in response to regulations implemented in 2003 by the Accreditation Council for Graduate Medical Education (ACGME). While the intent was to create a more humane residency training, I felt that the changes in training hampered the ability of new doctors to deal with real world medicine after residency. Required residency hours were lengthy and medical professional communities recognized the potential dangers that excessive work hours under stressful situations posed on several levels including sleep deprivation and the resulting increased rates of medical errors due to fatigue. The ACGME looked at the current residency programs. This included studying time requirements spent at the hospital, patient safety issues, resident wellness, and the resident training experience. In 2007 regulations were restricted to 80 hours per week for medical residents in training, overnight call frequency of no more than one overnight every third day, 30-hour maximum straight shift, and 10 hours off between shifts; albeit voluntary, adherence had been mandated for the purposes of accreditation of the residency. Moreover, firstyear residents, also called interns, were limited to shifts no longer than 16 hours straight, due to these newly regulated standards effective on July 1, 2011.

While patient safety advocates and surgeons themselves felt trepidation about these drastic changes that would alter the way residents would be trained, still the ACGME implemented the new standards in an effort to protect residents from sleep deprivation, fatigue, and the medical errors that can follow from longer work hours. Second year resident schedules allowed up to 24 straight hours, with 4 additional hours permitted to ensure proper patient hand-off, as opposed to the previous standards whereby 24 hour shifts were the maximum for all residents, with 6 additional hours for patient hand-off.

With this as a background, I want to discuss board certification and clarify what it is and why it is so important and then talk about the current state of the medical specialty know as Phlebology. First of all, many doctors

and most laypersons are unaware that there are only 24 approved medical specialties. The American Board of Medical Specialties (ABMS) was created to assist these 24 medical specialty boards in the development and use of standards in the ongoing evaluation and certification of physicians. ABMS recognized as the "gold standard" in doctor certification believes that better trained physicians means better care for patients. Unfortunately, phlebology is not one of the 24 recognized medical specialties and there are no formal university based training programs in existence today. The American Board of Phlebology was formed in 2007 with the goal of setting standards of practice, establish training programs in venous disease, and to promote excellence in treatment by "credentialing" doctors who can pass a written exam and have trained in one of the 24 ABMS recognized specialties and have letter documentation of confirmation that the have trained in phlebology in some way. The different ways to achieve "board certification" in phlebology of the American Board of Phlebology is listed on their website. The notion that training in any specialty can lead to a physician becoming a board certified phlebologist in light of the fact that most of the recognized specialties are medical and not surgical and provide no mechanism to operate and train in phlebology. I think it is naïve and irresponsible to believe that this field can be performed by any doctor who can provide the correct documentation and pass a written test. The harsh reality is that board certification in phlebology is not "real" and should not convey to the public this means the physician has had proper training. This brings me back to the reason I started this article explaining current standards and guidelines in residency training because the changes have negatively impacted the ability to train a resident in the accredited residency program they were accepted into. My intent is not to inflame physicians. My intent is to outline to patients that practitioners who call themselves board certified phlebologisits who have not had adequate training in a specialty that is surgical or invasive in nature, cannot manage independently any problem that may arise during the patient's care. These practitioners, for the most part, do not hold hospital privileges. With the constitutionality of The Affordable Health Care Act, I speak as one the few physicians who have had formal training in one of the surgical specialties treating venous diseases. We as a group should stand up and confront the unpleasant reality of who could and should care for patients with venous disease. Although doing so will result in many inadequately trained but board certified phlebologists being excluded from this field in order to protect the integrity of those surgeons whose training included vascular surgery, both arterial and venous disease, in order to assure the public that this field is not a "wide

open free-for-all" that allows any physician to use the label phlebologist just because they took several weekend courses and passed a written exam. I will elaborate on several of these points that I have raised.

First of all, the three surgical specialties that include formal training in operative management and the medical care of these patients with diseases of the blood vessels are general surgery, vascular surgery, and cardiothoracic surgery. Board certification in general surgery has been a prerequisite in order to gain board certification in the other two specialties after an additional two or three years of additional training. It is often forgotten that starting in medical school and later in surgical training we are taught that a surgeon/physician should not be performing a procedure if they are incapable of providing compete post-op care including being able to deal with any potential complication that might have occurred as a direct result of the procedure performed. Thus, given the fact that these three surgical disciplines are the only specialties that train the residents to master the expertise in performing the technical aspects of each vascular/venous procedure and post operative management, which on a rare occasion may require hospitalization, should make complete sense to both physicians and those with no medical background that no other specialty has the qualifications to treat these sometimes complex and often misunderstood disease of the venous system. Clearly a neurosurgeon, who is one of the most highly trained surgical specialists and deals with some of most critically ill patients, does not practice phlebology. Any physician, however, who has performed a residency in any one of the recognized specialties can call himself or herself a phlebologisit and say they are board certified if they pass a written test and have additional documentation of having some experience dealing with venous disease? In fact the American Board of Phlebology states clearly on their web site "It is not the purpose of the Board to define requirements fro membership on hospital staffs, to gain special recognition of privaledeges for its diplomates in the practice of Phlebology or to define the scope of Phlebology practice. The Board does not define who may or may not practice Phlebology. It is neither a source of censure or an entity for the resolution of ethical or medico-legal issues." After a critical reading in layman's terms, this basically says the Board is not responsible for who does what, what their training is, or where they do it at. In contrast using as an example The American Board of Thoracic Surgery, which maintains the standards and provides certification to only those cardiothoracic surgeons who have gone through a rigorous training program which includes a vascular component and after successful completion of training which includes certain operative requirements and being able to

provide complete care for these most seriously ill patients. It is only then that one can they accepted to sit the written board examination and if successful, at a later date pass a very difficult oral examination, can they call themselves board certified in thoracic surgery. The requirements to maintain board certification in the three surgical specialties I have mentioned that are uniquely trained diagnose and treat venous disease include having active privileges at a JCAHO accredited hospital and soon will require all diplomates be approved and then mandate participation in well established outcome database. Unfortunately board certification in phlebology does not require the physician to have hospital privileges, allows any physician of any specialty to perform these office based procedures, and then if a problem arises they often have to send the patient to the hospital and have a qualified physician treat their patient and deal with the complication that may have not occurred had a truly qualified doctor cared for the patient from the onset. Once again I will state that a physician should not perform a procedure in which should a problem arise, their training did not prepare them to diagnosis and treat any post operative problem that resulted as a direct result of the care by the phlebologist. That is just not how I was trained in my surgical programs and I do not know another surgeon who trained in the same specialty who will not echo this same sentiment.

Secondly I need to discuss the importance of participation in an outcome database. Although the American Venous Forum does have a new database and should be applauded at their hard work to form the first venous registry in the United States, currently any physician who practices phlebology can participate and submit their results. Why is this a problem? The simple answer is that a registry that is open to any "vein doctor" whether qualified or not who can submit their results is quite different from the Society of Thoracic Surgeons database. The STS database is only open to selected surgeons and their results are heavily scrutinized by independent medical personnel in order to assure the accuracy and veracity of data input since the outcomes are often used to generate new practice standards of care. The American Venous Forum Registry does not and cannot assure accuracy of data input and thus conclusions must be regarded with much caution. The next question that one may ask is why the AVF matters anyway? The brief answer is that the Affordable Health Car Act assures us that government regulators and insurance company analysts will look at these databases and decide on the universal acceptance of certain procedures by looking at cost versus benefits model and obviously the outcomes generated. If the AVF is allowed to continue in its present state, the results from endovenous ablative procedures cannot be trusted and could be outstanding due to inaccurate data input or dreadful because an unqualified poorly trained doctor who has the lack of integrity to input his true results can make this outstanding procedure appear dangerous and lead to poor outcomes which will allow government health agencies and private insurance companies to have complete justification to deem it dangerous and no longer pay for this non-invasive procedure which has become the gold standard in the treatment of venous reflux disease in the superficial venous system of the legs. This could require the antiquated and barbaric vein stripping which must be done at a hospital o surgical center to once again become the standard of care. This would propel the treatment of venous disease backwards and exclude patients that are now "too sick" to have their lower extremity venous disease treated surgically and any subsequent complications be treated conservatively which would results in lost work days and increased medical costs.

After I wrote my initial article for WebMD that many considered an opinion only, my position that the new resident training rules would lead to inadequate surgical residency training for future surgeons was supported by a recent article in a premier peer-review surgical journal. David Farley, MD, of the Mayo Clinic in Rochester, Minn., and his colleagues conducted a study at 11 general surgery residence programs where they surveyed 215 interns about the efficacy of the new standards. In the June 18, 2012 edition of the *Archives of Surgery*, Dr. Farley's findings were published with statistics that caused alarm within the medical community and may ultimately have an adverse effect on patient care.

The investigation found that 80% of the surgical interns believed that the time restrictions would decrease continuity of care with patients, and nearly 58% believed that it would impact overall patient care. Furthermore even greater concern was expressed when interns were asked about the effect the reduced hours would have on their expertise in the operating room, with 67% reporting apprehension. On average, 50% of the interns believed their general medical knowledge, surgical skill set, and educational experience would suffer, even if their fatigue would lessen. Farley's findings reiterate my original premise regarding the deficiencies in medical training in the United States since implementation of the new guidelines that were put into place well after completing my general surgery residency in 1996. I will restate what I had written in my original paper. "Now I want to talk about the reality of medical training that many of these "experts," who have never taken care of a patient, fail to understand. Since I am a board certified in both general surgery and cardiothoracic surgery, I will discuss training from my perspective as a surgeon. After 4 years of medical school and 9 more years of surgical training after that, I went into

private practice as a heart surgeon in 1999. I did my general surgery training at Los Angeles County-USC Medical Center, which is probably the busiest hospital in the US. I performed over 1300 cases as the primary surgeon in 4 years and often spent 130 hours a week at the hospital. I did my heart surgery training at University of Miami-Jackson Memorial Hospital, which also is one of the busiest hospitals in the United States. Today, the graduating residents from the same general surgery program I trained at finish with around half the number of cases that I performed in the same time frame of training."

There is a reason that surgical training is extensive and complex. The first reason is to purge those doctors that can't perform under such extreme conditions that too often become reality. The second reason is that in order to develop an excellent technical skill set in the operating room, there needs to be a graded approach to learn how to operate such that residents can operate and care for patients independently at the end of residency. Today, in most residency programs, many residents are only allowed to do portion of the case, because the attending surgeon completes the surgical procedure. After graduation, how are these surgeons going to face a sick patient "alone" if they haven't successfully performed the required procedures for board certification with great frequency and being taught all the techniques? Indeed, if surgeons cannot perform invasive procedure and manage patients appropriately, how can the American Board of Phlebology continue their present stance and allow any doctor trained in an accredited specialty by the ABMS to have a chance at board certification in Phlebology? If changes are not rapidly implemented, the field is doomed to extinction.

So what kind of doctors are we training for the future? I think that Farley's paper published in one of the premier surgical journals supports the opinion that I had originally presented in first my article in July 2011. It is imperative that current surgical training be rigorously scrutinized. Unless we individualize the training that is required of each specific specialty, the future of medicine, as we currently know it, will forever be altered in a negative way. Surgical care has many shades of gray and cannot be made into a black and white issue. To limit work hours and allow future surgeons to believe that delegating responsibility is the norm, assumes that all residents are created equal and does not allow any flexibility in the way surgery residents are trained. This makes further specialized post-residency training almost mandatory in a narrow surgical field so a future surgeon can master the skills that should have been taught during their general surgical residency. Unless we confront the reality of current medical training and the

future of health care known as Obama care, which was recently affirmed by the US Supreme Court, who upheld the constitutionality of the Affordable Health Care Act, we are heading for a health care system that is inferior to that of many countries in the world. The current health care law was supposedly made to provide excellent care to all Americans while cutting costs. Unfortunately this notion actually creates a dichotomy because poorly trained surgeons will rely on more and more testing on more people who now will have insurance in order to make a diagnosis that could be made prior to the mandated changes in surgical training programs by simple examination. The art of physical diagnosis by examining the human body has been replaced by tests that are often not necessary and are very costly.

The importance of what I have stated cannot be overlooked or brushed under the rug. General surgical residents who are one of the few physicians who learn vascular surgery during their training felt that the current training will probably not prepare them adequately with the skill set to operate and treat patients independently and with the confidence that graduates of the same programs until training changed in the early 2000s. If our future general surgeons leave training not well prepared unless they sub specialize, how can we allow anybody to call himself or herself a phlebologist and treat patients? Clearly, if the trend is that surgical training programs appear to be falling short, is it fair to those of us properly trained in surgical specialties that deal with arterial and venous disease to have to sit back and watch a field implode by allowing all non-surgical specialties to perform invasive procedures without formal training? A weekend course is not sufficient to teach a procedure that if done wrongly can potentially lead to the death of a patient? At present, there is one non-accredited training program in phlebology taught by a surgeon in an academic setting. There are several "weekend" courses given on the treatment of venous disease at different locations that can be quite costly to attend. Clearly, those physicians without a surgical background cannot learn the technical aspects about how to perform a procedure by taking a course and therefore, the motives of those physicians teaching these courses should be suspect. If a board certified vascular surgeon was to perform endovascular arterial procedures, they are required to spend several months learning the proper techniques at accredited high volume programs and indeed they already have all the skills and board certification in vascular surgery. This standard does not apply to a non-surgical physician who wants to learn phlebology and as of now it appears only a few surgeons are willing to speak up and talk the about reality of future healthcare and how it relates to the practice of phlebology. Taking a written exam and having done cases with "friends" or several

courses should not be allowed to suffice to meet the requirements to allow any doctor to call themselves a board certified phlebologist. Those of us surgeons who have the skills and knowledge base to deal with any venous problem and any complication which might arise are the only hope to insure that the field of phlebology continues to expand, have excellent patient outcomes using new minimally invasive procedures, and maintain the highest ethical standards that are instilled during surgical training.