

July 10, 2024

To ABMS Advisory Council:

The Society for Vascular Surgery would like to congratulate our Cardiology Colleagues on their application for an independent board for certification in Cardiology. We recognize that Cardiology is a unique and distinct entity from Internal Medicine, and we fully support their efforts to accomplish this milestone.

The authors of the current proposal clearly state their goal (Item 2.1, Page 14), which is to provide continuous clinical excellence in the field of cardiology. They state this by *“Ensuring that cardiologists achieve clinical competence in cardiovascular training and then maintain competence throughout their career is fundamental to providing appropriate, high-value health care, and critical for ethical and professional duties of cardiovascular professionals. Patients and the public expect their physicians to have the ability to deliver high-quality care and should require that there are standards in place to assure continuous competence.”* In addition, by their own definitions *“To maintain competence, physicians must be committed to lifelong learning and be responsible for maintaining the medical knowledge and **clinical and team** skills necessary for the provision of quality care. More broadly, the profession must strive to see that all its members are competent and must ensure that appropriate mechanisms are available for physicians to accomplish this goal.”* In addition, *“Continuous clinical excellence for the delivery of the best care to cardiovascular patients demands a uniquely specialized and novel approach for achieving and maintaining competence.”* The new Board will abide by several guiding principles including a responsibility to the public, a focus on patient-centered decisions, and it will be aligned with cardiovascular sub-specialization and team-based care.

These are laudable goals, but in several areas, and in particular those that concern patients with vascular disease, we believe they fall short, and revision of the proposal is imperative:

Under Representation of the Significant Health Burden of Vascular Disease

The authors list areas that fall within Cardiology that require clinical practice proficiencies related to their field (Section 2.2.3, Page 18). Each of these have “their own separate knowledge base, procedures, diagnostics, and training.” Several of the listed areas overlap with those provided by Vascular Surgery. These include atherosclerosis, cerebrovascular disease, diabetes and cardiovascular disease, endocrine disorders and cardiovascular disease, genetic cardiovascular diseases, percutaneous interventions, and peripheral artery disease – to name a few. The authors go on to describe (Section 2.2.5, Page 22) that “Given its complexity, it requires specialized knowledge and expertise to effectively diagnose and manage cardiovascular risk factors and diseases.” In addition, “Due to the complexity of disease, diagnosis, and management, care of the cardiovascular patients requires a cardiovascular specialist to work in a true team-based approach.” And the authors point out that “In some cardiovascular subdisciplines, there is substantial overlap with the specialized fields of radiology and surgery” (Page 16).” The vascular surgical community could not agree more.

We recognize that the field of cardiology is expanding. This is apparent based on the current number of cardiologists and cardiology specialists. Cardiac-related disease is a significant health problem in the United States. Pre-Covid estimates suggest that an estimated 1.35 million Electrophysiology (EP) procedures (82% devices and 18% catheter ablations) were performed from 2016-2020. (Altibi AM, et al. Heart Rhythm 2024). In addition, the annual rate of all cardiac EP procedures increased from 818 to 1090 per 100,000 based on data from Centers for Medicare and Medicaid Services from 2013-2020. (Scott M. Heart Rhythm 2023). For those patients with advanced heart failure, it is estimated that this affects 6.2 million American adults with an incidence of 21 per 1000 population after the age of 65 years (Truby LK et al., J Am Coll Cardiol 202; 8: 523-536). In 2019, more than 3000 patients were treated with a left ventricular assist device (LVAD) and more than 3000 patients received a heart transplant in the United States, with an additional 3500 patients awaiting transplantation. Understanding the epidemiology of adult congenital heart disease is difficult. It is estimated that 97% of children born with congenital heart disease will survive into adulthood, and 70% of those alive at 18 years will live to 70 years of age. This suggests that there are many more adults with CHD than there are children with it. Globally, coronary artery disease is the foremost cause of mortality. It accounts for nearly 7 million deaths and 129 million Disability Adjusted Life years (DALYs). In addition, there are growing subspecialties including cardio-oncology, cardio-obstetrics; interventional heart failure; cardiometabolic programs; cardiovascular genetics; and structural heart disease (Section 2.2.2).

What is not apparent from the current application is the extent of vascular disease that plagues our society. As noted, peripheral arterial disease, cerebrovascular disease and renovascular disease, only constitute 5% of the topics that may be addressed by a cardiologist. However, It is estimated that over 200 million people have PAD worldwide (Criqui MH, Circ Research, 2015; 116: 1509-1526). And this only touches on a portion of the vascular disease processes. When factoring in the need for additional care needed to include venous disease, aortic disease, and dialysis access, the volume of patients with vascular-related disease is staggering. This application demonstrates the low priority that vascular disease plays in the day-to-day activities of a general cardiologist. The prevalence of vascular disease far surpasses the ability of specialized cardiologists to diagnose and manage the multitude of vascular pathology. The majority of these areas, however, are all encompassed within the training and credentialing paradigm of vascular surgery. Despite vascular surgery's focus on these areas, we too recognize that we alone cannot meet the needs of all of the patients with vascular disease. We rely on health care partners to assist in their care, and we understandably expect that they have intensive, focused training to help assure the highest quality of care for patients.

Unclear Path to Credentialing in Vascular Disease

We believe that proof of a quality training paradigm for vascular disease includes a focus on PAD, cerebrovascular disease, venous disorders, and many other areas. That proof is not met within the current application. There is no clearly defined pathway for Vascular Certification. There is a significant lack of specificity on the type and breadth of procedures, related to training paradigms for diagnosing and treating vascular disease. Given this lack of clear requirements, the degree of expertise will substantially vary among cardiology programs. This lack of uniformity in vascular training will create

confusion for the public and adds to the potential risk of diagnosing and treating vascular diseases. . . Requisite numbers of cases to treat the wide breadth of vascular disease, peripheral vascular interventions, including aortic interventions, renal interventions, and carotid interventions are not defined in this application. The authors also offer no educational pathway to gain adequate knowledge of available surgical options, which are often the optimal treatment for patients with vascular disease.

Beyond peripheral vascular disease, aortic disease is mentioned only briefly in the application. However, aortic pathology has been in the domain of vascular surgery and cardiac surgery, who are considered experts in the management of this disease process. The technical aspects of surgery and endovascular interventions, as well as the heterogeneity of aortic disease, far surpass both the knowledge base and technical expertise of cardiologists. Minimum requisite numbers are not defined in the application. It is common to need open surgical skills to address complex aspects of aortic aneurysm repair which are lacking in this proposed training paradigm. While cardiology participation on the multi-specialty management of vascular disease may be beneficial, heart specialists generally do not have the capability to be the safest and most expert providers of patients with aortic disease.

Lack of Quality Improvement in Practice

In addition to the lack of a clearly defined training paradigm for those proclaiming expertise in vascular disease, there is an even less clear plan outlined to assure quality improvement in practice. To assure patients are receiving the highest quality care it is imperative that quality improvement programs be implemented. While the applicants state a commitment to measuring competency with both clinical and nonclinical standards and maintaining and reinforcing standards of professionalism and ethics (Section 2.3.2, Page 27), the means to capture this information and provide it to practitioners is not defined. Vascular surgeons report results of intervention in a nationwide registry (VQI) that is widely respected and clearly leads to improved outcomes.

Confusing Nomenclature will Lead to Public Confusion

The application frequently interchanges the terminology for the specialty under consideration, switching indiscriminately between Cardiovascular Medicine and Cardiology. While we do recognize that the current infrastructure within the ABIM offers 5 Cardiology-related certification exams, with the primary exam entitled Cardiovascular Disease. The latter is a prerequisite for subsequent training and testing in Adult Congenital Heart Disease, Advanced Heart Failure and Transplant Cardiology, Clinical Cardiac Electrophysiology, and Interventional Cardiology. We also recognize that this new board proposal is essentially allocating the Cardiovascular Disease component as the “home” of cardiology, with the other components (and additional ones under development) being housed under its oversight. In section 2.2.2 (Page 17), the applicants term this oversight organization as **General Cardiology**, and we would wholeheartedly support the establishment of the *American Board of Cardiology*. This is an appropriate title for the organization that is responsible over-seeing the credentialing and ongoing certification of

Cardiologists, including ones that have gone on to develop sub-specialty interests. Titles including the term “Cardiovascular,” however, become confusing as the nomenclature encompasses a wide variety of specialties. For instance, there is significant overlap with regards to the care of patients with vascular disease between the current application and with Vascular Surgery, which is already a board of the ABMS. Vascular Surgery training and certification is the ONLY specialty that assures competence in providing comprehensive medical, endovascular and surgical care for patients with peripheral arterial disease, cerebrovascular disease, renovascular disease, and aortic disease. These vascular pathologies are only briefly touched on throughout the application and are referred to as areas that cardiologists “may have an interest.”

Public Safety Risk

Given the mixed nomenclature within the application, the proposed name “The American Board of Cardiovascular Medicine” implies all cardiologists have appropriate and in-depth training and understanding of peripheral vascular disease. This confusion is destined to provide a false perception to the public that seeking peripheral vascular care from members of this new board will offer the same high-quality care for all facets of peripheral vascular disease as those that have formal training for this disease. Additionally, “cardiovascular” provides a false sense of knowledge, skill and willingness for those members of the new board with minimal training to be credentialled to perform procedures and offer opinions for treatment of peripheral vascular disease that they are not competent to offer or perform. There is a significant risk that cardiologists, who will refer to themselves as “cardiovascular specialists” will provide inadequate or non-comprehensive care for patients with vascular disease and may even be directly responsible for harmful outcomes or perform procedures for inappropriate indications.

With significant emphasis on “Shared Decision Making” for those patients with Medicare and private health care insurance, patients are at risk of disinformation when discussing vascular disease. Vascular Surgeons are the only specialists that provide 24/7 comprehensive vascular care including medical, endovascular and surgical management. No other specialty offer all three potential treatment options, but instead are obligated to refer patients to vascular surgeons, often as a last resort. To proceed with board certification that implies that these physicians have comprehensive expertise in “vascular disease” is both confusing and inappropriate for patients who have carotid, renovascular, aortic, venous, or peripheral vascular disease. This list of vascular diseases includes only a few of the areas of expertise treated by vascular surgeons. Furthermore, open surgery remains an important treatment option for many patients with vascular disease. Cardiologists are not trained in open surgery and cannot offer, or sometimes even discuss this critically important option. As such, it would damage the public confidence in board certification if health care providers can be board certified in “vascular” but not able to offer open surgery.

In conclusion, the Society for Vascular Surgery supports the efforts for the establishment of an independent board of Cardiology. While there are significant concerns in the initial review of their application, as outlined above, revision of the application is imperative to assure that the standards for care to all patients, independent of the providers specialty, is guaranteed. We look forward to working

with cardiologists to improve their application, especially related to the specifics directed towards Vascular Disease.

Society for Vascular Surgery (SVS)
American Venous Forum (AVF)
Association of Program Directors in Vascular Surgery (APDVS)
Eastern Vascular Society (EVS)
International Society for Women in Vascular Surgery (ISWVS)
Midwest Vascular Society (MWVS)
New England Vascular Society (NEVS)
Western Vascular Society (WVS)
Society Clinical Vascular Surgery (SCVS)
Southern Association for Vascular Surgery (SAVS)
Society for Vascular Ultrasound (SVU)
Society for Vascular Nursing (SVN)
Vascular and Endovascular Surgical Society (VESS)