CHEST

POINT:

Should Interventional Pulmonology Be Given American Board of Internal Medicine Subspecialty Status? Yes

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ABBREVIATIONS: AABIP = American Association of Bronchology and Interventional Pulmonology; ABIM = American Board of Internal Medicine; ACGME = Accreditation Council for Graduate Medical Education; IP = Interventional Pulmonology; NEDIM = New and Emerging Disciplines in Internal Medicine

Board certification has two major aims: (1) to assure the public that a physician meets baseline qualifications and (2) to establish transparency of these qualifications for the medical profession. Unlike individual state licensing bodies, board certification is not an absolute requirement to practice medicine in the United States. However, because states do not extensively regulate and measure physician claims of specialized expertise, specialty board certification is needed to independently verify that a physician has the necessary knowledge and skill to practice within a particular field.[1] Interventional Pulmonology (IP), a sub-subspecialty from its parent specialty of Pulmonary Medicine, has developed rapidly over the last decade in the United States. There are over 35 training programs across the country, active quality research published in journals such as *CHEST*, the *American Journal of Respiratory and Critical Care Medicine*, and the *New England Journal of Medicine*, dedicated IP journals/meetings, and a high demand for IP fellowship-trained physicians. Similar to many other early subspecialties, the growth of IP has lacked formal standards for certification, leaving the public and medical profession unclear about its role in medicine. A formal recognition of IP through American Board of Internal Medicine (ABIM) board certification may be overdue.

The ABIM, established in 1936 as a Member Board of the American Board of Medical Specialties, is the most widely recognized nonprofit physician evaluation organization certifying physicians. The ABIM provides board certifications for physicians in 20 different internal medicine disciplines and supports the development of emerging sub- and sub-subspecialty board certifications, most recently Hospital Medicine via maintenance of certification in 2009, and Advanced Heart Failure and Transplant Cardiology in 2010. The ABIM is not, however, the only board-certifying organization. In 2013, a medical society-based board certification and examination were developed by the American Association of Bronchology and Interventional Pulmonology (AABIP). Since then, hundreds of physicians have been certified. AABIP board certification has also started developing standards to define IP, setting a prelude to a more universally accepted recognition. Unfortunately, the AABIP is not an independent certification organization and lacks recognition from any state medical board. Other organizations, such as the National Board of Physicians and Surgeons and the American Board of Physician Specialties, may have the requisite organizational abilities to establish IP standards, but the ABIM is the only specialty board recognized in all 50 states and is accepted universally as the standard-setting entity. As a practical consequence, credentialing and the attainment of medical privileges at many hospitals are often dependent on proof of board certification, notably through the ABIM.[2]

What Are the Benefits of a Formally Recognized Subspecialty?

Recognition of a subspecialty creates practice standards and well-defined competencies.[3] This recognition

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protects the public and the medical community by helping to ensure that a physician's claim of expertise is independently evaluated by a group of knowledgeable peers. From a quality standpoint, board certification has been associated with higher overall performance, using validated quality assessment tools.[4] Board certification status has been associated with improved outcomes among electrophysiologists implanting cardioverter-defibrillators[5] and surgeons performing segmental colon resections.[6] Research demonstrates lower mortality after percutaneous coronary intervention performed by ABIM-certified interventional cardiologists when compared with noncertified physicians[7] and an association between higher board examination scores and reported career satisfaction.[8] Furthermore, disciplinary actions have been found to be lower among ABIM-certified Internal Medicine physicians compared with those who are not certified.[9]

Beyond the benefits for the public and the medical community, board certification is necessary for a specialty to develop. Board certification provides a framework that attracts trainees, promotes research, establishes structure for educators, and encourages administrators to invest resources into promoting the field.[3] While IP has matured significantly, it may stagnate in its achievements, based on the experiences of other subspecialties, without ABIM board certification.

Does the Field of Interventional Pulmonology Meet Criteria for Formal Recognition as a Subspecialty, and Is There a Need for This Formal Recognition?

IP focuses on the evaluation and management of a spectrum of thoracic disorders of the airways, lung parenchyma, and pleural space, with special emphasis on minimally invasive "advanced bronchoscopic and pleuroscopic techniques."[10,11] However, IP is more than just a procedure-based specialty, as it specializes in the advanced evaluation and management of a variety of medical diseases, such as central airway disorders, thoracic oncology, and complex pleural diseases. As an example, the National Cancer Comprehensive Network guidelines now recommend that IP be a part of a multidisciplinary team in the evaluation of suspicious lung nodules.[12]

Since 1993, the ABIM has used the New and Emerging Disciplines in Internal Medicine (NEDIM) report to define the criteria that the ABIM will consider for the creation of certifications for new Internal Medicine disciplines and subspecialties. These criteria were updated with the NEDIM-2 report in 2006.[13] NEDIM-2 lists the conditions the ABIM uses for recognizing that a subspecialty qualifies for its own certification. IP meets these criteria for recognition as a subspecialty.

A main recommendation from the NEDIM-2 in recognizing an emerging specialty is that there is a unique body of knowledge that cannot be fully incorporated into its "parent" discipline (Pulmonary Medicine). A knowledge gap between general pulmonologists and IP-trained physicians has been demonstrated for IP-related topics. In one study,[14] an IP in-service examination tested the level of knowledge of previously published IP-core topics.[15] Higher scores were directly related to the level of formal IP fellowship training. In addition, although most "standard" fellowships in pulmonary and critical care medicine expose trainees to a variety of procedures, data suggest that only a minority of these programs achieve targeted competency numbers for many procedures, including those procedures not generally categorized as "interventional."[16] Recognizing that IP requires a specialized depth of knowledge, nursing and mid-level practitioners are now developing a focus in IP.[17] Furthermore, IP research has expanded beyond case series and "how I do it" reviews, to include a growing body of publications in translational, education, quality improvement, and comparative effectiveness research. This is reflected in the existence of dedicated IP journals, professional societies, and scientific meetings.

The popularity of IP fellowship programs grew out of a demand for training that could not be provided during traditional pulmonary fellowship.[16,18,19] The use of complex technology and unfamiliar disease states necessitated supervised learning in the training setting. Early American IP physicians found this training in Europe and Asia before becoming mentors in the United States.[20] As such, strong and dedicated IP academic fellowship programs (12 months minimum) are now increasingly available here in the United States. Because of the meteoric growth of IP fellowship programs, an accreditation standard for IP fellowship training has been recently developed to describe required competencies and to standardize training throughout the country.[11] This accreditation standard is now recognized by multiple pulmonary professional

societies, including the American College of Chest Physicians, the American Thoracic Society, the Association of Pulmonary and Critical Care Medicine Program Directors, the Association of Interventional Pulmonary Program Directors, and the AABIP. As a point of comparison, Hospital Medicine, which was recognized by the ABIM as part of the maintenance of certification with its own examination and pathway, does not have comparable availability of specialized training programs.

Given the need for procedural competency in addition to a specialized knowledge base, IP is a discipline with clinical applicability practiced in a form that is distinct from adult pulmonary medicine. The graduates of these IP fellowship programs are in high demand, illustrating the social need for IP specialists. As IP practitioners use advanced technology to treat various disease states, board certification provides the needed gauge to help ensure competency and further development in the subspecialty, with the ultimate goal of improving care for our patients.

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COUNTERPOINT:

Should Interventional Pulmonology Be Given American Board of Internal Medicine Subspecialty Status? No

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Let's start from the following premise. We wholeheartedly believe that Interventional Pulmonology is a unique subspecialty that requires distinct training and demonstration of competence. In fact, each of the

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