

The American Board of Thoracic Surgery: Update

Valerie W. Rusch, MD,^a John H. Calhoun, MD,^b Mark S. Allen, MD,^c and William Baumgartner, MD^d

The primary purpose of the American Board of Thoracic Surgery (ABTS) is to protect the public by establishing and maintaining high standards in thoracic surgery. To achieve these objectives, the Board has developed qualifications for examination and procedures for certification and maintenance of certification. During the past few years, the ABTS initiated a new process for subspecialty certification in congenital cardiac surgery; a new process for maintenance of certification in accordance with requirements set forth by the American Board of Medical Specialties (ABMS); and collaborated with other organizations including the Residency Review Committee for Thoracic Surgery (RRC-TS), the Joint Council for Thoracic Surgical Education (JCTSE) and the Thoracic Surgery Directors Association (TSDA) to address some of the challenges currently facing our specialty. This report summarizes ABTS activities during the past 2 years.

PATHWAYS TO CERTIFICATION

Eligibility to enter the ABTS certification process is currently achieved by completing one of the following four training pathways:

1. Completion of a general surgery residency (5 years) approved by the American Council on Graduate Medical Education (ACGME), followed by completion of a 2- or 3-year ACGME-approved thoracic surgery residency. Completion of an ACGME-approved Joint Training Program (a so-called 4/3 program) also fulfills this requirement. Certification by the American Board of Surgery (ABS) is optional for residents who started their residencies after July 1, 2003.
2. Completion of a general surgery residency or a cardiac surgery residency approved by the Royal College of Physicians and Surgeons of Canada, followed by successful completion of a 2- or 3-year ACGME-approved thoracic surgery residency.

From ABTS Chair, 2009-11,^a Memorial Sloan-Kettering Cancer Center, New York, NY; ABTS Chair, 2011-13,^b University of Texas Health Science Center, San Antonio, Tex; ABTS Examination Chair, 2009-12,^c Mayo Clinic, Rochester, Minn; and ABTS Executive Director,^d Johns Hopkins Hospital, Baltimore, Md.

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Address for reprints: Valerie W. Rusch, MD, Department of Surgery, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, Rm C-868, New York, NY 10021 (E-mail: ruschv@mskcc.org).

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3. Completion of an ACGME-approved vascular surgery residency that leads to eligibility for a primary certificate in vascular surgery, followed by completion of a 2- or 3-year ACGME-approved thoracic surgery residency.
4. Completion of an ACGME-approved integrated 6-year thoracic surgery residency (commonly termed, I-6 residency).

Recently, there has been increasing interest in the I-6 residency pathway because it potentially allows residents to acquire knowledge and skills in thoracic surgery earlier in their training and also facilitates exposure to relevant allied disciplines in ways that other pathways do not. It is also hoped that this pathway will be a more attractive training paradigm to medical students and will help rectify the currently low number of applicants to thoracic surgical residencies. To create the infrastructure needed for I-6 residencies, the ABTS collaborated with the RRC-TS to establish operative case requirements for core surgical training in these residencies. These took effect for I-6 residents who started training on July 1, 2011, or thereafter.

REVISED OPERATIVE CASE REQUIREMENTS

At the October 2011 meeting, the ABTS approved a revised set of operative case requirements for the final 2–3 years of thoracic surgical residency training. These revisions were developed in collaboration with the RRC-TS and will take effect in July 2012. The new requirements reflect changes in the specialty (eg, requirements for minimally invasive lobectomy, endobronchial ultrasound, and catheter-based cardiac surgical procedures), add granularity to previous requirements, and add requirements for experience in critical care, simulation, and in multidisciplinary patient care (eg, tumor boards or cardiac catheterization conferences). It is expected that these updated requirements will enhance the depth and breadth of residency experience.

NEW THORACIC SURGERY CURRICULUM

Recognizing that operative case requirements constitute only one measure of thoracic surgical training, the ABTS collaborated with the JCTSE and the TSDA to create a thoracic surgery curriculum. Based on the curriculum developed in the United Kingdom, this document outlines in detail the cognitive and operative skills that every thoracic surgical resident should know upon completion of training. Not only does this curriculum provide guidance for residents and their program directors, it will also serve as the template for electronic teaching modules currently under development by the JCTSE and the TSDA. A copy of the

thoracic surgery curriculum can be found on the Board's recently revised Web site at www.abts.org.

INITIAL CERTIFICATION EXAMINATIONS

Overall pass rates for the initial certification exam have gradually declined during the last 8 years. While the pass rate on the qualifying (written) exam has remained fairly stable at about 80%, the pass rate on the certifying (oral) has steadily declined, most noticeably since 2007 when the ABTS changed the oral exam format to allow questions on a broader range of topics and to require that candidates pass both the cardiac and general thoracic components of the exam. Conversely, the change in oral exam format required an increase in the number of examiners, which can potentially lead to a fairer exam process. Unfortunately, the pass rate for the oral examination in June 2010 was 67.3% and 66% in 2011, down from about 80% 10 years ago.

While it is possible that this trend reflects problems in the specialty as a whole with smaller numbers of residents (and therefore a less competitive pool of trainees) applying to thoracic surgical residencies, the ABTS is seriously concerned about this issue and has taken several steps to ensure that the exam is thorough, fair, and relevant to current practice. Like other ABMS Boards, the ABTS contracts with a psychometrician who determines the statistical validity of each exam and advises on changes in test format and content. In addition to rigorous annual review of all written and oral exam questions, the Board has intensified the orientation process for guest examiners (surgeons who are not ABTS Directors) for the oral exam and recently developed an orientation video for candidates taking the certifying exam to familiarize them with the process. During the past 2 years, the ABTS also instituted an annual process of soliciting nominations nationally from Division Chiefs in Cardiothoracic Surgery for exam consultants (who develop questions for the written exam) and oral examiners. This ensures that the ABTS draws upon the broadest possible range of expertise across the specialty. The declining exam pass rates were also one of the reasons that the ABTS decided to formalize guidelines for training by developing the thoracic surgical curriculum.

CARDIOTHORACIC CRITICAL CARE EMPHASIS

The ABTS recognizes cardiothoracic critical care as one of the four basic components of thoracic surgery along with adult cardiac surgery, general thoracic surgery, and congenital cardiac surgery, and has taken measures to emphasize this. As noted, documented experience in critical care will now be required to be eligible for initial certification. In addition, specific questions relating to critical care are now included in the initial certification and in the maintenance of certification examinations. The goal of these efforts is to ensure that ABTS diplomates are prepared to care for their

patients across the continuum of a hospital stay, including the intensive care unit, and have the necessary documentation to support doing so.

The ABTS is also promoting Critical Care as a career path for its diplomates by collaborating with the ABS in developing criteria for cardiothoracic-focused critical care fellowships that lead to subspecialty certification. Recent changes in the requirements for surgical critical care fellowships leading to certification by the ABS will now allow trainees to spend 3–4 months of a 1-year fellowship in a cardiothoracic surgical intensive care unit. Along with new requirements allowing more operative experience during critical care fellowships, these changes should make critical care an attractive training option for thoracic surgeons who wish to make this a career focus. Such fellowships can be undertaken as an additional year during I-6 residencies, or before or after the 2–3 years of training in traditional thoracic surgical residencies. Subspecialty certification is then possible through examination by the ABS once a primary specialty certification (either ABS or ABTS) is completed.

MAINTENANCE OF CERTIFICATION

In response to an initiative by the American Board of Medical Specialties, the ABTS implemented its Maintenance of Certification (MOC) in January 2008. To date, approximately 850 diplomates have successfully participated in the MOC program, which now includes passing a secure exam. All diplomates who are currently practicing, including those who hold life-time certificates, are expected to participate in Parts I–IV of the MOC program. In addition, diplomates who hold Inactive Status are expected to participate in Parts I–III. Diplomates must hold a valid and unrestricted ABTS certificate to enter the MOC process. The only pathway for renewal of a lapsed certificate is to take and pass the Part I (written) and the Part II (oral) certifying examinations. Detailed information is available on the ABTS website.

During the development of the MOC process over the past 6 years, the ABTS has repeatedly considered whether the MOC exam should be a broad-based test (“comprehensive exam”) covering all aspects of the specialty or should be a more focused exam (“modular exam”) tailored to the practice pattern of the diplomate as documented in the case log required as part of the MOC exam application. In a recent survey conducted via the ABMS, only 5 of 17 Boards (and only 3 surgical boards) reported administering a “modular” exam. All others, including the ABS, have adopted the use of a comprehensive exam. Modular exams use a set of questions designed to test core knowledge in the specialty and add to that a set of questions focused on the diplomate's subspecialty. Advocates of the comprehensive approach see the need to maintain and test broad general knowledge in the specialty while advocates of the modular approach consider in-depth testing in the area(s) of

subspecialty practice more important. Clearly, both approaches are considered valid by other Boards and by the ABMS. The current ABTS approach of a comprehensive exam derived from SESATS has been associated with a high pass rate and general approval from diplomates. The ABTS will continue to consider the validity of the two approaches but has also been advised by our psychometrician to gain further experience with the comprehensive exam before considering any change. If undertaken, transition to a modular exam would require a much larger pool of exam questions with subspecialty-focused questions of far greater difficulty than used currently.

CONGENITAL CARDIAC SURGERY SUBSPECIALTY CERTIFICATION

After several years of development leading to approval by the ABMS of a subspecialty certificate in Congenital Cardiac Surgery, the ABTS initiated the certification examination process in 2009. Two pathways currently permit certification in Congenital Cardiac Surgery, which can be obtained only after primary ABTS certification. "Pathway One" is the successful completion of a full

congenital cardiac surgery residency approved by the ACGME, starting on July 1, 2008 or thereafter. "Pathway Two" is for those candidates who trained before July 1, 2008. Admission into the subspecialty certification process is based on training, current clinical experience, and professional accomplishments in the field. This pathway remains in effect only until 2014. To date, 3 candidates have obtained certification via Pathway One and 92 candidates completed certification via Pathway Two. The process of MOC for Congenital Cardiac Surgery is now in development.

Rapid evolution in the practice of Thoracic Surgery during the past decade, new requirements for MOC, and problems in residency training have required the ABTS to become intimately involved in these areas because they affect certification in the specialty. A collaborative approach with the RRC-TS, JCTSE, TSDA, and ABS has been essential to addressing these challenges. As physicians in general come under increasing administrative oversight, continued dynamic involvement of the ABTS and regular reappraisal of the certification process is key to supporting the well-being of our specialty.

COMMENTARY

The ethical dilemma of Thoracic Surgery recertification

Cary W. Akins, MD

As stated in the published documents of the American Board of Thoracic Surgery (ABTS), "The primary purpose and most essential function of the Board is to protect the public by establishing and maintaining high standards in thoracic surgery."¹ Few would disagree that for initial certification, the ABTS has been successful. Indeed, in the current ABTS update published in this journal,² the authors have outlined continuing process improvements,

including alternate pathways to certification, revised case requirements that more accurately reflect current practice, and improved examination strategies. By all measures, ABTS initial certification of competency to the American public of an applicant, who has completed the necessary training and passed the current examination, to independently practice both general thoracic and cardiovascular branches of our specialty is accurate. However, I am not certain that the same degree of accuracy applies to recertification of all applicants who successfully complete the current ABTS Maintenance of Certification (MOS) process.

For example, in accordance with the requirement for recertification every 10 years, I applied for and was recertified by the American Board of Thoracic Surgery in 1987, 1997, and 2005 after fulfilling the requirements

From the Division of Cardiac Surgery, Massachusetts General Hospital, Boston, Mass.

Address for reprints: Cary W. Akins, MD, Department of Surgery, Cox 648, Massachusetts General Hospital, 55 Fruit St, Boston, MA 02114 (E-mail: cakins@partners.org).

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