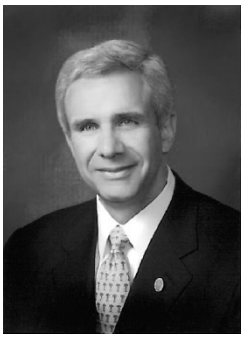
Member Board of the American Board of Medical Specialties

DIPLOMATE

April 2014

PRESIDENT'S REPORT


Stephen Albanese, MD

Throughout its history, the American Board of Orthopaedic Surgery has worked to serve the best interests of the public and medical profession. The ABOS accomplishes this mission by establishing educational standards for orthopaedic residents and evaluating the initial and continuing qualifications of orthopaedic surgeons. While the basic mission of the ABOS has remained consistent throughout its 80 years in existence, the methods by which it accomplishes its goals have evolved to keep pace with changes in medicine and society.

The initial certification process is still the core activity of the Board. The Written Examination Committee is responsible for leading the development of the computer-based Part I Examination. Developing this examination requires an enormous effort from multiple orthopaedic surgeon volunteers, ABOS staff members, and National Board of Medical Examiners (NBME) consultants. The result in 2013 was once again a highly reliable, valid computer-based Part I Examination.

The past four years have been a time of great transition for the ABOS practice-based Part II Oral Examination. For the first time in 2010, the images for the examination were uploaded by candidates into a digital imaging system. Most practices and hospitals have moved or are in the process of moving to digital records, so converting the record portion of the Part II Examination to digital is a natural next step. In November 2013 the Oral Examination Committee conducted a test of a digital record system. The test involved several successful candidates from the 2013 Oral Examination and experienced oral examiner volunteers. The feedback from this test was generally positive. The Board has elected to move forward with digital records for the 2014 Oral Examination. The records will be uploaded prior to the examination, utilizing a process similar to that used for the images. The candidate and two examiners will all have access to the same set of records during the examination. The Oral Examination is an opportunity to view a sample of a candidate's practice, and would not be possible without the efforts of a large number of orthopaedic surgeon volunteers who generously donate their time.

The first time-limited certificates were issued in 1986, which means that the initial group is now becoming eligible for their third Recertification Examination. The process for maintaining a current certificate has changed since the first time-limited certificates were issued. As one of the 24 member boards of the American Board of Medical Specialties (ABMS), the ABOS now participates in the Maintenance of Certification (MOC) program. Of the of 16,454 time-limited certificate holders, 15,191 (92.32%) are enrolled in the MOC program. The ABOS has worked hard to make this process a valuable, easily implemented experience for diplomates. Whenever possible, the Board has attempted to design the program in a way that allows MOC credit for some of the continuing education and quality improvement activities already completed by orthopaedic surgeons as part of their routine practices.

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PART I REPORT

Part I Certification Report

ANNUNZIATO AMENDOLA, MD, PhD, CO-CHAIR
JAMES ROBERSON, MD, CO-CHAIR

A key mission of the ABOS is to certify the expertise, knowledge, judgment, and skills of orthopaedic surgeons through the Part I Certification Examination. The examination is designed as the first part of a two-stage process to provide a fair and accurate assessment of the ability of surgeons trained in orthopaedics to provide the highest quality, state of the art care to members of the public. The examination was developed through the active oversight of the 2012-2013 Written Examination Committee (WEC). Dr. Annunziato Amendola served as Chair and Dr. James Roberson as the Co-Chair. Preparation of the examination is a primary Board function and members involved included Drs. Albanese, Anglen, Baumhauer, Carpenter, Emery, Ezaki, Herkowitz, Hurwitz, Kasser, Lundy, Marsh, Martin, O'Keefe, Peabody, Saltzman, Thompson, and Vail.

The 2013 Written Certification Examination was created through the work of over 80 orthopaedic surgeons practicing throughout the United States. These surgeons represent all disciplines and subspecialties within orthopaedic surgery. The process of creating the 2013 examination began two years earlier, when the members of the Question Writing Task Force were provided with their question writing assignments. Nine more steps followed:

1) Examination questions were submitted to the National Board of Medical Examiners (NBME) in December 2011;

2) NBME staff edited and categorized examination questions into one or more of 18 subcategories;

3) questions were returned to the question writers for additional review prior to the meeting;

4) the Question Writing Task Force convened in Philadelphia in April 2012 for a review of all of the questions

5) approved questions received final edits and were entered into an item library at the NBME;

6) in November 2012 the Field Test Task Force met in Chicago to review and approve questions tentatively selected for the 2013 examination;

7) the NBME assembled the proposed examination, with attention to broad representation of all areas of orthopaedic practice;

8) in January 2013 the ABOS Written Examination Committee met and discussed and approved each question selected for the examination;

9) in March 2013 the Chair and the Co-Chair of the Written Examination Committee and the Executive Director reviewed the proofs and gave final approval to the examination.

Eligibility for the Part I Certifying Examination requires that candidates complete an ACGME accredited orthopaedic residency that includes 51 of 60 months of clinical training. Canadian residents that have passed the Royal College of Physicians and Surgeons Examination are eligible for the ABOS Part I Examination. A third pathway is the scholar track whereby a foreign-trained orthopaedic surgeon may seek approval to take the Part I Examination following a total of five years of clinical orthopaedic experience at a US academic center.

Prospective candidates are encouraged to register for the examination soon after receiving their scheduling permits so as to maximize the chance that they will be assigned to the test site of their choice. The registration process requires candidates to complete an ABOS-sponsored tutorial that familiarizes candidates with the examination format. The 2013 examination was designed with 7 separate test blocks. Blocks 1-6 each are allocated 75 minutes for completion, while block 7 has a total of 30 minutes for completion. There is a 45-minute break during the examination.

The 2013 ABOS Part I Certification Examination was administered on July 11, 2013. The computerized examination allowed the inclusion of multimedia questions that can incorporate explorable CT/MRI scans, arthroscopy videos, and physical examination videos. More than 180 Prometric Test Sites were used across the United States and Canada. A total of 832 candidates sat for the examination and all candidates completed the examination. 678 candidates from US/Canadian medical schools and 39 international candidates took the examination for the first time while 115 candidates were repeating the examination due to prior failure. Of these 115, 99 were from US/Canadian medical schools.

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Part I Dates for 2014	
March - April	Credentials Committee meets to determine admission to examination.
April	Candidates receive scheduling permits.
July 10th	Part I examination, Prometric Testing Centers.
October	Examination results sent to candidates and program directors.

PART II REPORT

Part II Oral Examination Report

J. Lawrence Marsh, M.D. Chair

The Part II Oral Examination evaluates candidates' performance in the practice of orthopaedic surgery by examining their skills based on cases from their own practice. The goal is to assess the applied knowledge and other important competencies necessary in the clinical care of patients. Upon successful completion of the Part II examination, candidates become Diplomates of the American Board of Orthopaedic Surgery and are certified for a period of 10 years. They also begin their first cycle of maintenance of certification (MOC). The 2013 ABOS Part II Oral Examinations were conducted July 23-25, 2013, in Chicago, IL.

To be admitted to the Oral Examination, a candidate must go through an extensive credentialing process. They must have passed the Part I Written Examination and must possess a full and unrestricted medical license in the United States or Canada or be engaged in full-time practice in the United States federal government, for which licensure is not required. To allow adequate peer and colleague review, candidates must have been in practice for at least 20 months in one location. The ABOS practice review process solicits input from their orthopaedic colleagues, hospital chief of staff, and chiefs of orthopaedics, surgery, anesthesia, operating room nursing staff, emergency room physicians, and radiologists. The results of the peer and colleague review are assessed by the ABOS Credentials Committee, which determine whether applicants are approved to sit for the Part II Oral Examination.

The Oral Examination is based on the notarized 6-month case list submitted by each candidate. Case selectors, who are Board members, and other oral examiners select 10 cases from each candidate's list. The 10 selected cases serve as the basis for the examination. The cases are representative of the candidate's practice profile and include cases with complications and one or more general orthopaedic cases if they are present on the list. The candidates upload their images for the 10 cases and bring supporting clinical documents to the examination. The Board examiners are volunteer, board-certified orthopaedic surgeons who must have a current ABOS certificate, must have recertified, and must participate in MOC.

The examination for each candidate is divided into three 35-minute sessions with two examiners in each session. The subspecialty of most of the examiners assigned to a candidate is the same as that of the candidate. During each examination session, the candidates present the requested cases and examiners ask questions related to the selected cases. The examiners also have access to the candidate's practice profile. The specific skills evaluated by the examiners for each case are data gathering, diagnosis and interpretive skills, treatment plan, technical skill, outcomes, and applied knowledge. The examiners also provide global evaluations of the candidate for surgical indications, surgical complications, and ethics and professionalism based on all of the cases they review. Each of the examiners scores the candidate independently. The examination is a structured peer review of the candidate's practice based on the scores obtained from six independent examiners on all of the skills across the 10 cases. The scores are adjusted to account for individual examiner severity. The scores are all combined to form a composite score for the candidate. There is no pre-determined failure percentage. The examination is structured so that it is possible for all examinees to pass the examination, resulting in some fluctuation in the failure rate across years.

In an effort to improve the examination process, the Board actively seeks feedback from candidates and examiners during debriefing sessions immediately following the examination. Candidates are asked to complete a questionnaire. During the sessions, verbal feedback is requested from the group. ABOS directors are present to answer questions and listen to comments from the candidates. Based on this feedback, changes are made on a yearly basis. In addition there are several other new initiatives that the board is considering to improve the reliability of the examination, such as enhanced examiner training and increasing the number of examiners to asses each candidate.

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Part II Dates for 2014	
March - April	Credentials Committee meets to determine admission to the examination.
April	Letters of notification of admission to examination available online.
	Candidates selected cases also available online.
May	Deadline to upload images into the Scribe system and pay exam fee.
June	Candidates receive examination assignments and admission cards.
July 22nd-24th	Part II examination, Palmer House, Chicago.
August	Examination results sent to candidates and program directors.

CREDENTIALS COMMITTEE REPORT

PETER M. MURRAY, MD, CHAIR

Members:
Judith F. Baumhauer, MD, Sanford E. Emery, MD, John H. Erbland, Douglas W. Lundy, MD, David F. Martin, MD, James R. Roberson, MD, Charles Saltzman, MD, Terry L. Thompson, MD, Rick W. Wright, MD, Shepard R. Hurwitz, MD

The Credentials Committee of the American Board of Orthopaedic Surgery has the primary charge of assessing the professional competence and adherence to ethical standards for candidates applying for the Part II Oral Certification Examination and the Recertification Examination. This is critical to the Board's overall mission of protecting the public. Candidates for initial ABOS certification and Diplomates of the ABOS applying for the Recertification Examination must demonstrate evidence of **professional standing**, which means that an ABOS applicant or Diplomate must retain an unrestricted medical license in all state jurisdictions in which the applicant or Diplomate practices. As part of the application process for these examinations, the committee reviews practice profile information provided by the candidates, as well as information received from state licensing boards, medical colleagues and the public. The primary tool used for **practice performance assessment** is peer review. A peer review questionnaire is sent to individuals identified by the applicant or Diplomate to obtain feedback on the quality of work and the professionalism of the applicant. Individuals participating in peer review can include current and former orthopaedic practice partners; residency and fellowship program directors; chiefs of hospital or university departments in orthopaedic surgery, general surgery, emergency medicine, radiology, and anesthesiology, as well as operating room nurse supervisors; and institutional leaders in orthopaedic surgery nursing. The peer review form queries six areas of competency: professionalism, communication and interpersonal skills, patient care and surgical skills, practice-based learning and improvement, systems-based practice, and medical knowledge. The ABOS depends on and is indebted to the multiple Diplomates and other professionals who complete these forms every year.

As part of the practice performance assessment, a six-month case list for Part II and Oral Recertification examinees is required and a three-month case list is required for computer recertification examinees. The ABOS continually works to improve our process on how we use these case lists to evaluate the candidate's or Diplomate's practice.

The Credentials Committee meets twice per year in Chapel Hill to review applicants for Part II (Spring meeting) and Recertification (Fall meeting). The committee must evaluate every applicant for the Part II Examination or the different Recertification Examinations to determine if they are qualified to take a given examination, should be deferred for a year for additional review, or should be denied the opportunity to take the examination. In certain circumstances, the committee may require a practice site visit to better evaluate the applicant. Additionally, the committee may require that a Diplomate take an oral examination as part of the recertification process in lieu of the computer-based written examination.

For the 2013 Part II Oral Examination, 689 applicants were accepted to take the examination while 24 applicants were presented to the Credentials Committee for additional review. Of these candidates**,** 16 were permitted to take the examination**,** four were deferred for a year, one was denied the opportunity to take the examination, and three were deferred for a practice site visit. For the 2014 Recertification Examinations, 1547 Diplomates were accepted to take the examination while 34 Diplomates were presented to the committee for additional review. Of these 34, 18 were permitted to take the examination, five were deferred for a year, two were deferred for a site visit, two were given the option of a site visit or to take an oral examination, and four were required to take an oral examination. In 2013, there were nine certificates revoked, with one of the revocations appealed and upheld. Also in 2013, the committee heard two appeals for certificate extension and two appeals for waiver of the requirement to recertify for the Subspecialty Certificate in Sports Medicine. All of these appeals were denied. These decisions are never easy, yet remain one of the core functions of the ABOS in order to maintain the high ethical and professional standards of our specialty and, more importantly, to accomplish our mission of protecting the public.

To date, the American Board of Orthopaedic Surgery has revoked the certificates of 78 Diplomates. For a list of recent revocations, refer to page 11.

SUBSPECIALTY CERTIFICATE IN ORTHOPAEDIC SPORTS MEDICINE

JAMES E. CARPENTER, MD, CHAIR

In the fall of 2007, the American Board of Orthopaedic Surgery granted their first certificates of Subspecialty Certification (SSC) in Orthopaedic Sports Medicine. This certification was intended for surgeons who have demonstrated qualifications in addition to those expected for board certification in Orthopaedic Surgery. These generally include additional training, a practice characterized by a majority of cases in orthopaedic sports medicine, as well as contributions to the field of orthopaedic sports medicine. Qualifications for this certification include evidence of practice in sports medicine, consisting of a case list containing a significant portion of operative sports medicine cases including arthroscopy reported over a 12-month period, as well as passing a secure examination on orthopaedic sports medicine. For the first five years of administration of this examination, formal fellowship training was not required. However, after that five-year grandfather period ended in 2011, completion of a one-year ACGME accredited orthopaedic sports medicine fellowship was required to be eligible for subspecialty certification. Since its inception, 2,116 orthopaedic surgeons have achieved Subspecialty Certification in Orthopaedic Sports Medicine. This is out of the over 27,000 board-certified orthopaedic surgeons. Last year saw the lowest number of examinees yet, with 112 who completed the examination. The failure rate on the examination has ranged from 6% to 13%.

The next Orthopaedic Sports Medicine Written Examination will be administered on October 17, 2014, at Prometric Testing Centers nationwide. The examination, which will be composed of 200 questions and will require approximately four hours to complete, is created by a panel of Diplomates who are already subspecialty certified in Orthopaedic Sports Medicine. Results will be available in January 2015. Applications for the next cycle will become available August 1, 2014, with a deadline of March 15, 2015. The examination for this cycle will be administered in Fall 2015.

The development of Subspecialty Certification in Orthopaedic Sports Medicine has also affected the recertification options in orthopaedic sports medicine. In 2012, the Written Recertification Examination with a subspecialty focus of sports medicine was phased out and replaced by the Combined Sports Recertification Examination. Successful completion of this examination (and the associated MOC process) provides recertification in both Orthopaedic Surgery and Orthopaedic Sports Medicine.

It also results in synchronization of certificates so that they are on the same 10-year cycle. Since 2012, only holders of subspecialty certifications in Orthopaedic Sports Medicine are eligible for recertification with a sports medicine-focused written examination. Those without subspecialty certification need to recertify along one of the other pathways. The Combined Sports Recertification Examination in consists of 120 orthopaedic sports medicine questions and 80 core orthopaedic questions.

Beginning in 2015, a Combined Oral Examination Pathway will become available for orthopaedic sports medicine. Similar to the Combined Written Examination Pathway, this pathway also will be an option only for those who are already subspecialty certified in sports medicine. The Oral Examination will be similar to the current Oral Pathway for Recertification with additional case list requirements.

Current requirements for taking the Sports SSC Written Examination to achieve subspecialty certification in Orthopaedic Sports Medicine include:

A. Must be a Diplomate of the American Board of Orthopaedic Surgery and have practiced in the same location for at least two years.

B. Must have a current, full, unrestricted license to practice medicine.

C. Must demonstrate professional competence and meet acceptable ethical standards.

D. Must have surgical staff privileges at a hospital without restriction.

E. Must be engaged in the practice of orthopaedic sports medicine as indicated by holding full operating privileges at a hospital or surgery center.

F. Must have completed a full one-year accredited ACGME sports medicine fellowship.

G. Must submit a list of operative and non-operative procedures during a consecutive 12-month period to include a minimum of 115 surgical cases, of which 75 must involve arthroscopy and 10 must be non-operative cases.

PGY1 Rotations, Surgical Skills Training, and ABOS Surgical Education Grants

J. LAWRENCE MARSH, MD
MICHELLE A. JAMES, MD

The American Board of Orthopaedic Surgery exists to serve the best interests of the public and the medical profession by establishing educational standards for orthopaedic residents and by evaluating the initial and continuing qualifications and competence of orthopaedic surgeons. The Board defines educational requirements for the specialty and stimulates graduate medical education.

In 2012, in partnership with the American Academy of Orthopaedic Surgeons (AAOS), the American Orthopaedic Association (AOA), and the Council of Orthopaedic Residency Directors (CORD), the ABOS determined that the PGY1 resident schedule no longer met the needs of orthopaedic surgery residents, and consequently revised the PGY1 rotation requirements and added a PGY1 requirement for surgical skills training. The Accreditation Council for Graduate Medical Education subsequently adopted these revisions and incorporated them into the Orthopaedic Surgery Residency Program Requirements effective July 2013.

The new content requirements for the PGY1 year include mandates for 6 months of orthopaedic surgery rotations designed to foster proficiency in basic surgical skills, the general care of orthopaedic patients as inpatients and in outpatient clinics, the management of orthopaedic patients in the emergency department, and the cultivation of an orthopaedic knowledge base. During the remaining 6 months of the PGY1 year, residents will receive structured education on non-orthopaedic surgery rotations designed to foster proficiency in the perioperative care of surgical patients, musculoskeletal image interpretation, medical management of patients, and basic surgery and airway management skills, with at least 3 months on surgical rotations (general surgery trauma, surgical or medical ICU, plastic/burn surgery, vascular surgery, and general surgery), and 3 months on rotations chosen from a list of options that includes musculoskeletal radiology, general surgery trauma, surgical or medical ICU, plastic/burn surgery, vascular surgery, general surgery, neurosurgery, pediatric surgery, emergency medicine, anesthesiology, physical medicine and rehabilitation, rheumatology, internal medicine and basic surgical skills.

In addition, formal instruction in basic surgical skills based on a curriculum that includes goals, objectives, and assessment metrics must be provided during the PGY1 year, either longitudinally or as a dedicated rotation. This training should prepare the PGY1 resident to participate in orthopedic surgery cases, including skills used in the initial management of injured patients (splinting, casting, and application of traction devices), and basic operative skills (soft-tissue management, suturing, bone management, arthroscopy, fluoroscopy, and use of basic orthopaedic equipment). Residency training programs must also provide a dedicated space to facilitate skills training.

The catalyst for the new skills training requirement derived from the realization that other surgical Graduate Medical Education had adopted more simulation in their residency training and that orthopaedics would need to require it in order for certification and accreditation to properly advance. The AAOS sponsored a simulation summit in November of 2011, which helped to crystalize the need for these changes. The logic that surgical training could be improved through dedicated practice on simple skills exercises became clear.

After mandating these new requirements, the ABOS assumed a leadership role in assisting program directors in advancing a simulation program to meet the new requirements. In conjunction with the AAOS and AOA/CORD, the ABOS sponsored a surgical skills task force to develop a curriculum for PGY1 skills training. The curriculum was developed by the task force members in modular format and emphasizes simple and low-cost skills exercises, while focusing on fundamentals. Each module was written to a template and includes goals and objectives and suggested assessment metrics; most of the modules include instructional videos to demonstrate the skill exercise. The titles and authors of the 17 modules are shown in Table 1. The curriculum and the individual modules can be viewed on the ABOS website and the material is freely available for download.

The ABOS recognizes that simulation in orthopaedic training is and will continue to be a rapidly developing field. To guide these developments and to ensure that the PGY1 curriculum remains as relevant and current as possible, the ABOS will sponsor an oversight group in conjunction between the Board and the AAOS and AOA/CORD. This group will review and update the modules on a yearly basis, while assessing the need for additional modules for more advanced residents and eventually the use of simulations for certification and recertification. The outlook is very promising for the

gradual incorporation of more and better simulations into orthopaedic skills education and assessment of skills.

Finally, in order to promote the effectiveness of the newly mandated surgical skills training requirements, the ABOS will provide grant funds of up to $25,000 per grant to ACGME accredited orthopaedic surgery residency programs that successfully propose research projects to promote innovations in surgical education. These grant priorities are deliberately broad, to encourage diverse and creative proposals that will advance the mission of the ABOS.

Proposals are requested that aim to develop, evaluate, and assess methods of orthopaedic surgical education that improve residents' surgical skills, with the ultimate goal of advancing patient care. Competitive projects may include research that focuses on teaching techniques, performance evaluation methods, and curriculum design, and should focus on techniques and methods that are generalizable to orthopaedic residency education, and easily transferable to other residency programs.

Please refer to the ABOS website (abos.org) for the modified Rules and Regulations and more details on the ABOS Resident Surgical Education Grants.

	Module	Author
1	Sterile technique- Operating Room Setup	Peter M. Murray, MD (ABOS), Michelle A. James, MD (ABOS) E. Carpenter, MD (ABOS)
2	Suturing and Knot Tying	Ann Van Heest, MD (AOA/CORD), M. Daniel Wongworawat, MD (AAOS)
3	Microsurgical suturing	Peter M. Murray, MD (ABOS), Michelle A. James, MD (ABOS)
4	Soft tissue handling techniques	Shepard R. Hurwitz, MD (ABOS), Bradford O. Parsons, MD (AAOS), M. Daniel Wongworawat, MD (AAOS)
5	Casting and splinting	Bradford O. Parsons, MD (AAOS), Joel T. Jeffries, MD (AOA/CORD)
6	Traction	Joel T. Jeffries, MD (AOA/CORD), Shepard R. Hurwitz, MD (ABOS)
7	Compartment syndrome	Ann Van Heest, MD (AOA/CORD), Michelle A. James, MD (ABOS)
8	Bone handling techniques	J. Lawrence Marsh, MD- Chair (ABOS), David F. Martin, MD (ABOS)
9	Fluoroscopy	J. Lawrence Marsh, MD- Chair (ABOS),
10	K-wire techniques	M. Daniel Wongworawat, MD (AAOS), Bradford O. Parsons, MD (AAOS)
11	Techniques Basic to Internal Fixation of Fractures	J. Lawrence Marsh, MD- Chair (ABOS)
12	Principles and techniques of fracture reduction	J. Lawrence Marsh, MD- Chair (ABOS)
13	Basic Techniques in External fixation	Toolan, Shepard R. Hurwitz, MD (ABOS)
14	Basic Arthroscopy skills	Pedowitz, David F. Martin, MD (ABOS)
15	Basics of Arthoplasty (TKA & THA)	Michelle A. James, MD (ABOS) E. Carpenter, MD (ABOS), David F. Martin, MD (ABOS)
16	Joint injection	Ann Van Heest, MD (AOA/CORD)
17	Patient Safety	Peter M. Murray, MD (ABOS), Michelle A. James, MD (ABOS)

(President's Report continued from page 1)

The addition of Diplomates completing their third cycle will result in a substantial increase in activity for the Board's rigorous credentialing process and other activities necessary to register Diplomates for the Recertification Examination. The Board has explored ways to improve the efficiency of ABOS operations to meet the additional demands resulting from the increased number of examinees and the MOC program. Conversion to a digital Oral Examination made it necessary to purchase imaging equipment. The Board has upgraded its website and continues to explore ways to modernize the electronic interface with Diplomates, candidates, and the public. The ABOS is conscious of examinee costs and has made an effort to limit examination fee increases through this period of growth.

Communicating with Diplomates is a high priority for the Board, especially during times of change in requirements. The ABOS uses a multifaceted approach, including presentations by the Executive Director and Board members, to reach as many Diplomates as possible. The website is a great source for the most up-to-date information and displays an individualized MOC timeline for each candidate logged into the site. Candidates with email addresses on file receive direct communications to remind them of deadlines. The American Academy of Orthopaedic Surgeons (AAOS) has been a great asset for communication with Diplomates. Shepard Hurwitz, the ABOS Executive Director, writes a regular column in AAOSNow that informs readers of ABOS-related activities and responsibilities. The leadership of the ABOS and the AAOS are in regular direct communication. There is a joint task force involving both organizations that provides feedback to the ABOS from AAOS members. The task force also serves as a vehicle for designing processes to simplify and communicate information.

Setting educational standards for orthopaedic residents is among the Board's essential missions. The ABOS nominates candidates for three of the positions on the ACGME Orthopaedic Surgery Residency Review Committee. The ABOS Graduate Medical Education (GME) Committee reviews the residency requirements and makes changes when needed. The GME committee is currently monitoring recent changes that were made to the requirements for the first year of orthopaedic surgery residency that included an increase in the orthopaedic experience to 6 months and the addition of surgical skills education requirements.

The ABOS Board of Directors currently consists of 19 Directors and two Directors-Elect. Directors are nominated by three organizations: the AAOS, the American Orthopaedic Association (AOA) and the American Medical Association (AMA). Directors serve 1 year as Directors-Elect, 6 years as Active Directors, and 3 years as Senior Directors. There is a public member, selected by the ABOS, who is eligible for two terms of 3 years each. The Directors generously volunteer a great deal of time. They serve on multiple committees, attend meetings, participate in the oral examination process and devote multiple additional hours to Board work. They are devoted to advancing the mission of the Board and serving the best interests of the public and Diplomates.

In closing, on behalf of the Board of Directors, I wish to thank all of the people who make it possible for the Board to carry out its mission. The efforts of the enormous number of dedicated volunteers who devote a significant amount of time to the Written and Oral Examinations should be viewed with pride by members of our profession. The staff in the Chapel Hill office has worked hard to keep up with the many changes in certification that have occurred over the past several years. Shepard Hurwitz has continued to represent the ABOS admirably in his interactions with our various constituents and related organizations, including the ABMS and orthopaedic societies. Finally, my special thanks to my fellow Board members for their dedicated service to our profession.

(Part II Report Continued from page 3)

Digital imaging is now fully accepted as the standard for image display during the examination. Candidates are required to upload all of the case images for their 10 cases to a central server in JPEG format approximately 2 months prior to the examination. During the examination, the images are displayed on video screens at each examination station and the candidates use the computer mouse to move through the images as they present their cases. Overwhelmingly, candidates have considered the transition to digital imaging a positive change. To continue the process toward a fully electronic examination, in November 2013 a Beta test was conducted at the Palmer House in Chicago with the assistance of volunteer Diplomates from the July 2013 examination. The purpose was to assess the feasibility of converting the medical record portion of the examination to digital format. The Beta test was very successful and the board is making plans to convert to a fully electronic examination.

The results of the 2013 examination were very similar to prior years. There were 689 candidates and 167 volunteer examiners. The passing rate was 86 % (593); 14% of candidates (96) failed the examination. The results for 2008 to 2013 are displayed in the table below. The ABOS Board of Directors is grateful to all of the participants in this voluntary activity. We believe that the Oral Examination is an essential component of our certification process and is an important mechanism to improve orthopaedic practice.

(Part I Report Continued from page 2)

The 2013 examination consisted of 312 questions. ABOS members of the Written Examination Committee performed a key validation process and 12 items were removed from the examination scoring. Thus a total of 300 questions were used to measure candidate performance on the examination. In August 2013 the ABOS Written Examination Committee convened to review candidate performance on the examination and to set a passing standard based upon the distribution of scores and a detailed psychometric evaluation of the test. The candidates were notified of their results in September 2013.

The passing standard for the 2013 examination was set at 1.12 logits. The examination is designed to provide candidates with the same opportunity to pass the examination each year. In order to judge the difficulty of the test and to assess the performance of candidates relative to other years, the examination contains a set of previously used examination questions. Each of these questions has detailed statistics from previous examinations, and the performance of current candidates on these questions relative to candidates in other years permits standardization of the examination between candidate pools in different years. Thus these previously used questions serve as equators that permit the same passing standard from year to year. The passing standard used in 2013 was identical to the passing standard used each year from 2009 until 2012 (Scale Score = 170 and Proficiency/Logits Score = 1.12). On the 2013 examination, this corresponded to a raw score of 210 correct answers (70%).

The passing rate for United States and Canadian medical school graduates that were taking the examination for the first time was 93.0%. The passing rate for the total group of candidates taking the examination was 85.0%. The passing rate for international medical school graduates taking the examination for the first time was 89.0%. Of those examinees repeating the examination, the passing rate for United States and Canadian medical school graduates was 87.0%; for international medical student graduates taking the examination a second or more times, the passing rate was 92.0%.

The validity of the test can be determined by the test psychometrics. The mean item discrimination, which determines how well each individual question discriminates between those who obtained high scores and those who achieved low scores, was 0.26.

The KR20 internal consistency reliability coefficient, the measure of how much an examinee's score would vary across repeated testing with different questions on the same content, was 0.90. The psychometric results are consistent with a highly valid examination and similar to the examination performance in the prior 4 years since the computerized version began.

The mean p value, or the average percent score of the 2013 examination, was 0.70 (70% correct). The performance of the standard reference group, which consists of the first time examination candidates that are graduates of US and Canadian Medical Schools, was similar in 2013 (93.0% passing rate) and 2012 (94.2%). In the two previous years, 2010 and 2011 (with respective failure rates of 11.5% and 11.1% in the reference group), significant ABOS concern arose with respect to the difficulty of the examination, resident work hours, and other issues. The ABOS continues to be actively engaged with organizations across the orthopaedic community to address educational and other factors associated with candidate performance. The fact is that the examination has remained constant in terms of process, difficulty, and psychometric analysis, with stabilization of the passing rates back to the rate of the 2009 examination. The ABOS continues to monitor the content and quality of the examination closely to make it fair and relevant to current orthopedic practice.

The American Board of Orthopaedic Surgery is proud to serve the orthopaedic community and the public through its examination process. The ABOS is committed to ensuring the highest quality of care by an extraordinary group of physicians who have completed a rigorous training process and who have acquired and routinely use highly specialized skills.

I would like to thank all of the orthopaedic surgeons and staff who committed the time and energy involved in the creation of the 2013 ABOS Part I Certification Examination. And I want to express special thanks to Patsi Furr, who is the direct office staff support to the Written Examination Committee.

EXAM STATISTICS

Part I Examination Statistics

	# 2009	%	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examiness	719		779		832		865		832	
Passes	643	89%	628	81%	660	79%	736	85%	701	84%

Part II Examination Statistics

	# 2009	%	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examinees	695		680		662		722		689	
Passes	621	89%	602	89%	586	89%	644	89%	593	86%

Subspecialty Certification in Hand Examination

	# 2009	%	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examinees	66		57		78		75		59	
Passes	62	94%	54	95%	77	99%	75	100%	57	97%

Subspecialty Recertification in Hand Examination

	# 2009	%	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examinees	41		23		14		9		11	
Passes	39	95%	23	100%	13	93%	8	89%	10	91%

Combined Hand Surgery Recertification Examination

	# 2009	%	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examinees	139		105		119		110		105	
Passes	135	97%	101	96%	116	97%	109	99%	103	98%

Subspecialty Certification in Sports Examination

	# 2009	%	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examinees	322		419		425		142		112	
Passes	281	87%	365	87%	378	89%	127	89%	106	95%

Combined Sports Recertification Examination

	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examinees	62		37		149		172	
Passes	59	95%	36	97%	145	97%	167	97%

Recertification Examination Statistics

Cumulative Recertification Results

	# 2009	%	# 2010	%	# 2011	%	# 2012	%	# 2013	%
Examinees	1340		1242		1202		1344		1360	
Passes	1297	97%	1194	96%	1151	96%	1283	95%	1287	95%

2013 Written Recertification Results

	General	Adult Recon	Spine	Combined Hand	Combined Sports
Examinees	662	128	151	105	172
Pass Rate	98%	96%	93%	98%	97%

2013 Oral Recertification Results

	General	Adult Recon	Sports	Spine	Hand	Foot/Ankle	Pediatrics	Oncology	Trauma
Examinees	43	11	17	27	8	7	9	4	8
Pass Rate	66%	73%	76%	74%	75%	71%	89%	100%	87%

Revoked Certificates

To date, the American Board of Orthopaedic Surgery has revoked the certificates of 78 Diplomates. Listed below are the most recent certificate revocations.

Former Diplomate	Last Known City/State	Year Revoked
Andrew M. Giovannini	San Francisco, CA	2013
Gerald S. Kane	Highland Park, IL	2013
Daryl L. Kirkby	Chandler, AZ	2013
Jon D. Norberg	Fargo, ND	2013
Franklyn Seabrooks II	Fairfield, CA	2013
Robert S. Cairns	Dubuque, IA	2013
Robert L. Diaz	Palm Beach Gardens, FL	2013
Jason A. Bergandi	Peru, IL	2013

MOC Dates for 2014	
March - April	Computer Recertification Examinations, Prometric Technology Centers
April	Oral Pathway -- List of 10 selected cases posted online at www.abos.org.
May 1st	Deadline for application for 2015 exam
June	Oral Pathway -- Admission cards online
	Computer Pathway exam results online to candidates.
July 21st	Practice-Based Oral Recertification Examination, Palmer House, Chicago
August	Oral Pathway exam results available online to candidates.
October	Credentials Committee meets to decide admission of applicants
December 15th	Examination fee due for all computer pathways
	MOC 1st cycle CMEs due for Diplomates certified in 2009, 2010, and 2011

Hand Dates for 2014	
April	Credential committee meets to determine admissibility.
May 15th	Deadline for submission of the $1,400 examination fee.
June	Scheduling permits will be posted online
September 8th-20th	Hand examinations administered at Prometric Technology Centers
November	Examination results are posted online

Sports Dates for 2014	
June	Deadline for submission of the $1,050 examination fee.
July	Candidate sheduling/admission permits are posted online.
August 1st	Application available at www.abos.org.
October 17th	Examination administered at Prometric Technology Centers

DIRECTORS UPDATES

On June 7, 2013, the orthopaedic community lost a dear friend and valuable member with the unexpected passing of Harry Herkowitz, MD. Harry had served on the Board almost ten years, during which he held several leadership positions including Chair of the Oral Examination Committee and ABOS president. The loss of Harry's friendship, knowledge, insight, and practical approach will be felt by colleagues and the patients he served.

James Kasser and Jeff Anglen will be completing their terms as Directors later this year. During their terms they have held leadership positions on the Board and their work has been instrumental in advancing important initiatives. Public member John Erbland will be completing his 6 years of service as a Director. John has brought a valuable perspective to the Board and has represented the public well. The contributions of these members will be missed.

The ABOS is pleased to announce the additions of two new Directors-Elect. William Levine from New York was nominated by the AOA. Rick Wright from St. Louis was nominated by the AAOS. The ABOS Board of Directors welcomes both of these talented individuals and looks forward to their many years of productive service to our specialty.

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ABOS Board of Directors
October, 2013