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PRESIDENT'S REPORT

"The American Board of Orthopaedic Surgery functions to serve the best interests of the public and of the medical profession by establishing educational standards for orthopaedic residents and by evaluating the initial and continuing qualifications and knowledge of orthopaedic surgeons".

The implementation of this mission requires the efforts of more than a thousand board certified orthopaedic surgeons that work collaboratively to improve public health and maintain the exceptional standards of our profession. Orthopaedic surgeons volunteer on five different question writing task forces; participate in standard setting exercises for examinations; and administer oral examinations for initial certification and recertification applicants. Thousands of others volunteers contribute to the peer review process. All of these volunteers believe the board certification process and maintenance of certification initiative promotes and assesses clinical, ethical and professional standards for all orthopaedic surgeons.

The ABOS sets training standards by establishing Orthopaedic Residency curriculum and content requirements. The ABOS is committed to a broad educational experience that includes a thorough understanding of the pathophysiology and clinical diagnosis and treatment of musculoskeletal diseases. The limitations placed by ACGME on residency work hours have made it essential that educational strategies and the resident curriculum are optimized to maximize the learning experience. The constant in this changing paradigm is the education and knowledge standards set by the ABOS. These standards have not changed. Our current graduating orthopaedic residents have had their entire training experience under the ACGME work hour restrictions. The ABOS Part I computer based examination is standardized each year. This allows the ABOS to maintain the same passing standard over time. Complex psychometric evaluation is performed on each question and on the entire exam. The examination has outstanding validity and reproducibility and ensures that the ABOS can achieve the goal of providing our diplomats with a meaningful certification and assuring the public that they will receive care provided by a



Judith Baumhauer, MD

physician with exceptional training, knowledge, and competency in orthopaedic diseases.

After successful completion of the written exam and prior to the oral exam, peer review is obtained. This is a critical component of the Certification process.

Peer review is broadly solicited and includes orthopaedists in the region

where the surgeon is practicing, emergency room physicians, anesthesiologists, nurses, and administrators knowledgeable about the candidate's clinical and ethical care of patients. This process allows us to protect the public (our patients) and police ourselves by requiring all orthopaedic surgeons to adhere to the high standards of our profession. We are one of the few medical specialties that utilizes this "full circle" assessment of standards to ensure the public of the professionalism of our Diplomates.

We live in an electronic world. The ABOS has worked hard to transform the radiographic imaging required for the ABOS Part II exam and the Maintenance of Certification (MOC) Oral exam from a printed to an electronic format. After an extensive survey of the Diplomates and beta testing, a very successful full transition was made to the electronic imaging format 2012. This resulted in improvements in multiple areas. High standards were maintained to assess orthopaedic knowledge and clinical care and radiographic quality was improved and more uniform. Diplomates had reduced costs when compared to using printed x-rays. Equally important, the travel to the examination was made less onerous!

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MAINTENANCE OF CERTIFICATION REPORT

THOMAS PARKER VAIL, MD, CHAIR



The specialty of orthopaedic surgery leads all medical groups in providing exceptional opportunities for continuous improvement and lifelong learning. Credit for this success is due to the tireless work of physician educators, professional organizations, and individual surgeons in our field who participate in a multitude of programs directed at quality improvement. Our processes for

peer review, our spirit of volunteerism, tools for self-assessment, and the provision to provide a secure examination are held among specialty medicine as being exemplary.

The American Board of Orthopaedic Surgery (ABOS) Maintenance of Certification (MOC) program is designed to provide orthopaedic surgeons a mechanism to receive ongoing credit for lifelong learning and continuous improvement after the initial board certification is achieved. The American Board of Medical Specialties (ABMS 2005) defines maintenance of certification as “a process designed to document that physician specialists, certified by one of the Member Boards of ABMS, maintain the necessary competencies to provide quality patient care.”

Maintenance of certification is of interest not only within our specialty and to the ABMS, but also to our patients, payers, and licensing groups at the State level. Hospitals, Health Systems, Insurers, and State Medical Boards are increasingly asking orthopaedic surgeons about their “MOC status” at the time of license renewal or initiation of a new license in another State. The Joint Commission requires physician participation in performance improvement, faculty positions at ACGME residency programs may require MOC, and some hospital credentialing bodies are now requiring MOC.

The distinction between licensure and certification is important. Licensure is a government function, certification is a professional function. State medical boards have a responsibility to the public to ensure the ongoing competence of physicians seeking renewal of licensure. Licensure is a “states right.” Sixty-nine state licensing boards license 850,000+ physicians. Obtaining a medical license generally requires 4 years of medical school, 1-3 years of post-graduate training, a 3-part national licensing examination, and professional qualifications. A medical license is “undifferentiated” – not based on specialty. To maintain a license requires submission of a renewal form, a renewal fee (varies by state), and continuing medical education (varies by state).

The Federation of State Medical Boards has defined a framework to maintain a license with the essential

components including competencies in medical knowledge, patient care, interpersonal and communication skills, practice based learning, professionalism, and systems based practice.

The American Board of Orthopaedic Surgery designed the Maintenance of Certification process to meet the requirements that demonstrate ongoing professional competence to anyone who might require that information, including the public, a credentialing body at a hospital or professional organization, or a State Medical Board. The ABOS MOC cycle occurs over a period of 10 years, and includes four parts. The four parts meet all of the requirements set forth by the American Board of Medical Specialties. Part I is defined as “Evidence of Professional Standing” (unrestricted State medical license, unrestricted surgical privileges, peer review – professionalism and behavior). Part II is “Evidence of Life Long Learning” (120 CME credits, of which 20 are self-assessment scored and recorded activities). Part III is “Evidence of Cognitive Expertise” (a secure exam- either computer exam or practice-based oral exam). Part IV is “Evidence of performance in practice” (case lists and peer review).

The goal of Part IV of MOC is to provide orthopaedic surgeons with a way to evaluate the quality of their own practice using familiar metrics which demonstrate self-improvement. The ABOS plans to expand current Part IV activities (the case list and peer review) with other options to fulfill this part of MOC. Other options being developed include “practice improvement modules” called PIMS, which are developed by content experts such as the AAOS or subspecialty organizations, and approved by the ABOS.

Practice improvement modules are not mandatory; they are simply another option to fulfill the Part IV requirement for evidence of performance in practice. A PIM is essentially a closed loop of practice review and improvement. In broad terms, a PIM would provide a structure to measure an activity in practice, assess performance, complete an education module on the subject, plan improvement, and then re-measure. CME credit would be given for completion of a PIM. Currently, PIMS are being developed by a number of subspecialty groups and the AAOS, and include topics such as carpal tunnel release, distal radius fracture, hammertoe treatment, and treatment of supracondylar humerus fractures in children.

In the end, one important goal of the practice improvement plan for Part IV is simplicity, with options that align surgeon activities in hospital QI, specialist society activity, or other professional activity that constitutes defined practice improvement.

The ABOS will provide an option for those organizations needing assistance with management of databases related to PIMS. Diplomates can now import CME credit from the AAOS directly to the ABOS, through their MOC dashboard on the ABOS website, and would like to add other professional organizations that grant CME to this process, and “push” information to Diplomates about deadlines and opportunities related to MOC participation. Finally, it should be emphasized that the MOC program does not change certification status for lifetime certificate holders.

The lifetime certification is secure, and does not change with this program. Some lifetime certificate holders will likely need or want to enter the MOC process, and they will be able to do so in the same manner as time-limited certificate holders.

All Diplomates not already participating in MOC may do so by activating a computer account with the ABOS, signing an MOC agreement, and starting a 10 year MOC cycle. Beginning in the Fall of 2013, those participating in MOC will be listed on the ABOS website and website of The American Board of Medical Specialties.

MAINTENANCE OF CERTIFICATION

FOR DIPLOMATES OF THE AMERICAN BOARD OF ORTHOPAEDIC SURGERY WHO WISH TO TAKE THE EXAM IN 2015

MOC Computer Examination Pathway

CONTINUING MEDICAL EDUCATION & SELF- ASSESSMENT EXAMS		CASE LIST		APPLICATION		EXAM YEAR	
taken in	due	during	due	available	due	exam fee due	in
2011-2013	5/1/2014	2013	5/1/2014	11/1/2013	5/1/2014	12/15/2014	2015
120 credits of Category 1 Orthopaedic CME, including 20 or more SCORED & RECORDED self assessment exam credits. Each SAE must be 10+ credits. The AAOS, ASSH, AOSSM, JBJS, CNS, NYSSOS & WOA offer SAE that qualify.		3 month surgical case list (limit 75) performed in hospitals and surgery centers during 3 consecutive months within the year indicated.		Application accessible at abos.org to Diplomates who have completed the MOC requirements. (CME, SAE and 3 month case list are finalized & documents have been received in the Board office.)		After the Credentials Committee meets, candidates receive their acceptance to sit letters at the end of October. They must then go online and pay the exam fee at abos.org.	
CME credits must be entered into the CME Summary at abos.org. The Summary must be printed and certificates or transcripts from the issuing bodies must be attached to the Summary and mailed to the Board Office at the time of application.		Case list must be entered at abos.org, then finalized & printed. Printed case list must then be signed by the medical records director, notarized & mailed to the Board office at the time of application.		Application must be completed, then finalized and app/MOC fee paid online. Documents required to be mailed in: 1. CME summary, 2. Notarized case list, 3. Application documents.		Exam options: 1)General 2)Adult Recon 3)Spine Surgery 4)Combined Hand (holders of hand subspecialty cert) 5)Combined Sports (holders of sports subspecialty cert).	

MOC Oral Examination Pathway

CONTINUING MEDICAL EDUCATION & SELF- ASSESSMENT EXAMS		CASE LIST		APPLICATION		EXAM YEAR	
taken in	due	during	due	available	due	exam fee due	in
2011-2013	5/1/2014	2013 - 2014	5/1/2014	11/1/2013	5/1/2014	12/15/2014	2015
120 credits of Category 1 Orthopaedic CME, including 20 or more SCORED & RECORDED self assessment exam credits. Each SAE must be 10+ credits. The AAOS, ASSH, AOSSM, JBJS, CNS, NYSSOS & WOA offer SAE that qualify.		6 month surgical case list performed in hospitals and surgery centers during 6 consecutive months within the years indicated.		Application accessible at abos.org to Diplomates who have completed the MOC requirements. (CME, SAE and 3 month case list are finalized & documents have been received in the Board office.)		After the Credentials Committee meets, candidates receive their acceptance to sit letters in October. They must then go online and pay the exam fee at abos.org.	
CME credits must be entered into the CME Summary at abos.org. The Summary must be printed and certificates or transcripts from the issuing bodies must be attached to the Summary and mailed to the Board Office at the time of application.		Case list must be entered at abos.org, then finalized & printed. Printed case list must then be signed by the medical records director, notarized & mailed to the Board office at the time of application.		Application must be completed, then finalized and app/MOC fee paid online. Documents required to be mailed in: 1. CME summary, 2. Notarized case list, 3. Application documents.		Candidates receive their list of selected cases in April, and must then upload the pertinent images & arthroscopic prints for the selected cases online. All other required case materials will be brought to the exam for presentation.	

*Diplomates whose certificates expire before they complete the MOC requirements will be required to take the Oral Examination Pathway.

Recertification

RECERTIFICATION EXAMINATION REPORT

JAMES E. CARPENTER, MD, CHAIR



The Recertification Examination is Part 3 of the four part Maintenance of Certification (MOC) program aimed at lifelong learning and practice improvement. The recertification examination options include 1) a computerized written examination or 2) an oral recertification pathway.

The computerized written pathway has a number of tests available from a General exam to the specialty profile exams of Adult Reconstruction and Spine. Those with a subspecialty certification in Hand or Sports can take the Combined Exam in those areas.

The general written examination consists of approximately 200 questions and covers general clinical material that all orthopaedists should know regardless of their area of expertise. The ABOS webpage WWW.ABOS.ORG provides additional data on the core orthopaedic knowledge anatomic breakdown for the computerized written examination.

The Specialty Practice Profile Examinations in the areas of Adult Reconstruction and Spine consist of approximately 40% general core questions and 60% subspecialty questions. The Combined Hand recertification examination has approximately 175 Hand Subspecialty questions and 80 general questions. The Combined Sports Subspecialty recertification examination has approximately 80 questions of general core questions and 120 specialty specific questions.

In 2012, 1210 orthopaedic surgeons took the computerized written recertification pathway. The General Exam pass rate was 97%; Adult Reconstruction 98%; Spine 95% and Sports 98%. The Combined Hand Pass rate was 99% and the Combined Sports Recertification pass rate was 97%.

The alternative recertification pathway is the Oral Examination. This recertification examination is focused on the submitted case list. Like the Part II Oral Examination for initial certification, the Diplomate chooses the subspecialty that most closely represents his/her practice. One-hundred and thirty four orthopaedists chose this pathway with an overall pass rate of 78%.

Diplomates are eligible to take a recertification examination up to two years prior to the expiration date on their certificate provided they have completed the MOC requirements. The reporting period for MOC Case List and CME/SAE for the computerized test are 15-23 months PRIOR to the computerized test and, along with the examination application are due MAY 1st, the year PRIOR TO the exam.

PLEASE, visit WWW.ABOS.ORG to familiarize yourself with the deadlines.

Cumulative Written Recertification Results

	2008	2009	2010	2011	2012
Examinees	893	1223	1108	1073	1210
Pass (%)	97%	98%	97%	97%	97%

2012 Written Recertification Results

	General	Adult Recon	Spine	Combined Hand	Combined Sports
Examinees	705	118	128	110%	149
Pass rate	97%	98%	95%	99%	97%

2012 Oral Recertification Results

	General	Adult Recon	Sports	Spine	Hand/upper ext	Foot Ankle	Pediatrics	Oncology	Shoulder	Trauma
Examinees	29	22	20	28	5	8	6	5	7	4
Pass rate	66%	86%	70%	71%	100%	88%	100%	80%	100%	100%

2014

MOC RECERTIFICATION EXAMINATIONS

Applications Available: Currently
Application Deadline: May 1, 2013*

* Diplomates must have completed their MOC requirements prior to 2013 in order to apply.

2013

MOC RECERTIFICATION EXAMINATIONS

General/Adult Reconstruction/Surgery of the Spine
Examinations

March 1 thru April 30, 2013
at Prometric Testing Centers, Nationwide

Oral Recertification Examination
July 22, 2013
at the Palmer House Hilton, Chicago

Combined Hand Examination
September 9-21, 2013
at Prometric Testing Centers, Nationwide

Combined Sports Examination
October 24-November 7, 2013
at Prometric Testing Centers, Nationwide

CREDENTIALS COMMITTEE

CREDENTIALS COMMITTEE REPORT

SANFORD E. EMERY, MD, CHAIR

Members:

Judith F. Baumhauer, MD, James E. Carpenter, MD, John Erbland, Harry N. Herkowitz, Jr., MD, Douglas Lundy, MD, J. Lawrence Marsh, M.D., David F. Martin, MD, Peter M. Murray, MD, James R. Roberson, MD, Charles Saltzman, MD, John G. Seiler, III, MD, Terry L Thompson, MD, Shepard R. Hurwitz, MD



The Credentials Committee of the American Board of Orthopaedic Surgery has a primary role to assess the professional competence and adherence to acceptable ethical and professional standards of candidates applying for the Part II Oral Certification Examination and the Recertification Examinations. We review information the candidate has supplied as part of our application

requests for part two certification or recertification, as well as any information pertaining to the committee's charge received from state licensing boards, the public, or medical professionals.

All diplomates of the ABOS and candidates for ABOS certification must demonstrate evidence of **professional standing**. A full unrestricted license to practice medicine in all state jurisdictions in which the applicant or diplomate holds a license is required. **Practice Performance Assessment** also occurs at the time of the Part II Oral Exam and Recertification Exam. The primary tool used for practice performance assessment continues to be the peer review form. This form (yes the orange op scan form!) is sent out to individuals identified by the applicant or diplomate who we contact for feedback on the quality of work and professionalism of the applicant. These individuals include orthopaedic colleagues, current and former practice partners, residency and fellowship program directors, chiefs of hospital staffs in orthopaedics, surgery, emergency medicine, radiology, and anesthesiology; operating room nurse supervisors, and heads of orthopaedic nursing. This peer review form asks questions in 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 is truly indebted to the multiple diplomates and other professionals who complete these forms every year. Indeed the success of the credentialing process depends upon our collective sincere efforts in this area.

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 for Computer Recertification examinees. The ABOS is currently working to improve our process of using 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 and Recertification. We review individuals whose state licenses have been revoked, which leads to revocation of board certification. Other options in evaluating applications to sit for a given examination include deferral for a year, denial, or acceptance to take the exam. At times we will request and organize a practice site visit to better evaluate the applicant or request that a diplomate take an oral examination as part of the recertification process.

For the 2012 Part II Oral Examination, 722 applicants were admitted, 8 were deferred, 1 was denied the opportunity to sit for the exam and 3 were deferred for a practice site visit. For the 2013 Recertification Examination, 1577 applicants were admitted to the exam, 7 were deferred, 8 were site visited and 1 was denied the opportunity to sit. In 2013, there were 8 certificates revoked. These types of decisions are at times quite difficult, yet remain one of the most important functions of the board in maintaining the quality and professionalism of our specialty using underlying principles of fairness and high standards. The ABOS is truly indebted to all individuals, particularly those taking part in peer review, who contribute to this important process.

Revoked Certificates

To date, the American Board of Orthopaedic Surgery has revoked the certificates of 70 Diplomates. Listed below are the most recent certificate revocations.

Donald J. Kurth Jr., MD	Massapequa, NY	2012
Dewey MacKay, MD	Brigham City, UT	2012
Barry R. Maron, MD	Albuquerque, NM	2012
Mark S. Metzger, MD	Portland, OR	2012
Darey A. Philbrick, MD	Brownwood, TX	2012
Raymond L. Struck	Willmar, MN	2012

Subspecialty Certification

SUBSPECIALTY CERTIFICATE IN SURGERY OF THE HAND

MICHELLE JAMES, MD, SUBSPECIALTY CERTIFICATION CHAIR
MARYBETH EZAKI, MD, CHAIR, JOINT COMMITTEE ON SURGERY OF THE HAND



The Joint Committee on Surgery of the Hand is comprised of members appointed by the three Primary Boards, Orthopaedic Surgery, Plastic Surgery, and Surgery. The charge to the committee is to set uniform standards for Subspecialty Certification (SSC) in Hand Surgery, to develop and administer the certification and recertification examinations, and to make recommendations to the parent Boards regarding Subspecialty Certification.



For the past three years, the administrative duties for the Hand examinations have been transferred to the ABOS. The process of development of the Hand examination begins approximately two years before the exam is deployed to the computer testing centers. The Question Writing Task Force (QWTF) consists of about twenty to thirty volunteers from all three parent

specialties who write questions based on Hand Surgery knowledge and best evidence. The questions are edited by staff at the National Board of Medical Examiners, and prepared for a face-to-face meeting of the QWTF to review each question for content, accuracy, and relevance. The best questions are then included in a pool of used questions with known performance statistics and used to construct the written examination. A content outline is used as a template to keep the exam consistent from year to year. This content outline ensures that all the major areas of Hand Surgery are covered in the examination. The exam undergoes a final edit by a subgroup of the Joint Committee, and then the test is sent back to the NBME for deployment to the testing centers.

After the exam has been given, the performance statistics for each question are reviewed and a Key Validation exercise is done for questions that are deemed ambiguous, too difficult, or controversial. At this stage, an average of five questions per test are deleted. A content-based standard setting exercise follows, with Hand surgeons from around the country, representing different kinds of practices, and the three parent Boards, reviewing question by question, the standard for the minimally competent hand surgeon. Final scoring of the examination takes place after the Key Validation assessment.

Standard Setting for the examination is done after psychometric evaluation by the NBME to determine the difficulty of an examination with respect to prior tests. This assures that a candidate had the same chance of passing this particular test compared to one given before. The passing scores are set at the same point by the Joint Committee for all three parent Boards. The Certification and Recertification tests are the same, however, passing scores are different.

The ABOS Diplomates who take the SSC Hand Recertification Examination and the Core Questions for Recertification in both Orthopaedics and Surgery of the Hand, comply with the same requirements as the ABOS Diplomates with the other SSCs.

The Joint Committee has recommended to the parent Boards, and it has been accepted, that an Oral Pathway for Recertification will be made available for those ABOS Diplomates who wish to take a single Oral examination to fulfill recertification in both Orthopaedics and Surgery of the Hand. Details are being worked out, and hopefully this pathway will be available in 2015.

The 2012 Hand Examination contained 175 items. Use of items with video was initiated with this examination.

Subspecialty Certification in Hand Examination (ABOS)

	2008	2009	2010	2011	2012
Examinees	80	66	57	78	75
Passed	95%	94%	95%	99%	100%

Subspecialty Recertification in Hand Examination (ABOS)

	2008	2009	2010	2011	2012
Examinees	16	41	23	14	9
Passed	100%	95%	100%	93%	89%

Combined Hand Recertification Examination (ABOS)

	2008	2009	2010	2011	2012
Examinees	85	139	105	119	110
Passed	96%	97%	96%	97%	99%

(Subspecialty Certification continued on page 14)

2013

SUBSPECIALTY CERTIFICATE IN HAND SURGERY

Subspecialty in Hand Surgery Examination
September 9, 2013

Subspecialty in Hand Surgery Recertification Examination
September 9-21, 2013
at Prometric Testing Centers, Nationwide

2014

Applications available November 1, 2013

For the Combined Hand Recertification Exam schedule, see page 4.

Subspecialty Certification

SUBSPECIALTY CERTIFICATE IN ORTHOPAEDIC SPORTS MEDICINE

JAMES E. CARPENTER, MD, CHAIR



The purpose of this report is to review and update you on the Subspecialty Certification in Orthopaedic Sports Medicine. This report will include: 1) A brief history of the process, 2) The current status of Sports Subspecialty Certification, and 3) Future directions including folding the Sports Subspecialty Certificate into the MOC process and the creation of an oral sports recertification pathway.

The grandfather period for those individuals who did not graduate from an ACGME accredited fellowship to sit for the Sports Medicine Subspecialty Certification examination ended with the 2011 examination.

1) Brief History

In 1998, the leadership in Orthopaedic Sports Medicine decided to pursue Subspecialty Sports Certification Status (Hand surgery was approved in the 80's). After careful deliberations and analysis of scientific surveys, it was determined that Orthopaedic Sports Medicine had "a unique body of knowledge and area of practice" worthy of subspecialty certification. The original application was submitted to the ABOS in 1998 and it was approved in 2000. Then, it was sent to the ABMS (the "mother" board) for approval in 2003. Over the next 4 years, the ABOS and NBME worked on developing an examination that was fair, psychometrically sound, valid, and reflected our "body of knowledge."

2) Current Status of Sports Medicine Subspecialty Certification

The first examination was given in 2007. Since then, we have completed 6 years of examinations. Each year, the exam consists of approximately 200 questions and is given over a 4 hour time period. Starting in 2010, the exam contains video questions. The content breakdown that was determined to reflect the "body of knowledge" (i.e. curriculum) of a graduating sports medicine fellow or practitioner is as follows:

- General principles (5%) (Research, study design, statistics, ethics, professionalism)
- Medical aspects of Sports Medicine (20%)
- Musculoskeletal (75%) - Upper extremity (30%), Lower extremity (40%), Spine (5%)

In addition to the usual rigorous psychometric evaluation done with the NBME, the past 6 tests have also undergone a standard setting exercise. This involves having 10 experienced (ACGME accredited fellowship and in practice a minimum of 10 years) sports orthopaedists reviewing the exam and acting as

judges to rate all items and determine passing rates. This exercise is done to further adjust and establish a final passing score. The results of the past 6 exams are listed on this page.

The Board has made several changes in the application process to make it more user friendly. A drop-down menu of acceptable Sports Medicine cases was created. Also, a "counter" was created to show the number and type of cases entered. These changes make it easier for the applicant to record acceptable Sports Medicine surgical and non-surgical cases. The minimum number of Sports Medicine cases required to sit the exam is 125. One hundred and fifteen of the 125 are surgical (75 arthroscopies) and 10/125 are non-surgical cases.

3) Combined Sports Medicine Examination

A critical goal of the subspecialty certification process is to make it consistent with the Subspecialty Certification in Surgery of the Hand (formerly Certificate of Added Qualification or CAQ) and the MOC process. With this in mind, in 2009, the Board approved the following proposal:

"Those individuals who pass the Sports Medicine Subspecialty Certification Exam will be eligible to sit a combined pathway examination to satisfy Part III MOC requirements when the Diplomate is eligible to apply for recertification of the primary certificate."

The primary orthopaedic and subspecialty certificates then have the same expiration dates. The Combined Sports Examination satisfies Part III of the MOC requirements. It is 200 questions in length and will consist of 120 questions from the Sports Medicine Subspecialty Examination pool and 80 questions from the General Orthopaedic Exam pool. The first Combined Sports Examination was given in 2010 with sixty-three candidates taking the examination. In 2011, thirty-seven candidates took this pathway, and in 2012, one hundred forty-five candidates took the examination.

(Subspecialty Certification continued on page 14)

Subspecialty in Sports Medicine Examination

	2008	2009	2010	2011	2012
Examinees	356	322	419	425	142
Passed	93%	87%	87%	89%	89%

2013 SUBSPECIALTY CERTIFICATE IN SPORTS MEDICINE

Examination: October 24, 2013
at Prometric Testing Centers, Nationwide

2014
Applications available August 1, 2013

For the Combined Sports Exam schedule, see page 4.

Certification

Part I Certification Report

REGIS J. O'KEEFE, MD, PhD, CO-CHAIR
ANNUNZIATO AMENDOLA, 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 2011-2012 Written Examination Committee (WEC). Dr. Regis O'Keefe and Dr. Annunziato Amendola served as the co-chairs. The committee members included Drs. Albanese, Anglen, Baumhauer, Carpenter, Emery, Ezaki, Herkowitz, Kasser, Marsh, Martin, Roberson, Seiler, Thompson, and Vail. A special thanks goes to Dr. Randy Marcus who is retiring from the WEC.

The 2012 Written Certification Examination was created through the work of over 70 orthopaedic surgeons practicing throughout the United States. These surgeons represent all disciplines and subspecialties within orthopaedic surgery. The process of creating the 2012 examination began two years earlier during the summer of 2010, when the members of the Question Writing Task Force were provided with their question writing assignments. Eight more steps followed: 1) Examination questions were submitted to the National Board of Medical Examiners (NBME) in December 2010; 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, 2011 for a review of all of the questions. 4) Approved questions received final edits and were entered into an item library at the NBME. 5) In November 2011 the Field Test Task Force met in Chicago to review and approve questions tentatively selected for the 2012 examination. 6) The NBME assembled the proposed examination, with attention to broad representation of all areas of orthopaedic practice. 7) In January 2012 the ABOS Written Examination Committee met and discussed and approved each examination question selected for the examination. 8) In March 2012 the Chairman 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 Exam requires that candidates complete an ACGME accredited orthopaedic residency. Canadian residents that have completed a Canadian orthopaedic residency program and passed the Royal College of

Physicians and Surgeons Examination are eligible for the ABOS Part I examination. A third pathway is the academic pathway 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 2012 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 are 45-minutes of break time during the examination.

2012 ABOS Part I Certification Examination was held on July 12, 2012. This was the third year that the examination included multimedia questions and explorable CT/MRI scans, arthroscopy videos and physical exam videos. More than 180 Prometric Test Sites were used across the United States and Canada. A total of 865 candidates sat for the examination and all candidates completed the examination. 704 candidates took the examination for the first time while 161 candidates were repeating the examination due to prior failure.

The 2012 examination consisted of 312 questions. Members of the Written Examination Committee performed a key validation process and 5 items were removed from the examination scoring. Thus a total of 307 questions were used to measure candidate performance on the examination. In August 2012 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 2012.

(Part I Certification continued on page 15)

Part I Certification Examination

	2009	2010	2011	2012
Examinees	719	779	832	865
% Passed	89%	81%	79%	85%

2013

PART I WRITTEN EXAMINATION

July 11, 2013

at Prometric Testing Centers, Nationwide

2014

Applications Available October 1, 2013

PART II ORAL EXAMINATION REPORT

J. LAWRENCE MARSH, MD, CHAIR



The purpose of the Part II oral examination process is to evaluate candidates' clinical competence through credentialing and examination. Unlike the Part I written examination, which primarily assesses knowledge, the goal of the Part II examination is to assess the application of knowledge. Upon successful completion of the Part II examination, candidates become Diplomates of the American Board of Orthopaedic Surgery and certified for

a period of 10 years. This also marks the beginning of the first maintenance of certification cycle.

The 2012 ABOS Part II oral examinations were conducted July 24-26, 2012 in Chicago, IL. In order to be admitted to the oral examination, a candidate must have successfully completed the Part I written examination, 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. Candidates also must have been in practice for at least 20 months in one location. Candidates are evaluated through a peer review process that includes input from their orthopaedic colleagues, hospital chief of staff, and chiefs of orthopaedics, surgery, anesthesia, operating room nursing staff, emergency room physicians, and radiologists. After reviewing the application and associated information, the ABOS Credentials committee determines which applicants are approved to sit for the Part II examination.

The oral examination allows peer review of the candidate's practice and decision making. The board examiners are volunteer, board certified orthopaedic surgeons. All examiners are required to participate in MOC and the recertification process and have a current ABOS certificate. The examination is based on the 6 month case list submitted by the candidate. The case lists were reviewed in advance and 11 cases selected. The candidates were allowed to delete one case, leaving 10 cases to serve as the basis for the examination. The candidates uploaded their images for the 10 cases and brought supporting documentation to Chicago.

The examination is divided into three 35 minute periods with two examiners in each period. During each examination period, examiners ask the candidate questions related to the selected cases. The examiners also have access to the candidate's practice profile. The specific skills evaluated for each case are data gathering, diagnosis and interpretive skills, treatment plan, technical skill, outcomes, and applied knowledge. There are global evaluations of surgical indications, surgical complications, and ethics and professionalism. Each of the examiners grade the candidate independently. The scores are

adjusted to account for examiner severity. The scores from all of the candidate's examiners are 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.

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.

Over the past several years there has been a definite trend toward digital imaging in hospital and office settings. This trend is expected to continue. Candidates have historically brought hard copy images to the examination. The limited access to hard copy images had made this more burdensome for the candidates. Many candidates had to pay for printed copies of images. Furthermore, the variability in printing methods led to inconsistency in the quality of images available for the examination. There was the additional burden of carrying the material to and from the examination in Chicago. The questionnaires from the 2010 debriefing sessions indicated that 88% of candidates had digital imaging in either their hospital or office. Fifty-six percent had digital imaging in both settings. The verbal feedback strongly supported the use of digital imaging for the examination.

After several years of consideration and extensive preparation, the transition was made to digital imaging in 2011. Candidates are now required to complete the upload of all case images for their 10 cases to a central server in JPEG format approximately 2 months prior to the examination in order to sit for the exam. Images to be uploaded include radiographs, CT scans, MRI's, arthroscopy images, clinical photographs and any other related images. 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 in the process.

The results of the 2012 examination were very similar to prior years. There were 722 candidates and 165 volunteer examiners. Six hundred forty four received passing scores for a pass rate of 89%. The results for 2007 to 2012 are displayed in the table below.

The ABOS Board of Directors are grateful to all of the participants in this voluntary activity. We believe that the oral examination is an essential component of our certification process.

Part II Certification Examination Statistics

	2008	2009	2010	2011	2012
Examinees	669	695	680	662	722
Passes	87%	87%	89%	89%	89%

2013

PART II ORAL EXAMINATION

July 23-25, 2013

at the Palmer House Hilton, Chicago

2014

Applications Available April 1, 2013

The following pages list candidates that have applied for Part II of the certifying examination for 2013.

Military

Ahmadi, Shahryar
Bender, Chad Lee
Dowd, Thomas Charles
Foley, Ryan Patrick
McGill, Robert John
Shupe, Paul Gregory
Triolo, Leah Marie

Alaska

Riedesel, Matthew Kent
Thomas, Kenneth Clemens

Alabama

Estes, Ashley Reed
Goldman, Matthew White
Gullung, Gregory Brinker
Lowe, Jason Allen
Maddox, Jeremiah Jonathan
McGough, Billy Wayne
Min, William
Turki, Hussein Wafik
Ward, Robert Andrew
Wilson, Glenn Lee

Arkansas

Akins, John Parrish
Cordell, Cari Lee
Hoffler, Charles Edward
Howell, James Tennyson
Rauls, Russell Barnes
Smitherman, James Adam
Wallace, Henry Caston

Arizona

Baig, Rafath Ullah
Bastian, Steven Daniel
Bryce, Christopher Daniel
Cercek, Robert Michael
Chhor, Kimberlly Siv
Duggan, Brian Thomas
Ganesh, Vishal Ataish Davendra
Hardy, Jolene Clark
Khera, Oner Ali
Lansing, Letitia Bianca
Lindner, James R
MacQueen, Benjamin Robert
Martin, Shelden Lee
Martineau, David William
Richardson, Nathan Davis
Wild, Jason Randall

California

Andersen, Jaron Ross

Bader, Semon
Boddula, Madhav R.
Bremner, Luke Flynn
Cheung, Yeukkei
Chi, Ying
Chow, Vincent Elliott
Cordero, Gustavo X
Crall, Timothy Scott
Crow, Scott Allen
Cuomo, Anna Vergun
Cyran, Leah T.
Dang, Alexis Bao-Chuyen
Day, Thomas Freeman
Doughty, Kathryn Suzanne
Ehsan, Amirhesam
Elsissy, Peter G.
Emmerson, Bryan Christian
Farac, Randall Alexander
Farn, Eugene Chan
Farris, Charissa Joy
Fayssoux, Reginald Scott
Fraser, Michael Robson
Friedberg, David Ari
Garcia, Ivan Alonzo
Ghodadra, Neil Shailesh
Gogia, Jaspaul Singh
Gonzales, Francis Balquiedra
Hadley, Zachary Scott
Hofer, Jason Kent
Iezza, Alexander Paul
Jones, Sidney Georg
Kabaei, Farzin
Kemper, Dan Daily
Kim, Paul Dohyung
Kinnucan, Elspeth Rose Edwards
Krosin, Michael Tyler
Kwak, Christine M.
Labson, Jerry Dean
LaRose, Connor Raymond
Lee, Arthur Ta-Tzu
Lee, Christopher Sy
Lee, Daniel Jayho
Lee, Ho Hyung
Linthicum, Jonathan Jay
Mahoney, Eamonn Maynard
Moazzaz, Payam
Omid, Reza
Pahl, Michael Anton

Pandya, Nirav Kiritkumar
Pardino, Sydney
Park, Samuel Wan
provus, jason Daniel

Riedel, Barth Bishop
Rotter, Philip Stuart
Sadeghi, Cameron
Smith, Jeremy Scott
Snow, Andrea Louise
Snyder, Garrett Micah
Sohal, Jennifer Kaur Rodriquez
Solhpour, Shahram Shawn
Syed, Hasan
Takenishi, Greg Steven
Tham, Allen
Trainer, Gabriel Tomas
Tweet, Matthew Lee
Varshney, Anuj
Wahba, George Mekhail
Wang, David William
Wickman, Amy Meyers
Young, Jeffrey Lee
Zalavras, Charalampos

Colorado

Borchard, Kevin Scott
Bravman, Jonathan Todd
Faro, Frances Dabney
FitzPatrick, Jennifer Lynne
Hale, Riley Wetzell
Hamman, Daniel Richard
Hartman, Ryan Lee
Kinder, Jeremy ron
Peace, William Joseph
Riley, Jaren Martin
Romero, Alex Anthony
Sears, Benjamin William
Shah, Nirav Rasik

Connecticut

Balach, Tessa
Gordon, Matthew Philip
Moss, Isaac Louis
Pianta, Teresa Jean

Delaware

Atanda, Alfred
Connor, Justin Roy
Lewullis, Gabriel Edward
Nichols, Louise Reid Boyce

Pfaff, William Lenox
Pillai, Gita
Wolf, Christopher Frank

District of Columbia

Schulte, Leah Michelle

Florida

Agudelo-Rivera, Juan Fernando
Albert, Anthony Stanek
Alfonso, Daniel Timothy
Baker, Christopher Earl
Baker, John Eldon
Bansal, Mohit
Barnes, Leslie
Berkowitz, Ezra Ashley
Blake, Deidre Marie
Chen, David Lu
Galloway, Matthew Ryan
Garrels, Kathryn Lee
Goldsmith, Scott Eric
Grandic, Elvis
Gray, Robert Raphael Leggon
Hirshorn, Kurt Clifford
Keen, Jeffrey Scott
Kempton, Laurence Byron
Mai, Matthew Christopher
Malik, Steven W
Manohar, Leslie Murli
Mejia, Hector Alberto
Monderson, Thesselon Warren
Mosley, Emmett Wayne
Nemitz, Jason Thomas
Okafor, Chukwuka Chinedum
Penello, Daniel
Pope, John Burton
Prince, Daniel Eduardo
Rocha, Jason Rene
Rust, Randall Thomas
Stephens, William Bradford
Trocchia, Aron Michael
van der Ven, Alexander
Wade, Allison Muia
Wang, John Lin
White, Laura Elizabeth
Zavoyski, Stephen Richard

Georgia

Arnold, Kali Danielle
Arrington, Terry Lee
Bhatti, Harvinder Singh
Bilotta, Jessica Christine
Cates, Taylor Brandon
Davis, Samuel Morgan
Freidl, Michael Conrad
Hester, Andrew Barrett
Jarrett, Claudius Damien
Katz, David Ian
Kelley, Wayne
Koo, Sam Byungcho
Kunes, Justin Ronald
Lord, Kent Justin
Louis-Ugbo, John
Ludwig, Brian Joseph
Peretz, Jeffrey Isaac
Prather, John Thomas
Price, Julian Paul
Raut, Sourendra
Reto, Javier Alberto
Starnes, Trevor Tyrone
Willimon, Samuel Clifton

Hawaii

Boughanem, jamal
Cabalo, Adam Eulalio
Garber, Alexander Charles
Kaneshige, Jason Riki
Toney, Eugene Asbury

Iowa

Bartelt, Robert Boyd
Bries, Andrew David
Hettrich, Carolyn Marie
Karam, Matthew David
Wills, Brian Philip Donald
Woodbury, Brent Gray

Illinois

Anane-Sefah, Jason Miller
Arndt, Stephen Robert
Bashyal, Ravi Kant
Berry, Michael Richard
Billhymer, Michael Edward
Brasher, Aimee Elizabeth
Chen, Lan
Connor, Jennifer Jean
DeLucia, Tracey Anne
Gardner, Matthew Paul
Hamming, David Edward
Hwang, Raymond Weihau
Kesani, Anil Kumar
Madhav Crawford, Taruna
Mikhael, Mark Michael
Mohan, Vivek

Osuji, Chukwunenye Kamalu
Rahman, Ra' Kerry Kahill
Rimington, Todd Randall
Sasso, Lisa Marie
Shah, Ritesh Rajendra
Sostak II, James Patrick
Srinivasan, Anand
Staron, Jeffrey Scott
Szatkowski, Jan Paul
Techy, Fernando
Wente, Todd Michael

Indiana

Clarke, Sylvan Eugene
Hanna, Jason David
Jain, Neel P
Kellams, Christy Faye
Klitzman, Robert Gerald
Prather, Brad Allen
Tanko, Quentin Kalman
van de Leur, Timothy John

Kansas

Bogener, James Winston
Krempec, Jeffrey Aaron
Pigg, James Scott
Tilley, Michael Brenden

Kentucky

Brey, Jennifer Marie Bergant
Harreld, Kevin Lee
Kakarlapudi, Raj V
McClure, Scott Brennan
Owens, Joshua Burk
Owens, Roger Kirk
Price, Shawn Lamar

Louisiana

Axelrad, Thomas William
Drew, Otis Rashad
Easton, Robert William
Ferachi, David Gerard
Guevara, Benjamin Gray
Houtz, Carlton Gregory
Ladner, Brian Joseph
Penton, Judson Leigh
Stewart, Christopher Manley
Waldron, Sean Robert

Maine

Lemos, David Warren

Massachusetts

Affonso, Jesse
Almacari, Georges
Cha, Thomas D.
Ferrone, Marco

Heyworth, Benton Evans
Kenniston, Julia Anne
Nandi, Sumon
Nascimento, Robert Jaime
Osuch, Daniel Brian
Ryan, Scott Patrick
Shervin, Nina
Shore, Benjamin Joel
Skaife, Tyler Lee
Thompson, Benjamin Michael
Julian
Villafuerte, Jorge Arturo
Weaver, Michael John
Yeh, Peter Cheng-Pin

Maryland

Abzug, Joshua Matthew
Akabudike, Ngozi Moge kwu
Banagan, Kelley Elizabeth
Boulton, Christina Louise
Cervieri, Christina Leigh
Ellison, Adam Covino
Giuliani, Jeffrey Robert
Helgeson, Melvin D
Johnston, Peter Shay
Jones, Angela Eve
Kessler, Michael William
Leu, David James
Martin, Benjamin Donahue
Neviaser, Andrew Shedden
Ojeyemi, Ojedapo Adedamola
Osbaehr, Daryl Christopher
Papp, Derek Francis
Patton, Chad Matthew
Pervaiz, Khurram
Shafiq, Babar
Srikumaran, Umasuthan
Zooker, Chad Chen

Michigan

Bow, Jennifer Katherine
Darwiche, Hussein Fadl
Doppelt, Jason David
Ellwitz, Joshua P
Kohen, Robert Brian
Li, Gertrude Yingyu
Moore, Andrew Michael
Pack, Bryan Jon
Park, Daniel Kwangwon
Tan, Jane Soon-Yuen
Vaupel, Zachary Michael

Minnesota

Cormier, Francis
Courville, Xan Francoise
Hamilton, Abigail Ruth

Holthusen, Scott Myron
Jones, Thomas Robert
Krych, Aaron John
Laine, Jennifer Casey
Larson, Annalise Noelle
Macalena, Jeffrey Alexander
Marek, Daniel Joseph
Redmond, John Michael
Ryssman, Daniel B
Schiffert, Alison Nicole
Signorelli, Joseph John
Tompkins, Marc
Truong, Walter Huu

Mississippi

Barr, Jennifer Sobeski
Bergin, Patrick Finley
Chamblee, Michael Alan
Galjour, George Christopher
Hosemann, Charles Delbert
Kneip, Christopher James
Kosko, John Herrington
Rainey, Richard Douglas
Stronach, Benjamin McKee
Tucker, Joel Asa
Van Osten, George Karl
Wright, Patrick Beaumont

Missouri

Berglund, Lisa Marie
Bormann, Kurt Timmins
Bradley, Matthew Walter
Choi, Luke Seungcho
Efird, Chad Douglas
Glisson, Colleen Elizabeth
Lehmen, Jeff Alan
Lenarz, Christopher James
Merriman, David Joshua
Nawas, Husam Talat
Sanders, Cary Todd
Sherman, Seth Lawrence
Thompson, Matthew Michael
Twiss, Todd Joseph
Wentz, Brock Thomas
Williamson, Michael Robert
Young, Jason Paul

Montana

Gelbke, Martin Konrad
Scheer, Zachary Boyer
Tan, Giselle J

Nebraska

Arnold, Ryan Michael
Beran, Casey Dean
Bergmann, Karl Andrew
Bott, Aaron Michael
Cornett, Chris Alan
Schutt, Shane Alexander

New Hampshire

Ames, James Barr
Davis, Alexander David
Lawless, Bryan Michael
Peelman, Jessica Helen

New Jersey

Bakhos, Nader Anthony
Beiro, Cristobal
Bloomstein, Larry Z.
Crivello, Keith Michael
DeNoble, Peter Hart
Frey, Steven
Greenleaf, Robert Martin
Haynes, Paul Thomas
Kwak, Steve Kim
Landa, Joshua
Lee, James McCarcum
Lu, Michael T.
Monica, James Taylor
Nwachuku, Chinenye Okezie
Pope, Ernest Jeffrey
Ropiak, Christopher R.
Shindle, Michael Kenneth
Van Gelderen, Jeffrey Thomas
Yeger-McKeever, Meira Ziva

New Mexico

Brock, Hugh Samuel
Matt, Victoria
Silva, Selina Rae
Tripuraneni, Krishna Raj

Nevada

Swope, Ryan Wesley

New York

Al-Humadi, Mohaned Adil
An, Yuehuei
Barsi, James Michael
Boettner, Friedrich
Brown, Bennett Howard
Chamas, Firas Malek
Choung, Edward W.
Clark, Lindsey Dolan
Dagly, Kamal Dinesh
Ding, Bryan Char-Hoa
Drakos, Mark Constantine
Ebrahimpour, Prouskh

Gabel, Jonathan Conger
Galano, Gregory John
Gallagher, David Jason
Gordon, Eric Michael
Gould, Jason
Gulotta, Lawrence Vincent
Hishmeh, Shuriz
Iannolo, Maria Theresa
Kaback, Lee Avrum
Karamitopoulos, Mara Selene
Kelmanovich, Daniel Jason
Khan, Fazel Ali
Kubiak, Paul Jan
Lazar-Antman, Meredith Anne
Lebl, Darren Richard
Masini, Brendan David
Mellon, Matthew Birk
Morrison, Elizabeth Mary
Muhlrud, Samantha Ilana
Pearlman, Charles J
Pino, Alejandro Ernesto
Pletka, Joshua David
Raphael, Brad Scott
Ratliff, David Fred
Renaldo, Nicholas Joseph
Roberts, Jared Tyler
Sapienza, Anthony
Shen, Jian
Suslak, Adam G
Verma, Rohit Binod
Vosseller, James Turner
Wasserman, Bradley R.
Wellman, David Stephenson
Zonno, Alan Joseph

North Carolina

Adams, Samuel Bruce
Barwick, James Franklin
Brown, Brian John
Del Gaizo, Daniel John
Erickson, John Michael
Garrido, Ben Javier
Garrigues, Grant Edward
Hallows, Rhett Kendall
Hamid, Nady
Jordan, William Jefferson
MacIntyre, Neil Ross
Martin, Larry
Mather, III, Richard Charles
Melvin, James Stuart
Miller, Anna Noel
Nwoko, Okechukwu E.
O'Neal, Scott Boyd
Papadonikolakis, Anastasios
Parada, Stephen A
Pill, Stephan Geoffrey

Reilly, Rachel Mary
Smith, Asher O.
Solic, John Michael
Walker, Earl William

North Dakota

Carlson, Chad Blake
Juelson, Timothy John
Keene, Roxanne Renae
Sehgal, Bantoo

Ohio

Abbott, James Douglas
Bellisari, Greg Ernest
Bono, Kenneth Thomas
Brady, Megan Anna
Butler, Robert Bryan
Chen, Michael Roy
Coale, Robert Milton
Deering, Scott John
Denning, Jaime Rice
Diulus, Carrie Ann
Finnan, Ryan Patrick
Fitzgerald, Steven John
Foster, Scott Alan
Fowler, Terry Ty
Gillespie, Robert James
Johnson, Eric Matthew
Khan, Safdar Nasim
Lai, Kafai
Little, Kevin James
Miller, Timothy Lee
Murray, Trevor Guy
Nelman, Kyle Ryan
Peters, Paul Gregory
Pierce, Bradley Arthur
Quinn, Daniel Patrick
Rottinghaus, Brian Andrew
Sahai, Vivek
Schnell, Scott Gerard
Shank, Craig Francis
St. Clair, Selvon Francisco
Taylor, Benjamin Craig

Oklahoma

Brantley, Steven Paul
Clowers, Brian Edward
Knutson, Zakary Adam
Ponder, Corey Eugene
Ringus, Vytautas Matas

Oregon

Bauer, Jeremy Paul
Denard, Patrick Joel
Doung, Yee-Cheen
Finter, Erin Elizabeth
Hahn, Michael Patrick

Kranenburg, Andy Jon
Langer, Jakub Stuart
Oji, George Shunrin
Puskas, Brian Louis
Southam, Jodi Dew
Yen Shipley, Nancy

Pennsylvania

Boateng, Henry Aidoo
Chou, Franklin H
Eager, Matthew Robert
Eichenbaum, Matthew Dan
Heckman, Daniel Scott
Jones, Christopher McCarthy
Kwon, Michael Soon il
Lutton, Jeffrey Scott
Mauro, Craig Stephen
Mitchell, Richard Joseph
Pagnotto, Michael Robert
Perricelli, Brett Christopher
Phillips, Jason Charles
Porat, Manny David
Steiner, Andrew Martin
Van Kleunen, Jonathan Paul
Vyas, Dharmesh
Wang, Mark Lin-Yi

Rhode Island

Rubin, Lee Eric

South Carolina

Grabowski, Gregory
Hopkins, Jeffrey Spencer
Horan, Michael Patrick
Jones, Thomas Moss
Lukowski, David Eric
Rodriguez, Marco Antonio
Tanner, Marc Anthony

South Dakota

Adler, Michael James

Tennessee

Arnold, Justin McHenry
Bernard, Matthew Stephen
Cason, Garrick Wayne
Doman, David Michael
Giel, Thomas Vincent
Hommel, Gabriel James
Knight, Cameron Dewayne
Massey, Matthew Bradley
Sethi, Manish Kumar
Torbert, Jesse Taylor
West, Priscilla Ann
Willis, Matthew Parker
Zielinski, Julie Anne

Texas

Ahuero, Jason Samuel
Babbel, Daniel McLain
Badylak, John Stephen
Burns, Travis Carter
Carayannopoulos, Nikoletta
Leontaritis
Cho, Alexander
Coyner, Katherine June
Finn, Mary Foley
Fullick, Robert Kyle
Gary, Joshua Layne
Gibbs, Mark Bennett
Gonzalez, Carlos
Hakim, Victor Nabeel
Heinrich, John Bradfield
Hennessy, Michael Ware
Hubert, Mark Gregory
Iagulli, Nicholas Dominic
Ivy, Amanda Michelle
Johnson, Michael Edward
Kelley, Zachary Lamar
Khazzam, Michael Saul
Kinsler, Alison Ryan
Lesley, Nathan Edwin
Lessner, Mark Andrew
Low, Brandon O'Hara
Maier, Michael Christopher
May, Megan Michelle
McDonald, John Edward
McKay, Scott David
Moen, Todd Christopher
Munz, John Wesley
Murdock, Ryan Christopher
Murray, Matthew C.
Nevitt, Matthew Frank
Niacaris, Timothy Raymond
Ogunseinde, Babajide Afolabi
Pankratz, Karl George
Parameswaran, Angelo Dushi
Patterson, Ryan William
Phelps, Christopher Ian
Piefer, Jason William
Prasarn, Mark Lawrence
Rajani, Rajiv
Rath, Paul Albert
Roberts, Stephen Jan
Samocha, Yigal
Sandu, Cezar Daniel
Schneider, Adam Michael
Serrato, Juan Antonio
Shah, Anup Ajit
Siddiqui, Saqib Armughan
Snow, Brian Joseph
Souder, Nicholas Paul
Stall, Alec Christian

Teunis, Candice Braerman
Thomas, Ryan Blaine
Vanden Berge, Kevin Marinus
Vineyard, Joseph Carmichael
Williams, Nathan Edward
Zavala, John Alexander
Zelle, Boris Alexander

Utah

Bachison, Casey Clifford
Barker, Brady Paul
Brady, John H.
Donigan, Jonathan A.
Hansen, Benjamin Jacob
Jackson, Jeffrey David
Magee, Trevor Hancock
Matthews, Bradford Kelly
Meininger, Alexander Kent
Pelt, Christopher Earl
Poulsen, Matthew Robert
Stock, Gordon Hal
Widmer, Benjamin James

Virginia

Aarons, Chad Elliot
Bulkeley, Julia Arden
Campbell, Michael Andrew
Cooper, William Arthur
Cruz, Aristides Ignacio
Curtin, Brian Matthew
Ebersberger, Marc Lee
Feathers, Todd William
Gaskill, Trevor Ryan
Goyal, Nitin
Hashemi, Ali Reza
Henning, Amy Elizabeth
Kryzak, Thomas John
Matiassek, Matthew Russell
Mo, Fred Fei
Park, Joseph Soo
Petilon, Julio
Reis, Abilio A.
Root, Cassie Gyuricza
Sablan, Nicholas Kapuni
Walker, Matthew Holmes
Walters, Suzanne Jaffe
Wisbeck, Jacob Michael

Washington

Amann, Sean Michael
Byrd, Gregory Dee
Christal, Aric Adrian
Da Silva, Jerome John
Frost, Nathan Lee
Koonce, Ryan Christopher
Laino, Daniel Kenneth

MacDonald, Kevin Michael
Mitchell, Bryan Sean
Moses, Kennett Jessee
Naumann, Paul Eric
Nowak, Douglas Donald
Olson, Soren Lance
Reichard, Alexander Kirk
Roberson, Charles Anderson
Schkrohowsky, Joshua Guenter
Steinman, Suzanne Elise
Tella, Mallik Nalluri
Van Hofwegen, Christopher Jon

West Virginia

Bramer, Michelle Anne
Hahn, Joseph Mitchel
Lindsey, Brock Anthony
Nelson, Matthew Koma

Wisconsin

Hicks, Scott Christopher
Iossi, Michael Franklin
Law, Brian Chun-Wah
Marcu, David Mihai
McCormick, Joseph Charles
Mullin, Timothy Ian
Polga, David Joseph
Rainville, Aundrea Denise
Schubkegel, Todd Andrew
Sylvester, Thomas J
Webber, Nicholas Paul
Wehrly, Lance Jacob

Wyoming

Allaire, Robert Basil
McKenna, Mark Edward
Ryzewicz, Mark Eugene

Guam

Fitzsimmons, Sean Eric
Ragon, William Stansul

Puerto Rico

Foy-Parrilla, Christian Anthony

Virgin Islands

Appleyard, Deborah Van Allen

(President's Report continued from page 1)

The next step is the consideration of a transition to an electronic medical record for the exam. Diplomates can be assured that this multi-year project will involve careful evaluation and testing of any new system prior to implementation.

Lastly, every Orthopaedic Surgeon I have met has been supportive of lifelong learning and advancement of education to benefit his/her patients however, the documentation of these efforts is time consuming. This is where enthusiasm for the effort sometimes falls short. Currently surgeons participate in multiple hospital initiatives including patient satisfaction and communication surveys, patient safety modules, radiation training and infection control certification to name a few. The numbers and topics can vary and depend on local and state requirements. MOC is a lifelong learning pathway with orthopaedic knowledge tools to advance patient care. Recognizing there are many meaningful activities that orthopaedists participate in beyond the traditional courses and meetings, the ABOS is working toward a system to recognize those efforts and provide MOC "credit" for completing meaningful requirements. In addition, the ABOS is exploring innovative ways to help practicing orthopaedic surgeons efficiently record this information for the Maintenance of Certification process. ABOS has partnered with the AAOS on the development of an electronic tool (AAOS/ABOS Transcript Transfer Service) to directly transfer AAOS CME credits to the ABOS, making the documentation less cumbersome.

I am honored to serve as the 59th President of the American Board of Orthopaedic Surgery. Since the inception of the ABOS in 1934, the mission has remained constant: to serve the best interest of the public and the medical profession by setting educational and professional standards for certification. Within this *Diplomate Newsletter* are the details of the work being accomplished by the dedicated ABOS Board of Directors, Volunteers and Staff. I urge you to review its content and to go to the New ABOS webpage WWW.ABOS.ORG for more information and to enroll in the MOC initiative.

Contact Us:

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400 Silver Cedar Court
Chapel Hill, NC 27514
Phone: 919-929-7103
Fax: 919-942-8988
Or Visit Our Website: www.abos.org

(Subspecialty Certificate in Surgery of the Hand continued from page 6)

The ABOS, ABPS, ABS Hand Initial Certification Examination was administered September 10, 2012 at Prometric testing centers across the country. In 2012, there were a total of 121 hand surgeons who took this exam. Of these, 75 were Orthopaedic hand surgeons, 28 were Plastics Surgeons, and 18 were General Surgery Hand Surgeons.

The Fail rate was 0% for ABOS candidates, 18% for ABPS candidates, and 33% for the ABS candidates.

The ABOS, ABPS, ABS Hand Recertification Examination was administered September 10-22 at Prometric testing centers. 9 ABOS candidates, 32 ABPS candidates and 14 ABS candidates took this examination for recertification in Hand only. The fail rate was 11% for ABOS candidates, and 9% for ABPS candidates and 0% for ABS candidates.

The ABOS Combined Orthopaedic and Hand Recertification Examination, consisting of 255 items, was administered September 10-22 at Prometric testing centers. 110 candidates took this exam. The fail rate was 1%. These results are comparable to those from prior years.

(Subspecialty Certificate in Orthopaedic Sports Medicine continued from page 7)

4) Future Direction

The practice profile sports recertification examination was phased out in 2011. As of 2012, those individuals who do not possess a Subspecialty Certificate in Sports Medicine and want to recertify their Primary Orthopaedic Certificate, the following options are available:

- General Orthopaedic Computer-Based Examination
- An oral examination based upon a 6 month case list of the Diplomate
(This will be given by a Sports Medicine exam panel)

The ABOS will work with the ABMS to get approval for an Oral Pathway that will satisfy subspecialty recertification in Sports Medicine in the MOC process. This will give the Diplomate who has a subspecialty certificate in Sports the option of either a written or oral pathway to satisfy both the primary and subspecialty certificate for the remainder of their professional careers.

(Part I Certification Continued from page 8)

The passing standard for the 2012 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 2012 year was identical to the passing standard used in 2009 - 2011 (Scale Score = 170 and Proficiency/Logits Score = 1.12).

The passing rate for United States and Canadian medical school graduates that were taking the examination for the first time examinees was 94.2%. The passing rate for international medical school graduates taking the exam for the first time was 68.7%. Of those examinees repeating the exam, the passing rate for United States and Canadian medical school graduates was 51.4%; for international medical student graduates taking the exam a second or more times the passing rate was 38.5%. The passing rate for the entire candidate pool was 85.1%.

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 0.27. 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 prior years.

The mean p value, or the average percent score of the 2012 examination was 0.76 (76% correct). The performance of the standard group, which consists of the first time examination candidates that are graduates of US and Canadian Medical Schools was similar in 2012 (94% passing rate) and 2009 (94% passing rate); passing rates in 2010 and 2011 were lower (89%). In each of these four years the same passing standard was used (Scale Score 170; Proficiency/Logits 1.12), so candidates in each of these years had the same opportunity to pass the examination. The overall failure rate in 2012 (14.9%) was lower than in 2011 (20.7%). The trend of a slightly worse performance on the Part I Certification examination, which was first observed in 2010 and continued in 2011 was not observed in 2012. The ABOS is actively engaged with organizations across the orthopaedic community to address educational and other factors associated with candidate performance.

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 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 creation of the 2012 ABOS Part I Certification Examination.



**ABOS Board of Directors
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