Chapter 14
Board Certification and Maintenance in Orthopedic Surgery

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An Overview of the American Board of Orthopedic Surgery

Purpose

The mission of the ABOS is to ensure the safe, ethical, and effective practice of orthopedic surgery for the public benefit, through standards for education, practice, and conduct [1]. It does so through its involvement in residency education requirements, and in particular through its programs for certification and maintenance of certification. While it is individual state medical boards that grant a license to practice medicine, the ABOS allows those who practice orthopedic surgery to obtain an additional designation as being board certified. While technically optional, many hospitals and other organizations prefer or require orthopedic surgeons to be either eligible for boards certification, or already certified. In this manner, the ABOS serves as a self-governance organization for the practice of orthopedic surgery in the United States.

History

The ABOS was formed in the 1930s as both American medicine and orthopedics were making a fundamental transformation [2]. The American Orthopedic Association (AOA) had been established in 1887 and was the first formally

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organized body representing orthopedic surgery. The AOA served in part to provide a measure of one's acceptance as an orthopedic surgeon, as membership required several years of practice focusing on orthopedics as well as presenting at its annual meeting. In part to provide an organization with a broader member base, the American Academy of Orthopedic Surgeons (AAOS) was formed in 1933. That same year, the AOA recommended the formation of a specialty board to certify orthopedic surgeons, made up of representatives of the AOA, the AAOS, and the orthopedic surgeon section of the American Medical Association [3]. By the following year the ABOS was incorporated, and in 1936 it published formal requirements for certification. The ABOS is a member of the American Board of Medical Specialties.

The certification requirements at the time the ABOS was founded involved no particular examination or ongoing maintenance. However, applicants were required to have graduated from an AMA approved medical school, have a license to practice in the state of residency, and be an AMA or other approved society member in addition to upholding high ethical and professional standards. Subsequent requirements for a period of residency and independent practice were soon added.

Structure of the ABOS

The ABOS is a nonprofit, autonomous, private organization. Candidates who volunteer for evaluation are reviewed by the Board, and the Board sets the standards for issuing certifications [4]. It also works alongside the Accreditation Council for Graduate Medical Education's (ACGME) Residency Review Committee (RRC) in defining minimal educational standards for orthopedic training [3].

The current structure of the ABOS connects directly to its origin. The Directors are all diplomates, and are elected by ballot slates proposed by three organizations: the AOA, the AAOS, and the AMA Council of Medical Education. The ABOS Directors serve without compensation [4].

How the ABOS Is Different from the AOA and the AAOS

The mission of the ABOS is distinct than the AOA or AAOS. Its purpose is to ensure safe and effective practice of orthopedic surgery for the public benefit, through participating in setting regulations for training and through its certification programs. The AOA is a limited membership organization that is focused on engaging the orthopedic community in developing the leaders, strategies, and resources to help guide the future of musculoskeletal care. Membership is itself an accomplishment, with elected members expected to be accomplished in several domains of leadership, scholarship, and engagement. The AAOS is also a membership organization, with a focus on providing extensive education and practice management services

broadly to the field of orthopedics. Application to become a fellow of the AAOS is open to all trained board-certified orthopedic surgeons. Through its Association and political action committee, the AAOS is also significantly involved in representing orthopedic surgeons in the health policy and regulation advocacy arena. If one were to make a *loose* comparison to the federal United States political structure, the AAOS would represent the House of Representatives (and somewhat the Executive branch), the AOA is rather akin to the Senate, and the ABOS is something between the Judiciary (although each organization has membership review mechanisms) and a regulatory agency.

Board Certification

Overview

While time-consuming and stressful for those going through the certification process or trying to squeeze in Maintenance of Certification (MOC) requirements, board certification in orthopedic surgery has a very rational structure. The formal process begins with a cognitive examination of medical knowledge at the completion of residency training (Part I), and is then followed by a review of candidates' own cases through formal oral case presentations and examination by established diplomates (Part II). Ongoing learning and practice quality is assessed through an organized MOC program.

Part I

The Part I examination is not a focus of this chapter, as residents take this at the conclusion of residency before starting fellowship or independent practice. Its structure is also more familiar to US-trained physicians, due to myriad other multiple choice–based examinations throughout schooling and training. The examination's structure and related literature will be briefly reviewed.

Structure

Part I is a cognitive examination spanning the breath of orthopedic surgery. It is designed to have approximately one-third of questions relate to basic science topics [5]. Care is taken to keep the test of similar difficulty year to year, and about one-third of the questions reportedly come from previous examinations. This examination is not graded "on the curve." Rather it is criterion-referenced, and it is indeed possible for everyone taking it to pass [6]. From 2012 to 2016, the overall failure

rate ranged from 10% to 15%, though for first-time test takers it was between 4% and 7% [7].

The process of creating the examination is formal and time-consuming. The written examination is created by over 40 orthopedic surgeons from around the United States, and the work begins 2 years prior to the examination [5]. By the time a question is used at examination it has gone through five levels of editing, and questions are re-edited every 3–5 years on a rolling basis [6]. One practical result of this laborious process is that it is unlikely that any new literature from within the past year, and certainly not in the past 6 months, would be specifically tested.

After the examination, scores are evaluated for their psychometric properties, and questions considered defective based on psychometrics are removed. It is this process that prevents immediate release of the scores. So as another practical point, if there is a question you just think is wrong, or the right answer not present, it may be better to just move knowing it could ultimately be removed from the examination and unscored.

What We Know About Predictors of Success and Failure in Part I

The question of predictors for passing Part I has been examined by multiple authors. For example, a single large residency program with 19 Part I failures over 15 years noted that residents who failed Part I had lower OITE scores, lower USMLE Step I scores, less honors designation during medical school clinical rotations, and a weaker Deans letter [8]. Another study which examined four programs also noted a moderate correlation between Part 1 scores and both USMLE Step 1 scores and OITE scores (more so in later years of residency) [9]. The practical lesson for residents is that studying for the OITE each year indeed seems to be good preparation for Part I.

Part II

> What could be more valid than examining a candidate with use of his or her own cases? It is truly the best way to measure practice performance. [5]

Part II is designed as a practice-based oral examination. It is meant to assess one's ability to apply in clinical practice the cognitive knowledge tested in Part I. Candidates report all cases to the ABOS for a 6-month period (currently April through September) with diagnoses, procedure codes, and a brief description via an online portal called Scribe. The case lists are finalized by October 31; they are then reviewed by the ABOS and 12 cases are selected for formal presentation. These oral

presentations are structured like case conferences during residency, with a summary provided by the candidate, who then responds to questions posed by examiners. Candidates may select a specific subspecialty for testing after fellowship training, with the expectation that 50% of cases will be within that field. Available subspecialties are hand, spine, pediatrics, sports, adult reconstruction, foot and ankle, trauma, and oncology. By doing so, candidates will be examined by three sets of examiners (two in each group) with at least one examiner in each group a subspecialist in the designated area [10].

Timeline

Timeline of Events Based on the 2018 Examination **[**4**]**

- April 1, 2017: 6-month case collection and applications available online.
- May & June, 2017: Must enroll patients preoperatively or perioperatively with their email addresses, for the collection of patient-reported outcomes.
- October 31, 2017: Deadline for completed application, fee, and 6-month case list.
- February 10, 2018: Deadline to submit additional documents to Credentials Committee if requested.
- April 2018: Letters of admission to examination become available on website for candidates. Candidates allowed to sit for examination have their selected cases posted online.
- June 1, 2018: Deadline to upload images and other records into the Scribe system for selected cases and pay the examination fee.
- July 24–26, 2016: Part II examinations at the Palmer House, Chicago.
- Late August, 2018: Examination results posted online for candidates.

Overview of Rules [4]

- While a candidate must have completed a residency under the rules that existed at the time residency began, candidates must meet all other requirements in effect at the time of application to sit for certification. *Candidates should check the current rules and processes at abos.org.*
- Part I must be completed before Part II. After passing the written examination, candidates have 5 years to take (and if necessary, retake) and pass the Part II oral examination. If Part II is not passed within those 5 years, which does not include time in fellowship, then retaking and passing the written examination is required before being eligible for Part II.
- Twenty months of continuous and active engagement in the practice of orthopedic surgery in one location in the United States, its territories, Canada, or a US

service installation is required. Fellowship time specifically does not count towards this 20-month period.

To sit for the oral examination in the summer of 2018, for example, the absolute latest that one could start practice would be November 1, 2016. One should consider starting no later than October 1, or even mid-September, to leave a buffer for onboarding time and not risk having to wait another year. This rule could also pose problems for those with employed positions, locum tenens, or any change in practice location within the first two years of practice.

- The application to sit for examination must be completed and credentialing accepted and the candidate admitted to the examination.
- Candidates must have a full and unrestricted license to practice medicine in the United States or Canada, or be in full-time practice in the federal government.
- While the minimum number of cases is 35 during the 6-month collection period, in a study of case mix for Part II between 1999 and 2003, candidates averaged between 117 and 129 cases, with between 15 and 17 reported complications [3].
- Candidates must collect all operative cases from all hospitals and/or surgery centers where she or he was the primary operating surgeon, including same-day surgeries, beginning April 1 of the year prior to examination.
- If a candidate is away from practice for 14 or more consecutive days during the collection period, for any reason, the starting period for collection is March 1.
- On examination day, if the candidate or examiner believes there is a conflict of interest then a replacement examiner can be requested.
- Although examiners focus on cases selected, they may also ask about a candidate's case list or practice, and there may not be time to cover all submitted materials or cases.

The ABOS has produced at checklist at: www.abos.org/certification-exams/part-ii.aspx

New in 2017: Patient Reported Outcomes

In several places, the Board notes its right to change rules and procedures at any time and without prior notice. This option was exercised in 2017, when applicants for Part II in 2018 found a brand new requirement to facilitate the collection of patient-reported outcomes (PRO) on patients. Applicants of this cycle are asked to prospectively request email addresses from patients having surgery in May and June and register them in advance through Scribe. Patients may refuse, and young children are excluded. Otherwise, patients receive PRO measures preoperatively (or perioperatively for urgent case) as well as postoperatively. While currently the means in which this information will be used to guide decisions for certification is unknown, the Board notes that such scores can be discussed during oral presentations. As this requirement is new in 2017, the future directions are unclear.

For the applicant, this process is eased by a web link and personalized password such that an administrative assistant or scheduler could ad in email addresses and register patients for the surveys. This is a new and additional requirement, which must be explained to patients, and only highlights the advice to plan additional time during the case collection period to stay up to date on data inputting. Certainly this requirement precludes the option to enter all one's cases into Scribe at the very end of the collection period.

What We Know About Predictors of Success and Failure in Part II

Between 2012 and 2016, 4–14% of candidates failed Part II [11]. There is sparse literature on what predicts difficulties at the examination, though authors with experience within the ABOS have provided guidance [10, 12]. In the context of lower pass rates for candidates listing spine surgery as their specialty or fellowship, a lower score regarding surgical indications contributed substantially [12]. This report noted several specific concerns by examiners during debriefing:

> … poor surgical indications for controversial diagnoses such as low back pain, aggressive surgical procedures without appropriate documentation, doing the same operation for any indication, and inability of a candidate to support his or her decision-making.

Candidates from all subspecialties can benefit from these insights.

At a single residency program with 16 Part II failures over 15 years, it was noted that those who failed Part II had lower OITE scores, lower Step I scores, less honors designation during medical school clinical rotations, and a weaker Deans letter [8]. This is similar to the predictions of failure in Part I. Though the paradigm is different in Canadian orthopedic training, higher OITE scores were correlated there with oral examination marks as well [13]. These studies suggest that while intuition might argue that multiple-choice scores would be less likely to predict oral examination marks, a foundation of medical knowledge and test taking acumen is helpful. More literature on strategies for success on Part II would be a useful addition to the literature and helpful for candidates.

The ABOS has offered five suggestions to Part II candidates [12]:

1. Be able to explain surgical indications in a scientific, thoughtful manner. If procedure relates to a controversial diagnosis, best evidence should be available to support the candidate's surgical decision.
2. Document carefully and fully decisions and justifications for selected cases. Candidates are specifically advised against answering, "I do it this way because that is what I learned in my fellowship."
3. Be prepared to support all decisions for selected cases, whether it is a decision for surgical or nonsurgical treatment.

4. Ensure that documentation and record-keeping are complete and organized for all cases.
5. Candidates should remember that examiners are there to test organizational skills, case preparation, knowledge, and decision-making in accordance with ABOS standards and start from a point of hoping for the success of every candidate.

Trends and Lessons from Candidate Case Lists

Case lists, submitted electronically since 1998, have also provided a nationwide orthopedic database of the care patterns of orthopedic surgeons who aim to sit for board certification [3]. The completeness of these lists is likely, due to records checks and strong motivation for compliance on the part of candidates. However, it is possible that candidates alter practice patterns during the surgical list collection period. In addition to its use for candidate evaluation certification, this database has been utilized for a variety of investigations.

Trends in care patterns have been assessed over time using candidate submitted lists. For example, between 1999 and 2003 the most common procedure was knee arthroscopy, with more than twice as many such cases as the next common procedure (carpal tunnel surgery) [3]. Over time a variety of trends have been noted, such as a transition from open to arthroscopic rotator cuff repair and less isolated subacromial decompressions [14], as well less superior labrum anterior to posterior (SLAP) repairs [15] and less arthroscopic meniscectomies, particularly among nonsports medicine fellowship trained candidates [16]. Candidates reporting trauma fellowships have submitted fewer acetabular fracture cases over time, dropping from an average of 10.1–5.2 between 2003 and 2015 while the number of pelvic ring injury and periarticular fracture cases has remained stable [17]. Another report showed a decreasing percentage of candidates treating femoral neck fractures, which could reflect subspecialization; for younger patients where open reduction internal fixation is indicated, the decreased numbers may also reflect avoidance of difficult cases [18]. The same report also noted increased use of total hip arthroplasty for femoral neck fractures, particularly by those who had completed arthroplasty fellowships, and a separate report noted that arthroplasty-trained candidates performed an increasing number of primary as well as complex revision knee arthroplasties over the course of a decade [19]. It is unknown whether these represent changes in the response to new data on the effectiveness of certain treatments, or active decisions by candidates to avoid potentially controversial indications or complication-prone operations during their case collection period. This concern about altering practice during case collection has been long noted [3].

The data have also been proposed as a means to provide orthopedic surgery residents and educators information on likely future practice [3]. This database has tracked the increasing percentage of candidates reporting fellowship training, rising

to 90% by 2013, and a greater percentage of candidate cases are now within her or his subspecialty area [20]. In the case of orthopedic oncology, the finding that newly trained orthopedic oncologists only had 42% tumor cases over 10 years (35% in the later years) has implications for the subspecialty – both those hosting fellowships and for residents considering an orthopedic oncology career [21]. A more than four-fold rise in candidates with trauma fellowship training has also been reported, likewise with potential implications for workforce planning [17]. Knowing overall trends in the number and range of particular procedures may aid the Board in comparing an individual candidate's numbers against national averages to assess for extremes in either direction [3].

Preparing for Oral Examinations

Routine oral examination plays a smaller role in the United States educational paradigm than in many countries. While anyone sitting for Part II has succeeded against at least a dozen major standardized tests, direct oral examination may be less familiar. Approaches to case collection and presentation that lead to passing have not been systematically evaluated, although members of the ABOS leadership and others have provided advice for candidates.

During Case Collection

For each patient undergoing surgery, a thorough history and physical examination is expected to be documented. "Candidates are graded on how they collect data, how the information was interpreted, the preparation of a differential diagnosis, what was considered in determining a working diagnosis, the formulation of treatment options, the demonstration of technical skills, and the resulting outcome of the ultimate course of action" [5]. While this reflects good practice, it would seem wise to avoid overreliance on templated notes and to document one's thought process and any shared decision-making with the patient. This particularly applies to obtaining informed consent and discussing nonoperative and operative treatment options. Proper follow-up and documentation of end results or progress to date are also important for evaluation, and every reasonable effort should be made to secure patient follow-up.

Surely the clinical practice of orthopedics includes many difficult and unusual scenarios. Regardless of your practice situation, conventional wisdom suggests it is good for morale and one's practice to develop a mechanism for discussing challenging cases. This could be a case conference, indications conference, or something less formal. If such a discussion occurs, that could also be mentioned in a preoperative or operative note. The oral boards examination specifically evaluates operative indications [4, 5], so preoperative review of challenging cases with peers is very

reasonable. At the very least it is an opportunity for you to hear other opinions, and hopefully avoid collective head scratching and statements of "I wish you'd asked my thoughts about this tough case beforehand" from peers when you start practice presentations in the spring.

All imaging will be reviewed, including preoperative and postoperative series. Take time to ensure that appropriate preoperative imaging has been obtained. As we can at times have little control over the quality of immediate postoperative imaging, consider saving important intraoperative C-arm imaging for fracture cases, as this is more within our control [22].

After Receiving Your List

When candidates receive their final case list in April of the examination year, there is a lot of work to be done. Notes must be complied, and imaging and other accompanying materials uploaded. The earlier these documents are collected and draft presentation slides made, the sooner one can start talking to colleagues about the cases. Multiple diplomates stressed the importance of broad case review and presentation practicing as I prepared this chapter. In particular, several commented on reaching out to colleagues beyond one's own institution; each hospital or group has certain entrenched ways of approaching particular clinical situations. By reviewing cases with people in a variety of regions and settings candidates gain a broader sense of anticipated questions and are able to refine the presentations and preparations. For anyone who is interested, perhaps particularly for candidates less able to seek multiple opinions, the Miller Review Course offers a highly rated one-day course that includes mock examinations and feedback.

Candidates should be able to reference relevant literature to defend treatment plans [5]. There is some debate in my discussions about whether specific articles themselves should be cited (at the risk of getting "into the weeds" during a very time-limited presentation), or just summarized to be able to support a specific treatment decision. Either way, given that there are just 12 cases and several months of preparation, it seems a safe course of action to re-review the relevant literature to one's case list. How specific or general one should respond to questions likely depends in part on the particular treatment decision.

Grading System

The Case Evaluation Rubric is readily available in the Rules and Procedures document online [4] and should be reviewed early by candidates. The categories are Data Gathering, Diagnosis and Interpretive Skills, Treatment Plan, Technical Skill, Outcomes, and Applied Knowledge. Each is scored from 3 (Excellent) to 0 (Unsatisfactory) with general descriptions of each being detailed for candidate and examiner review. There is also a Global Evaluation Rubric, which

comprises Surgical Indications, Surgical Complications, and Ethics & Professionalism that is similarly scored and outlined. A failing mean score is less than 2.0 points [12].

During the Examination

The current detailed format for the day of examination processes will be provided. Practical wisdom that has been promulgated is to avoid getting defensive, take responsibilities for complications, and answer questions succinctly with the knowledge that some of the examiners may have written the book on the topic of discussion [22]. Have a clear concise summary of each case, which includes a discussion of the informed consent process and decision for operative vs. nonoperative treatment. It is in your interest to keep the pace moving and get through as many of the cases as possible in order to provide more material for evaluation [22]. Afterwards there is a debriefing section, followed by a widespread recommendation for celebrating having gotten through the day. You will not get results for about a month, so you might as well celebrate!

Resources for Part II

ABOS Website

The ABOS website is the go-to resource, and is the site you will be spending a lot of time on:

- There are recorded videos available online about Part II and using Scribe. You will also receive emails in February/March about free live webinars.

  https://abos.org/certification-exams/part-ii/videos-to-help-prepare-for-part-ii-application-and-examination.aspx
- Up-to-date rules and procedures.
- Statistics on the past several years' worth of examinations.

AAOS Offerings

- Webinar on Part II: Be watching your email or the AAOS Webinar website in January/February for opportunity to register for an information session. There is a fee associated. It can be watched live with a question and answer period, and is then available for registered participants for 30 days afterwards.
- General advice on taking oral examinations http://www.aaos.org/CustomTemplates/Content.aspx?id=6033

Orthopedic Trauma Association (OTA) Advice

The OTA provides advice for residents and fellows, including advice for case collection and more. Among its tips are to book flights and hotels as soon as you know your travel dates, do not check any critical luggage, among other helpful advice. This is definitely worth a read, though it is now a few years old.

- Advice for Part II – http://ota.org/media/87978/part-3-taking-the-exam.pdf

Miller Review Course

As with Part I, the team at Miller Review has an in-person course designed for Part II. Its current structure is a one-day course in which participants present three of their own cases, hear other case presentations and attend seminars. New in 2017 is the option for those anticipating being a candidate the following year to audit the course, as an opportunity to gain information on surgical indications and documentation during the case collection period, and to observe case presentations (http://millerreview.com).

Maintenance of Certification

For those now entering practice, certification is an unending process. And that is by design, though meandering the course has been to reach this point [23]. The ABOS vision is improving the quality of care and outcomes for patients, through competency standards and lifelong education of board-certified orthopedic surgeons. All certificates awarded after 1985 are valid for 10 years and are subject to satisfactory participation in the Maintenance of Certification (MOC) program. The term MOC is preferred over "recertification" to signify a continual process of updating knowledge and skills [23].

Elements of MOC

There are four specific MOC components consisting of evidence of professional standing lifelong learning and self-assessment, cognitive expertise, and performance in practice. Professional standing is evidenced by maintaining a full and unrestricted license to practice medicine, along with privileges at a hospital or ambulatory surgery center in the United States or Canada. The hospital or center itself must be accredited by an ABOS recognized accrediting body. Lifelong learning and self-assessment are one of the major aspects of MOC, in

Table 14.1 Elements of Maintenance of Certification (MOC)

Category	Requirements
Professional standing	Maintaining full unrestricted license
	Maintaining hospital/surgery center privileges
Lifelong learning and self-assessment	Orthopedics-related 120 Category 1 CME, by 3rd year in cycle
	Another 120 CME credits by end of 10-year cycle
	Of these, 20 credits each time (40 total) must be SAE
Cognitive expertise	Examination each 10 years
Performance in practice	Review of case list
	Peer review

Abbreviations: *CME* Continuing Medical Education, *SAE* Self-Assessment Examinations

accordance with the vision of the ABOS. In order to be considered participating in MOC, diplomates are required to submit 120 credits of Category 1 Orthopedic-related Continuing Medical Education (CME) that include a minimum of 20 CME credits of Self-Assessment Examinations (SAE) by the end of the third calendar year of one's 10-year certification cycle [4]. An additional 120 CME credits, of which 20 are SAE, must be submitted prior to scheduling an examination. In total, then, in a 10-year period the requirements are for 240 CME credits, 40 of which are SAE. Cognitive expertise is evidenced through the examinations that are part of ongoing certification every 10 years, in addition to the required SAE as part of CME. Performance in practice may be evaluated by review of a diplomate's case list, and a peer review process that requires responses from at least seven peers, five of whom must be diplomates of the ABOS (Table 14.1).

On the ABOS website, surgeons are designated as to whether they are "Participating in MOC." This has a very specific definition. Diplomates with recently awarded certifications or updated certifications receive the initial designation automatically. To keep this designation, the above required 120 CME credits must be submitted by the end of the diplomate's third calendar year of the certification cycle. If this is not done, the website designation will change to "Participating in MOC: No" until the required CME is submitted [4].

MOC Once-a-Decade Examination

There are two main options for examination at the 10-year mark. The first option is to once again submit a 6-month case list, and apply for an oral examination similar to Part II of the initial certification. This pathway may be appealing for those who work in a focused domain and have little interest in taking a computer-based examination covering topics far removed from his or her clinical practice. There are also situations in which the ABOS may require a diplomate to recertify via an oral

examination pathway, which occurs if peer review has identified questions about a diplomate's practice or if there has been a limitation of surgical staff privileges by a hospital.

More commonly, though, a nonoral examination pathway is chosen by diplomates [4]. There remains a requirement to enter cases into Scribe, but only for a consecutive 3-month period or up to 75 consecutive cases performed, and these case lists do not lead to a case-based examination. Diplomates then take either a General Clinical Computer Examination or a Practice-Profiled Computer Examination. These range between 150 and 175 questions and are taken at a Prometric Center just like Part I, but are only 3 h in length. These tests are criterion-references, which means that all diplomates may pass; there is no set or minimum percentage of test takers that must fail. In addition to the general examination, there are currently seven practice-profiled computer examinations: Adult Reconstruction, Foot and Ankle, Pediatrics, Hand, Spine, Sports Medicine, and Trauma.

Can certification be removed? It absolutely can, and all diplomates are urged to read the entire rules and procedures online for additional information [4]. In addition to failure to comply with the terms and condition of the MOC process, disciplinary action by medical licensing authorities or any felony or "misdemeanor involving moral turpitude" conviction deemed by the Board to have a material relationship to the practice of medicine may result in revocation of certification.

Conclusions

The pathway to Board Certification in Orthopedic Surgery, as developed and periodically updated by the ABOS, should be a point of pride for the profession. Compared with many other specialties, or systems of orthopedic certification I have learned about in peer countries, the US system is rationally structured and of high quality. The evaluation of medical knowledge at the end of residency, combined with review of candidates' own cases in independent practice through an oral examination by established peers, is a comprehensive means of assessing competency. Of course, for those going through the process it is a significant undertaking that is both time-consuming and stressful. Hopefully the information in this chapter sheds some light on the process and provides useful information for candidates. While I have no special knowledge of the process, this chapter was put together in the midst of my own candidacy for Part II – so in the least, I was equally motivated to gather and learn what I could. I am thankful to the many people, applicants and diplomates who leant their experience and opinions on this topic. Finally, among the most important lessons for me was how the rules and processes have changed over time, even in the past few years. Candidates for certification and those in MOC should keep apprised of the current procedures through the ABOS website. Best of luck!

Terminology

- *Board certified*: an orthopedic surgeon currently certified by the ABOS.
- *Board eligible*: an orthopedic surgeon who has passed the Part I examination and is eligible to apply for completing the Part II examination for certification. This status is lost after 5 years if the oral examination is not passed.
- *Candidate*: an orthopedic surgeon applying for board certification.
- *Diplomate*: an orthopedic surgeon currently certified by the ABOS.
- *Maintenance of Certification (MOC):* the process through which diplomates maintain primary certification in orthopedic surgery and are assured for continuing competency.
- *Scribe*: an online program through abos.org where case lists are submitted.

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