

Passing Your Boards: Facts and Myths about the American Board of Ophthalmology Examinations

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1. How are questions for the examinations created and what material is covered?

Questions for the Written Qualifying Exam (WQE) and Oral Examination are created by the American Board of Ophthalmology's (ABO) Examination Development Committee. This committee is composed of dozens of volunteers from every subspecialty of ophthalmology along with ABO Directors. Committee members write questions in their respective areas of expertise. All questions are reviewed and revised multiple times before final vetting at an annual Examination Development Meeting.

All questions in the WQE consist of a statement or question (the "stem") followed by four options, from which the candidate selects the best answer. Subject areas for the WQE include lens and cataract; cornea, external disease, and anterior segment; glaucoma; neuro-ophthalmology; oculofacial plastic, lacrimal, and orbital surgery; pediatric ophthalmology and strabismus; optics and refractive management; retina, vitreous, and intraocular tumors; and uveitis. The WQE is similar to the OKAP examination and includes basic science topics.

Questions for the Oral Examination are known as Patient Management Problems (PMPs). Each PMP consists of a clinical scenario in which the candidate discusses with an Examiner his/her approach to clinical care, just as would be done during a day in the office or operating room. The candidate should succinctly outline the key elements of the history and the clinical examination, a differential diagnosis with the most likely or working diagnosis, the appropriate management options, and other pertinent aspects of the patient's care. More detail about how Oral Examination questions are scored is provided in the next section. Topic areas for the Oral Examination include anterior segment of the eye; external eye and adnexa; neuro-ophthalmology and orbit; optics, visual physiology and correction of refractive errors; pediatric ophthalmology and strabismus; and posterior segment of the eye.

2. Are the examinations "graded on a curve" so that a certain percentage of candidates must pass or fail?

No!

The score required to pass the WQE and Oral Examination are determined by a standard-setting methodology. This requires that a group of peers estimate the minimum level of clinical decision-making and medical knowledge an ophthalmologist requires to practice competently. Both examinations employ a criterion-referenced passing standard, which

means candidates are *not* “graded on a curve.” For every examination administration, it is theoretically possible for all candidates to pass if each achieves a score at or above the passing standard.

The WQE raw scores (number of questions answered correctly on each examination) are transformed to a reporting scale ranging from 200 to 1000, and the passing standard or cut score (minimum score needed to pass) is 700. A scaled score is provided to candidates to indicate their level of performance. A psychometric method, equating, is used to ensure that different levels of question difficulty do not make any one examination harder or easier than any other. All questions that appear on the WQE carry the same weight for the final score. However, the allocation of content among the subject areas is not equal. The content area representation on the examination (test blueprint) is based upon the results of a survey of board-certified ophthalmologists and is consistent from examination to examination. During the past 5 years, the pass rate for first-time WQE candidates has ranged from 87.2% to 96.8%.

For the Oral Examination, the scores for each of the six topic areas are averaged to arrive at an overall score. The number of PMPs delivered within a single topic area is varied, as some PMPs are more complex and take longer to administer. To pass the examination, a candidate’s overall average score across the six equally-weighted areas must be higher than the passing standard. Although a passing score in all topic areas is not required to pass the examination, candidates who are not successful in passing the Oral Examination are required to repeat the entire examination. Results of the Oral Examination are provided as pass or fail only. During the past 5 years, the pass rate for first-time Oral Examination candidates has ranged from 72.5% to 87.4%.

Each PMP is scored objectively through the use of a standardized grading rubric. The candidate is assessed on data acquisition, diagnosis, and management.

- **Data Acquisition:** Recognition by the candidate of depicted abnormalities and diseases that affect the eye, ocular adnexa and the visual pathways is evaluated. Candidates are asked for historical information and examination data that might be obtained on a patient with a particular condition depicted or described.
- **Diagnosis:** The ability of candidates to synthesize historical information, clinical examination findings, and laboratory data and formulate a relevant differential diagnosis and arrive at the correct diagnosis is assessed.
- **Management:** Candidates are expected to provide an appropriate plan for medical and/or surgical management of patients with the condition depicted or described and be able to discuss the prognosis and/or relevant therapeutic complications.

3. What should I expect at the examinations?

The WQE is offered once annually in September (previously in March). The WQE consists of 250 multiple-choice questions administered via computer at Prometric testing centers nationwide. The testing time is 4 hours and 30 minutes, divided into two sections that are up to 2 hours 15 minutes each. When a test section closes, the candidate may not return to it. If a candidate requires an unscheduled break during the examination, the examination clock does not stop. Accommodations are available for candidates with disabilities and for nursing mothers.

The ABO has transitioned from two Oral Examinations per year (spring and fall) to one per year in March in Phoenix. The Oral Examination is a face-to-face assessment during which practicing, board-certified ophthalmologists (who function as as Examiners) present a series of Patient Management Problems (PMPs) and assess how the candidate would manage each clinical scenario. The entire examination takes approximately a half-day to complete. The examination is divided into six sessions that are each 25 minutes long and focused on two topic areas. The candidate moves through the six sessions during 5-minute breaks, transitioning from room to room along a row of office-like suites. iPads are used to to view each PMP, which often contain images or videos. Each session contains up to 10 PMPs. The Examiner is responsible for ensuring that candidates complete the necessary material for the examination. The Examiners are instructed to adopt a neutral, deadpan, poker-faced demeanor so that the examination is as standardized as possible for each candidate. There is frequently more than one Examiner in a room, and a Panel Leader (typically a current or emeritus Board Director) may or may not enter the room during an examination. Be assured that there are no secret signals or codes that the Examiners telegraph to the Panel Leaders about the candidate's performance! The Panel Leader's role is to provide a brief orientation, to secure smartphones or watches that candidates may have accidentally brought to the exam, to manage the flow of candidates between examination rooms, to ensure proper grading, and, perhaps most importantly, to grade the examiners to ensure that they are conducting the examination appropriately. As with the WQE, accommodations are available for candidates with disabilities and for nursing mothers.

In the unlikely event that a technical issue occurs during the Oral Examination, ABO Staff are immediately available to help resolve the problem and resume the examination. ABO Staff are also on-site to assist candidates with the registration process and to answer questions.

4. Are there tactics to avoid in the Oral Examination?

Yes. Since it is important for the candidate to address the key features of each Patient Management Problem, the 25 minutes for each session should be used wisely and efficiently. As such, there is no need to state the obvious, e.g., "This is a slit lamp photograph" or "I would perform a complete ophthalmic examination." Stalling is not in the

candidate's best interest, nor is a "data dump" – a rapid and wide-ranging commentary with little relevance to the PMP.

Please know that it is not possible to skip a PMP and return to it later in the session. If an Examiner senses that the candidate is lost and is unlikely to find his/her way back to the correct path despite gentle, guiding questions, the Examiner may encourage the candidate to move on to the next PMP. Similarly, if it is clear to the Examiner that the candidate is sufficiently knowledgeable about a PMP, s/he may suggest that the candidate move on. This is done to help the candidate get through as many PMPs as possible, in the candidate's best interest.

5. Is it necessary to take an exam prep course?

Everyone who successfully meets the ACGME milestones during residency should have the knowledge and experience to pass the ABO examinations. In contrast to examinations of a generation ago, which were not psychometrically standardized and during which virtually any question could be asked, all questions nowadays are based on material in the American Academy of Ophthalmology's Basic and Clinical Science Course. The OKAP examination should help residents identify areas for improvement in preparation for the Written Qualifying Examination, in particular.

Any ophthalmologist who serves as an ABO question-writer or Examiner is prohibited from disclosing any content about the ABO examinations and from participating in "mock orals." However, the ABO encourages residents and candidates to quiz each other under timed conditions to become comfortable with succinctly describing how to manage various clinical scenarios.

6. Why does it take several weeks for examination results to be mailed?

Candidates often wonder why the results of a computerized examination cannot be disclosed immediately after the testing session. However, the performance of each question is analyzed following the examination to identify outliers. For instance, a question that is appearing on an examination for the first time may be answered incorrectly by a higher percentage of candidates than anticipated. Another example may be if a photograph or a video is misinterpreted by a significant number of candidates. In such situations, the question may be eliminated and the entire examination re-scored. Examination validity and reliability are paramount to ensure the integrity of the board certification credential.

7. What plans are afoot for the examinations?

The ABO continually evaluates options for improving its examinations, often based on suggestions from candidates as well as the hundreds of our dedicated volunteers. As mentioned above, the certification timeline has been compressed so that a newly

graduated resident may, if desired, sit for both the WQE and Oral Examination within nine months of graduation (rather than 16-24 months as has been the case for many years). The Oral Examination, starting in March 2020, will be conducted in an office suite setting rather than in a hotel room. The ABO has developed a new training program for Oral Examiners to improve consistency between sessions, and the form that Panel Leaders use to assess the Examiners will be available on-line. We hope to offer webinars for candidates to help them prepare for the examinations. Finally, the ABO is weighing the pros and cons of conducting the Oral Examination on-line to eliminate reduce expenses and keep examination fees as low as possible.

8. Why are examination integrity and security so important?

The ABO is committed to ensuring the validity and integrity of its certification decisions, which are based on examination results. Security of the ABO examinations is essential, and scores should accurately reflect a candidate's fund of knowledge. Unauthorized access to information about ABO examinations, whether intentional or inadvertent, may create an unfair advantage for a candidate. Recall and disclosure of questions during or after the examination is forbidden, and candidates agree to maintain strict confidentiality of ABO examination content. All examination materials are the sole property of the ABO and subject to copyright protection.

9. Why do the examinations cost what they do?

As anyone who has volunteered as a question-writer or Oral Examiner will attest, creating and administering high-quality examinations is far more labor-intensive and costly than one might imagine. In addition, the ABO conducts multiple other functions to fulfill its mission "to serve the public by certifying ophthalmologist through the verification of competencies." Details about the ABO's finances are available through our web site or through the ABO office.

The ABO, the public, and our profession benefit greatly by the extraordinary service of hundreds of volunteers, especially Oral Examiners who pay their own way to the examination and are not otherwise compensated. Nearly all of the ABO's operating revenue comes from examination fees, so their commitment helps to keep fees relatively low compared with other certifying boards.

Please help us keep fees as low as possible by ensuring the confidentiality and integrity of the certification process. Thank you.