AMERICAN ACADEMY™ OF OPHTHALMOLOGY

History of the American Board of Ophthalmology Oral Examination

Nancy A. Hamming, MD,[1,2,3] *Lanning B. Kline, MD,*[1,4] *John C. Keltner, MD,*[1,5] *James C. Orcutt, MD, PhD,*[1,6] *Martha J. Farber, MD*[1,7]

The oral examination has been an integral part of certification by the American Board of Ophthalmology (ABO) since its founding in 1916. An overview is provided regarding the history, evolution, and application of new technology for the oral examination. This part of the certifying process allows the ABO to assess candidates for a variety of competencies, including communication skills and professionalism. *Ophthalmology 2016;123:S20-S24 © 2016 by the American Academy of Ophthalmology.*

The American Board of Ophthalmology (ABO) oral examination has been an integral part of the certification process for the past 100 years. Although a written examination and patient logs have been used to determine competence to practice, the oral examination has been the process by which we evaluate clinical assessment and management of patients. This experience is one remembered by all board-certified ophthalmologists, often with great angst.

The examiners and directors who administer this process are dedicated clinicians who donate their time and expertise to support the profession and are trained carefully to evaluate the candidates, who are new ophthalmologists embarking on their careers. Professional self-regulation of our profession has always been at the forefront of board certification. The oral examination has evolved over the past century in an effort to improve the testing environment for candidates as well as to ensure the psychometric validity of the examination process.

Early History, 1916–1965

In a letter dated February 2, 1916, ABO founder Dr. Alexander Duane wrote to fellow founder Dr. Walter Lancaster, "If a man can present credentials showing that he has pursued a satisfactory course in ophthalmology, has devoted sufficient time to this subject, and has covered sufficient ground in it, we could well afford to make our examination less searching as regards particulars…. This can be determined much better by oral examination than by a written examination." In a December 1919 American Board for Ophthalmic Examinations brochure, a protocol was delineated to establish board certification. Some applicants were granted certification based on their reputation and preeminence in the field of ophthalmology. Different requirements were listed for those who had been in practice for more than 10 years, 5 to 10 years, and fewer than 5 years. After evaluating patient logs, clinical experience, and publications, some candidates were granted certification, whereas others were required to enter into an examination process.

The components of the practical or oral examination were (1) external examination, (2) ophthalmoscopy ("Candidates are required to bring their own ophthalmoscopes that they might not suffer the handicap of an unfamiliar instrument."), (3) errors of refraction, (4) testing of the ocular muscles and fields, (5) relation of ocular conditions to disease, (6) therapeutics, and (7) laboratory examination (pathology). It was noted at the end of this summary: "As the teaching of ophthalmology improves, more of this practical laboratory work will be required, including work in anatomy, physiology, optics, bacteriology, and pathology."

The first oral examination was held December 13 and 14, 1916, in Memphis, Tennessee, coincident with the meeting of the American Academy of Ophthalmology and Otolaryngology. The examination was held in a hospital clinic and candidates were tested using actual patients. Although it was considered an honor to serve as the site for the examination, patients and facilities were needed for the examinations, and the clinic was closed for the day. The number of applicants for board certification gradually increased, such that after the first 10 years, 545 certificates had been awarded. Examiners observed the candidates as they interacted with patients and provided assessment of the candidates' clinical findings, diagnosis, and proposed treatment. Candidates rotated to the next patient and a new examiner. The director participated in the questioning and ultimately determined the grade. Pathology was an important component of the examination. Microscopes were provided so that candidates could observe and describe the anatomic aspects of disease.

Surgical competency was assessed using cataract extraction on a pig or kitten eye fitted into a face mask. The incision was made with a Graefe knife, and according to Robert Shaffer's *History of the American Board of*

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Ophthalmology 1916–1991, the candidate "was often so unnerved that he experienced world-class tremors."[1]

Oral Examination, 1965—2015

By 1965, the number of candidates increased to the point where hospital clinics could no longer accommodate the examination process. In addition, because the clinics were closed during the examination, the lost revenue contributed to a situation that was no longer tenable for the host institution. The ABO made the decision to relocate the oral examination to hotels at various locations across the country. In some years, 1 examination was held, but more commonly 2 examinations each year were administered, one usually in an East Coast or Midwest location, and the other in a West Coast location.

With patients no longer available for examination, a series of simulated patient descriptions or "props" were developed in different subject areas (Fig 1). After the presentation of a brief patient history and clinical photographs, the candidate was asked what additional historical and examination information would be helpful and to provide a likely diagnosis and differential, an approach to management (medical, surgical), as well as a prognosis. Seven subject areas were included in the examination: histopathology, refraction, surgery, medical ophthalmology, neuro-ophthalmology, motility, and external disease. In addition to photographic props, other equipment also was used, including microscopes, lenses, trial frames, radiographs, optical equipment, and charts. Microscopes were abandoned in the mid 1960s when the logistics of equipment and set up became too burdensome.

The examination required 2.5 days, with 3 subjects tested on each of the first 2 days and a single subject tested on the third day. Candidates gathered in large hotel rooms and waited for their names to be called for examination. Many candidates continued to study while waiting, prompting even more anxiety among the group. Before each examination, candidates were queried to see whether they knew the examiner or director. By professing acquaintance, candidates could avoid specific examiners or directors who had developed a reputation for being harsh.

In 1981, the decision was made to reduce the number of subjects tested from 7 to 6 and to complete the examination in 2 days. Pathology was integrated into the other 6 subject areas: optics, anterior segment, neuro-ophthalmology, posterior segment, pediatric ophthalmology and strabismus, and external disease and adnexa. The elimination of a separate section on pathology created concern that there would be a decrease in competence in this subject.

In an effort to standardize examinations as much as possible, prop books were developed in each subject area. Candidates' books included photographs and a brief history, whereas the examiners' books included the expected candidate responses. Basic information was included to help guide an examiner in deciding whether a candidate's performance warranted a passing grade. The director rotated among the rooms and typically spent more time with candidates considered to be marginal or failing. The examiner often had a predetermined signal to let the director know of the candidate's performance. One example was the so-called matchbook signal. (Before the 1980s, smoking was common during an examination.) If the matchbook was open, the candidate was not doing well; if it was closed, the candidate was passing that portion of the oral examination. If a candidate failed in a subject, the reasons were provided to the ABO office. Although standardization was the ideal format, if a candidate was outstanding, an examiner often increased the difficulty of the questions to challenge the exceptional person. A candidate who failed 1 or 2 subjects was required to retake only those subjects at a future examination. If more than 2 sections were failed, the entire examination was repeated. If a candidate failed the oral examination twice (later 3 times), he or she had to return to take the written examination again before qualifying for the oral examination.

In 1987, the ABO established a panel appointment system for candidates, allotting 25 minutes for each of 6 examinations. With 5 minutes between each examination, the

Figure 1. The large prop books containing questions for the oral examination that described a variety of clinical scenarios.