



AMERICAN OSTEOPATHIC ASSOCIATION

**Basic Standards for
Residency Training in
Ophthalmology**

**American Osteopathic Association
and**

**American Osteopathic Colleges of Ophthalmology
and Otolaryngology Head and Neck Surgery**

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**Basic Standards for Residency Training
In Ophthalmology
TABLE OF CONTENTS**

I. Introduction.....	3
II Mission.....	3
III Educational Program Goals	3
IV Institutional Requirements.....	3
V Program Requirements and Content.....	5
Program Requirements.....	5
Transfers & Advanced Standing.....	5
Program Content.....	5
Osteopathic Philosophy & Manipulative Medicine	5
Medical Knowledge	5
Patient Care.....	6
Interpersonal Communication Skills.....	6
Professionalism.....	6
Practice-Based Learning and Improvement.....	6
Systems-Based Practice	7
Ambulatory Clinic.....	7
Surgical Experience.....	7
Program Rotational Requirements	8
VI Program Director and Faculty	9
Program Director.....	9
Faculty.....	9
VII Resident Requirements.....	10
VIII Evaluation	11

I - INTRODUCTION

These are the Basic Standards for Residency Training in Ophthalmology as established by the American Osteopathic Colleges of Ophthalmology and Otolaryngology Head and Neck Surgery (AOCOO-HNS) and approved by the American Osteopathic Association (AOA). These standards are designed to provide the osteopathic resident with advanced and concentrated training in ophthalmology and to prepare the resident for examination for certification in Ophthalmology by American Osteopathic Boards of Ophthalmology and Otolaryngology-Head and Neck Surgery (AOBOO-HNS).

II- MISSION

The mission of the osteopathic ophthalmology training program is to provide residents with comprehensive structured cognitive and clinical education that will enable them to become competent, proficient and professional osteopathic ophthalmologists.

III – EDUCATIONAL PROGRAM GOALS

The goals of the osteopathic Ophthalmology program are to train residents to become proficient in the following core competencies:

- A. Osteopathic Philosophy and Osteopathic Manipulative Medicine: Integration and application of osteopathic principles into the diagnosis and management of patient clinical presentations.
- B. Medical Knowledge: A thorough knowledge of the complex differential diagnoses and treatment options for the patient with ophthalmic disease and the ability to integrate the applicable sciences with clinical experiences.
- C. Patient Care: The ability to rapidly evaluate, initiate and provide treatment for patients with acute and chronic ophthalmic conditions in both the inpatient and outpatient settings as well as promote health maintenance and disease prevention.
- D. Interpersonal and Communication Skills: Use of clear, sensitive and respectful communication with patients, patients' families and members of the health care team.
- E. Professionalism: Adherence to principles of ethical conduct and integrity in dealing with patients, patients' families and members of the health care team.
- F. Practice-Based Learning and Improvement: Commitment to lifelong learning and scholarly pursuit in Ophthalmology for the betterment of patient care.
- G. Systems-Based Practice: Skills to lead health-care teams in the delivery of quality patient care using all available resources.

IV – INSTITUTIONAL REQUIREMENTS

- 4.1 There must be a minimum volume of seventy-five (75) major ophthalmic surgical cases per year for each resident in training.
- 4.2 The institution's department/section of Ophthalmology shall have at least one (1) physician certified in Ophthalmology by the AOA and a second physician certified in Ophthalmology by the AOA or the American Board of Ophthalmology.
- 4.3 The program must maintain a list of learning objectives to indicate learning expectations at yearly training levels and provide it to the residents annually.
- 4.4 The program must maintain a written curriculum and provide it to the residents annually. Sample curriculum is available at www.aocooohns.org.

- 4.5 The institution must provide a supervised ambulatory site for continuity of care training. Institutional clinics or Ophthalmologists' offices may be used.
- 4.6 The institution/program must maintain a file for each resident containing, at minimum:
 1. Ambulatory logs;
 2. Procedure logs;
 3. Monthly rotation evaluation forms;
 4. Quarterly program director evaluations;
 5. Semiannual ambulatory evaluations;
 6. Semi-annual reviews
 7. Ophthalmic Knowledge Assessment Program (OKAP) exam scores
- 4.7 The institution must provide the time and resources for each resident to attend the Annual Clinical Assembly or another educational program sponsored by the AOCOO-HNS at least once during their residency.
- 4.8 The institution must arrange for each resident to take the annual Ophthalmic Knowledge Assessment Program (OKAP) exam.
- 4.9 The program must be represented each year at the annual AOCOO-HNS Program Directors Work Shop and annual College sponsored Faculty Development Course.

V - PROGRAM REQUIREMENTS AND CONTENT

A. Program Requirements

- 5.1 The residency training program in Ophthalmology must be thirty-six (36) months in duration.

B. Transfers and Advanced Standing

- 5.1 The program must receive documentation from previous program director confirming that the resident has achieved a specific level of training, and receive an endorsement from the new program director recommending advanced standing for a specific block of time.
- 5.2 The program is required to provide verification of residency education for residents who may leave the program prior to completion of their education.
- 5.3 Requests for advanced standing and time allotted for such requests shall be considered on a case-by-case basis. The AOCOO-HNS Council of Medical Education shall review all applications and make recommendations. Advanced standing credit is applicable only for training received at the institution immediately prior to the program to which the resident is requesting transfer.

C. Program Content

- 5.1 Osteopathic Philosophy & Manipulative Medicine
 - a. Training in osteopathic principles and practice must be provided in both structured educational activities and clinical formats.
 - b. Residents must complete an OPP/OMM curriculum.
- 5.2 Medical Knowledge
 - a. The formal structure of educational activities must include monthly journal clubs.

- b. The formal structure of educational activities must include structured faculty didactic participation.
- c. Attendance at required educational activities must be documented.
- d. Residents must participate in structured Ophthalmology educational activities throughout their training program, including during the OGME-1 Year.
- e. Each resident must participate in Ophthalmology board review, either in the form of an ongoing program, or by the program sponsoring the resident's attendance at an Ophthalmology board review course.
- f. By the completion of the Ophthalmology residency program, each resident must have completed a formal basic science course (at minimum 100 hours) and demonstrate competency in the basic sciences, medical and surgical knowledge in the following areas:
 Medical, surgical and laser training in Ophthalmology, including basic sciences, optics, refraction, contact lenses, and low vision, ocular inflammations, uveitis, and ocular tumors, retina and vitreous, Neuro ophthalmology, pediatric ophthalmology, external diseases and cornea, glaucoma, ocular and adnexa trauma, cataracts and anterior segment surgery, oculoplastics, refractive surgery, laser therapeutics, and general medicine as it applies to Ophthalmology.

5.3 Patient Care

- a. The resident must have training and experience in comprehensive histories and physicals, including structural examinations, with emphasis on the eye and related systems.
- b. The resident must have training and experience in the following surgical procedures: Cataract with IOL, Eyelid malposition; Strabismus Glaucoma procedures including laser, Retinal procedures, and Corneal procedures to include, at minimum: indications; contraindications; complications; limitations and evidence of competent performance.
- c. The resident must have training and experience in the interpretation, indications, contraindications and complications of Fluorescein angiogram, A and B scan ultrasound, OCT and/or HRT, Visual fields, Biometric calculations, Pachymetry, Refraction, Retinoscopy, Tonometry, Direct and indirect ophthalmoscopy, Gonioscopy, Keratometry, Slitlamp biomicroscopy and Evaluation of ocular motility.
- d. The resident must have training and experience in the interpretation of facial x-rays, CT scan, MRI, ultrasound and other imaging modalities.
- e. The resident must have training and experience in airway management, resuscitation, local/regional anesthesia, sedation; universal precaution techniques, operative intervention, and preoperative and postoperative care.
- f. The resident must have training and experience with state-of-the-art advances and emerging technology that may be needed in future practice settings.

5.4 Interpersonal and Communication Skills

- a. The resident must have training in communication skills with patients, patient families and other members of the health care team, including patients with barriers to communication, such as sensory impairments, dementia, language and cultural differences.

5.5 Professionalism

- a. The resident must have training in health care disparities.
- 5.6 Practice-Based Learning and Improvement
- a. The resident must have training in teaching skills.
 - b. The resident must have training in the use of electronic health records.
 - c. The resident must have learning activities and participation in quality improvement processes.
 - d. The resident must have learning activities in medical research throughout the program including, at minimum: research types and methodology; biostatistics; health services research and interpretation of medical literature.
 - e. The resident must complete scholarly projects as required by the AOCOO-HNS and approved by the program director.
- 5.7 Systems-Based Practice
- a. The resident must have training in practice management.
 - b. The resident must have training in health policy and administration.

D. Ambulatory Clinic

- 5.1 The training site must provide for general Ophthalmology patient care where residents can function as the primary caregiver for patients on an ongoing basis (Continuity Clinic). The site may be in a clinic (free-standing or in-hospital) or in a private practice setting.
- 5.2 The resident's continuity clinic training must be under the supervision of an Ophthalmologist.
- 5.3 There must be participation between the supervisor and the resident including, at minimum, evidence that all cases are discussed and that all charts are reviewed and signed by the supervisor.
- 5.4 The ambulatory experience must take place a minimum of one-half day a week, 36 weeks per year.
- 5.5 The training site must provide specific educational training and experience in ambulatory care.
- 5.6 The resident must be exposed to the medical and surgical diagnoses found in a general Ophthalmology practice.
- 5.7 The resident must be taught to apply the concepts of disease prevention and health maintenance.
- 5.8 Specific ambulatory clinic logs must be maintained and contain, at minimum: patient identification; diagnosis and the activity and/or procedures performed on each visit.
- 5.9 The resident must be scheduled to see at minimum, four patients, on average, per half-day period.
- 5.10 The resident must develop a continuity panel of patients in the ambulatory clinic.
- 5.11 An opportunity must exist for the resident to participate in the ongoing care of his/her clinic patients when they are hospitalized and/or undergo surgery at the base hospital facility and through all phases of their care.

E. Surgical Experience

- 5.1 Residents must have major technical and patient care responsibilities in surgery (including laser surgery). Each resident must perform as primary surgeon at least the following required number of operative procedures prior to graduation:
- | | |
|---|----|
| a. Cataracts with IOL's | 50 |
| b. Eyelid Malposition
(Entropion, Ectropion, Blepharoplasty, Ptosis, etc.) | 25 |
| c. Strabismus (Muscle cases) | 15 |
| d. Glaucoma Procedures
(Including lasers) | 15 |
| e. Retina Procedures
(Including surgery and laser) | 15 |
| f. Cornea Procedures
(Pterygia, keratectomies, corneal transplants, etc) | 3 |
- 5.2 The program director is responsible for verifying the surgical experiences of each resident, to include the number of cases in each category where the resident has served as the primary surgeon or the assistant surgeon (surgical logs).
- 5.3 Equivalent distribution of categories and procedures among the residents must be demonstrated. Significantly unequal experience in volume and/or complexity of cases managed by the residents will be considered serious noncompliance with these requirements.

F. Program Rotational Requirements

- 5.1 The internship preliminary year (OGME-1P) training must contain the following required elements:
- 3 months Internal Medicine;
 - 2 months Neurology/Neurological surgery;
 - 1 month surgical subspecialty (ophthalmology, neurological, maxillofacial, vascular, ENT/facial plastic, plastic, general);
 - 1 month medical subspecialty (pulmonary, neurology, dermatology, gastroenterology, rheumatology, family medicine, internal medicine);
 - 1 month Radiology/Neuroradiology;
 - 1 month Emergency Department/Trauma;
 - 1 month Intensive Care Unit;
 - 1 month Ophthalmology;
 - 1 month Elective (from surgical subspecialty or medical subspecialty lists above).
- 5.2 During OGME-2 - OGME-4 residency training years the resident must have training and experience in the following specialty areas:
- Optics, refraction, contact lenses, and low vision;
 - Ocular inflammation uveitis, and ocular tumors;

- c. Retina and vitreous;
 - d. Neuro ophthalmology;
 - e. Pediatric ophthalmology;
 - f. External diseases and cornea;
 - g. Glaucoma;
 - h. Ocular and adnexa trauma;
 - i. Cataracts and anterior segment surgery;
 - j. Oculoplastics;
 - k. Refractive surgery;
 - l. Laser therapeutics;
 - m. General medicine as it applies to ophthalmology.
- 5.3 During OGME-2 - OGME-4 residency training years the resident must have rotations in the following specialty areas under the supervision of qualified specialists. Minimum duration of training in specialty areas is:
- a. Pediatric Ophthalmology, 2 months
 - b. Retina, 2 months
 - c. Neuro-Ophthalmology, 1 month
 - d. Cornea, 1 month
 - e. Glaucoma, 1 month
 - f. Plastics, 1 month
 - g. Comprehensive-Ambulatory, 24 months

VI – PROGRAM DIRECTOR AND FACULTY

A. Program Director

- 6.1 The program director must be certified in Ophthalmology by the AOA through the American Osteopathic Boards of Ophthalmology and Otolaryngology-Head and Neck Surgery.
- 6.2 The program director must have a minimum of three (3) years of clinical experience in Ophthalmology following certification by the AOA or request special consideration by the AOCCO-HNS Council of Medical Education;
- 6.3 The program director must be in active clinical practice in ophthalmology.
- 6.4 The program director's authority in directing the residency training program must be defined in the program documents of the institution.
- 6.5 The program director must comply with procedures and requests of the Council on Medical Education.
- 6.6 The program director must have compensated dedicated time to administer the training program.

- 6.7 The program director must submit an annual report for each resident TO THE AOCOO-HNS and review it with the resident. Annual Reports must be submitted within 30 days of training completion.
- 6.8 The program director must attend the annual AOCOO-HNS Program Director Workshop, held during the Annual Clinical Assembly (ACA), at a minimum of once every other year. In the intervening years, the program director must assign a designee who is actively involved in the training program, to attend the workshop in his or her place.
- 6.9 The program director must attend the annual AOCOO-HNS-sponsored Faculty Development Course as follows: the program director must attend two (2) out of three (3) programs and assign other faculty involved in the training program to attend one (1) out of five (5) annual faculty development programs.
- 6.10 The program director must notify the AOCOO-HNS of the resident's entry into the training program and the names of all residents in the program by submitting a resident list annually on a form furnished by AOCOO-HNS.
- 6.11 The program director must maintain an e-mail address and provide it to the AOCOO-HNS.
- 6.12 The program director must arrange for the residents to take the Ophthalmic Knowledge Assessment Program (OKAP) examination on an annual basis and to provide, each year, the test results to the AOCOO-HNS Council of Medical Education.
- 6.13 The program director must review the results of the annual Ophthalmic Knowledge Assessment Program (OKAP) examination with each resident by the end of the training year.
- 6.14 The program director has the responsibility and authority to promote a resident.
- 6.15 The program director has the responsibility to designate the resident as training complete.

B. Faculty

- 6.1 Faculty must maintain current certification or be board eligible by the AOA or appropriate allopathic board agency.
- 6.2 Faculty must make available non-clinical time to provide instruction to residents. Faculty must participate in the academic educational programs such as formal lectures, case conferences, journal clubs, book clubs, and board review.

VII – RESIDENT REQUIREMENTS

- 7.1 The resident must maintain and accurately complete records of their educational activities in the required surgical log format.
- 7.2 Surgical logs must be recorded from surgery performed at the base and affiliate sites, and must be reviewed and verified semi-annually by the program director.
- 7.3 The surgical logs must document the fulfillment of the requirements of the program, describing the scope, volume, and variety and progressive responsibility of the resident.
- 7.4 The residents must submit the year-end annual surgical log to the program director within thirty (30) days of completion of each training year.
- 7.5 The curriculum must advance residents' knowledge of the basic principles of research through scholarly activity. Scholarly activity is required of all residents during their training. Scholarly activity entails contribution to knowledge that is available to the discipline of ophthalmology or its subspecialty areas. To be recognized as scholarly the project must be

shared with peers and subject to peer review. Each resident is required to obtain 2 points by the completion of their third year of training. Projects with their point values are to be approved by the program director in advance of completion and submitted on the program director's annual report (see appendix ii for project and point recommendations). The sponsoring institution and program should allocate adequate educational resources to facilitate resident's involvement in scholarly activity.

- 7.7 The residents must attend a minimum of 70 percent of all meetings as directed by the program director.
- 7.8 The residents must participate in hospital committee meetings as directed by the program director.
- 7.9 The residents must participate each year in the annual Resident Ophthalmic Knowledge Assessment Program (OKAP) Examination.
- 7.10 The residents must maintain certification in advanced cardiac life support throughout the residency.
- 7.11 The residents must attend the AOCOO-HNS Annual Clinical Assembly or another AOCOO-HNS continuing education program once during the training program.
- 7.12 The resident must maintain a current e-mail address and provide it to the AOCOO-HNS upon entering the program.
- 7.13 The resident must complete a suitable home study course approved by the program director during the OGME-2 and OGME-3 training years. Documentation of the entire home study course is required by the end of the OGME-3 year of training. The residents must review the home study course in a group fashion, and to review it twice during the training program.

VIII – EVALUATION

- 8.1 The faculty and residents must evaluate the program and curriculum annually to ensure that it is consistent with the current goals of the program and further address, at minimum: aggregate performance on the annual Resident Ophthalmic Knowledge Assessment Program (OKAP) Examination; pass rates on the AOCOO-HNS certification examination; resident retention rates in the program; percent of graduates completing the program in 36 months; placement of graduates and professional accomplishments of graduates.
- 8.2 All evaluations must be signed by the person completing the evaluation, the program director and the resident.
- 8.3 The program director or a designee must meet with the resident semiannually to review and document the resident's progress.
- 8.4 At the end of each training year, the program director, with faculty input, must determine whether each resident has the necessary qualifications to progress to the next training year or be considered training/program complete.
- 8.5 Residents' identities in faculty evaluations must remain confidential.
- 8.6 Program Directors and Faculty performance must be reviewed on an annual basis.
- 8.7 Information provided by residents must be included as part of the assessment of faculty performance.

- 8.8 The program must have a remediation policy for residents who are performing at an unsatisfactory level.
- 8.9 All newly approved residency training programs will be given a maximum of thirty six (36) months continuing approval following the first inspection which occurs twelve (12) months after the first resident begins the program.

APPENDIX ONE: ACCREDITATION

The Council of Medical Education (C.O.M.E.) of the American Osteopathic Colleges Of Ophthalmology And Otolaryngology-Head And Neck Surgery (AOCOO-HNS) is the body which recommends its residency programs for accreditation to the American Osteopathic Association (AOA). The C.O.M.E. has the responsibility of maintaining the standards of training by which all ophthalmology residency training programs can be measured. Accredited institutions and programs agree to, and must meet or exceed the standards set forth in the AOA basic documents and the AOCOO-HNS ophthalmology basic standards for postdoctoral training throughout their entire period of accreditation.

The residency program director is the central figure in the accreditation process. A program director must commit to compliance with the basic standards for residency training in ophthalmology. He/she is responsible for amassing and submitting the required data to the C.O. M.E. The accuracy and veracity of this information is critical to the accreditation process. The C.O. M.E. retains the authority to recommend to the AOA acceptance or denial of accreditation, call for a focused site visit, or place a program on probation if the standards are not being met.

Residency training programs demonstrate compliance with the basic standards and on-going quality improvement through the following:

1. Self-study evaluation of the program using appropriate crosswalk, and conducted by faculty, residents, and sponsoring institution and OPTI.
2. Delineation of findings and recommendations from this self-study for self-improvement.
3. Submission to the C.O.M.E. reports of on-site evaluations, mid-cycle reviews, annual reports and any other requested information in a timely manner and meeting all published deadlines.

APPENDIX TWO: SCHOLARLY ACTIVITY POINT RECOMMENDATIONS

- 2 points for a published article in a peer review journal
- 2 points for an unpublished article requiring irb approval
- 2 points for presenting a workshop at a national meeting
- 1 point for presenting a lecture at a national meeting
- 1 point for presenting a poster at a national meeting
- 1 point for a non-published paper conforming to the paper requirements
- 1 point for completion of a course in statistics, writing skills, editorial courses or research skills course

APPENDIX THREE: PAPER REQUIREMENTS

In order for a non-published paper to conform to the current paper requirements it must meet the following list of requirements.

- Abstract must be well written, include key words and define the scope of the paper
- The general structure of the paper must include:
 - 1500 words or more (excluding the bibliography)
 - Correct use of language
 - Correct punctuation
 - Proper footnoting
 - Appropriate use of charts, graphs, figures, tables or photographs
 - Type-written or computer formatted
 - Adheres to recommended format for type of paper chosen
 - Bibliography properly written and annotated
 - Appropriate contact made with IRB if applicable
- Originality of content must be demonstrated in the following:
 - Introduction and abstract
 - Clearly defined objectives of the paper
 - Literature review and references appropriate in scope and number for paper's subject
 - Accurate reporting of case findings including the collected data.
 - Discussion demonstrates critical comment, reflects an interpretation of data, cross-references literature, shows mastery of subject and demonstrates direction for reader
 - Results for data collection appropriately analyzed and clearly articulated.
 - Paper presents good evidence for conclusions drawn
 - Conclusion concise, clear and relevant
 - Paper offers new paradigm or shows new direction for reader (i.e., was this an important study? Is there a take-home message?)