A FRAMEWORK FOR ALLIED

OPHTHALMIC TRAINING PROGRAMS

Education, Training, Certification and Accreditation

Presented by:

JCAHPO Education and Research Foundation
Funded by an unrestricted educational grant through a gift from Dr. and Mrs. Melvin I. Freeman
In a changing world, the need for consistent and ever-improving eye care becomes more evident each day. As a result, there is a great need for qualified, skilled, and certified Eye Care Teams and accredited ophthalmic training programs.

The Eye Care Team consists of ophthalmologists, optometrists, nurses, ophthalmic assistants/technicians/medical technologists, refractionists, opticians, orthoptists, ophthalmic photographers, low vision therapists, and others. Non-clinical staff who support the Eye Care Team may include receptionists, billing clerks, secretaries, office managers, clinic officers, and other staff. All clinical and non-clinical workers have an important role in overall patient care.

Allied Ophthalmic Personnel (AOP) is a common term that refers to all members of the Eye Care Team, other than the ophthalmologist. Specifically, this document addresses the core group of allied ophthalmic personnel (AOP) that are ophthalmic assistants, ophthalmic technicians, refractionists, and ophthalmic medical technologists. In some parts of the world, these Eye Care Team members may be referred to as mid-level personnel, para-ophthalmic specialists, and other ophthalmic health care workers. In Canada and the United States, as well as in other countries, many of these positions are listed as occupations with very specific government-recognized job titles, such as Ophthalmic Medical Technician.

AOP perform assigned procedures under the direction or supervision of a physician licensed to practice medicine and surgery, and qualified in ophthalmology.

Some of the most common tasks performed by AOP at all levels of certification include:
- Taking patient histories
- Taking eye measurements
- Administering eye tests and evaluations
- Providing patient services
- Maintaining instruments
- Performing a variety of clinical tasks

AOP may be trained on-the-job (OJT) or be a graduate of an accredited ophthalmic training program. Graduates and OJT staff may become certified or licensed (depending upon location or country). Certification communicates to patients, the public, and the ophthalmologist a higher-level of qualifications.

### Understanding Accreditation, Licensure, and Certification

**Accreditation**

In general, accreditation is a voluntary process which is overseen by a non-governmental organization providing regulations, that:
- Are based upon guided self-evaluation and self-improvement.
- Rely upon peer review that in turn stimulates evaluation and program improvement, and
- Evaluate the effectiveness of the academic unit against a set of defined standards.

**Licensure/Registration**

Licensure and registration are defined as the permission to do something as given by a governmental authority with the implication that one would not be permitted to do this activity without such permission. A license is recognized by the laws of the state, province, or government in which it is granted.

**Certification**

Certification is the recognition by the private sector of voluntarily-achieved standards. Certification is therefore distinguished from licensure because it is usually non-governmental and voluntary. Certification may also be required by a governmental or third party payee.

**Accreditation Versus Certification**

Accreditation applies only to institutions and programs; individuals are not accredited. Individuals are certified or licensed.
Benefits of Developing a Training Program

Starting an Accredited Training Program
By developing an accredited training program, the institution will gain a variety of benefits for the future of the institution, students, employers, and patients worldwide. Accreditation emphasizes learning quality, responsibility, and improvement through a process of reflection and analysis.

Benefits of an Accredited Training Program

Institution
• May qualify schools and programs for government funding.
• Increases enrollment at accredited institutions.

Employers
• Establishes a baseline of professional and quality standards.
• Improves training of allied ophthalmic personnel to help eliminate eye disease and blindness.
• Helps meet the high demand for qualified AOP.
• Creates greater pool of talented and trained students for employers and a variety of health organizations.
• Ensures established knowledge base for all incoming employees.
• Keeps up with the latest advancements and treatments for the best patient care.

Students
• Provides a direct pathway for student eligibility for certification upon graduation.
• Earns respect and attention within the profession on both local and global levels.
• Offers more choices and opportunities for students and faculty in the eye care field.
• Gives students the opportunity to join a highly regarded profession.
• Provides immediate and long-term benefits to help students’ education in the direction of progress, advancement, and relocation.

Ophthalmic Community
• Improves quality of life by providing better patient eye care in the community.

Major Steps to Developing a Training Program

1. Obtain a copy of the Standards and Guidelines for Accreditation from:
   International Council of Accreditation (ICA)
   2025 Woodlane Drive, St. Paul, MN 55125-2998 U.S.A.
   (651) 731-2944, www.icaccreditation.org

   International Joint Commission on Allied Health Personnel in Ophthalmology (IJCAHPO)
   2025 Woodlane Drive, St. Paul, MN 55125-2998 U.S.A.
   (651) 731-2944, + 001 1 651 731 2944, www.ijcahpo.org

2. Conduct a needs assessment; survey communities of interest, e.g., ophthalmologists, professional organizations of allied health personnel.

3. Research local, state, and national government policies regarding educational programs.

4. Identify a post-secondary academic institution, hospital, medical center, or other government, education, or medical service to host and sponsor the program.

5. Secure contracts with qualified personnel (qualifications and responsibilities are outlined in the Standards and Guidelines for Accreditation):
   • Medical Director
   • Program Director
   • Instructors
   • Clerical Support

6. Develop a budget and guarantee funding to support the program, e.g., expenses such as classroom space, laboratories, equipment, faculty, etc.

7. Develop the curriculum according to the Standards and Guidelines for Accreditation.

8. Pursue accreditation following the Standards and Guidelines for Accreditation.

The Standards and Guidelines for Accreditation are the basis for accreditation of educational programs for AOP. The term “Standards” refers to the minimum requirement for accrediting ophthalmic training programs. The term “Guidelines” refers to documented evidence to measure meeting the Standards.

The accreditation process strives for high quality patient care by maintaining national and international educational Standards for AOP. The Standards have the following characteristics:

1. Standards are qualitative, not quantitative. There are no arbitrary numerical indicators.
2. Standards are broad in purpose. They must apply to many different types of programs and institutions. It is the program’s responsibility to create a program that adheres to the Standards. There is no single template for a successful accredited program.
3. Standards are expected to acknowledge and respect the basic right of institutions to be self-defining and self-determining.
4. Standards represent prescriptive rather than proscriptive requirements that are acceptable to the communities of interest that use the Standards.
5. Standards are designed to allow for quality, continuity, and flexibility. The curriculum is not directly correlated to the IJCAHPO certification exam.

Maintaining Accreditation
Accreditation is an ongoing process. Programs enter the process, and once they gain accreditation, must maintain continuous self-study and improvement mechanisms. Administrative requirements for maintaining accreditation, include:

1. Submit the self-study report one year before expiration.
2. Schedule a site visit before accreditation expiration.
3. Provide an Annual Report at the end of each year.
4. Remit annual fees.

For more specific information, refer to the ICA Standards and Guidelines for Accreditation - AOP Training Programs found online at www.icaccreditation.org, IJCAHPO Accreditation Standards and Guidelines are at www.jcahpo.org.
International Core Curriculum for Ophthalmic Assistants and International Core Curriculum for Refractive Error

Curricula available: International Core Curriculum for Ophthalmic Assistants and the International Core Curriculum for Refractive Error, which were developed by the International Joint Commission on Allied Health Personnel in Ophthalmology (IJCAHPO) and the International Council of Ophthalmology (ICO).

With comprehensive analysis and input from content experts and educators from around the world, the core curricula are well-designed, clearly defined, and carefully organized. The curricula employ a modular system that can be used internationally by educators and ophthalmic specialists and are compatible with local practice and regulations. Consistent with “best practices” in ophthalmology and patient care across the globe, the curricula are designed to provide learners with content domains or categories and the appropriate performance objectives to accomplish eye care job tasks.

The foundational Ophthalmic Assisting knowledge and skills required of ophthalmic medical personnel are the following five core competencies:

- Patient care
- Medical knowledge
- Professionalism, interpersonal and communication skills
- Technical and scientific skills
- Community and health services

These Ophthalmic Assisting competencies in the core curriculum are organized into the following three sections:

A. Introduction to Ophthalmology
   1. Clinic and Personnel Functions
   2. Medical Ethics, Regulatory, and Legal Issues
   3. Communication Skills, Patient Education, and Ophthalmic Counseling
   4. Ophthalmic Patient Services and Relations (Triage)
   5. Community Health Eye Care
   6. Safety
   7. Administrative Duties
   8. Medical Terminology
   9. General and Ocular Anatomy, Physiology
   10. Pharmacology
   11. Microbiology
   12. History Taking

B. Basic Skills (continued)
   12. Eye Diseases
   13. Systemic Diseases

C. Advanced Skills
   1. Low Vision
   2. Supplementary Test - Advanced Skill Level
   3. Ophthalmic Imaging
   4. Surgical Procedures
   5. Refractometry, Retinoscopy, Refinement
   6. Ocular Motility
   7. Contact Lenses
   8. Supervision and Training Support

B. Basic Skills
   1. Vital Signs
   2. Visual Testing (Distance and Near)
   3. Pupillary Assessment
   4. Lensometry
   5. Keratometry
   6. Tonometry
   7. Supplementary Tests - Basic Skill Level
   8. Clinical Equipment and Supplies Maintenance
   9. Examination of the Eye and Face
   10. Clinical Optics
   11. Biometry

Basic Training Equipment Needed for Curriculum

- Basic Exam Equipment (Occluders, Patches, Pinhole, Reading Cards, etc.)
- Trial lenses/Phoropter
- Lensometer/Test Glasses
- Keratometer
- Retinoscope
- Slit Lamp
- Tonometer
- Prisms
- Fundus Camera
- Perimeter
- Handlight/Penlight
- Color Plates/Tests
- Media for Microbiology
- Culture of Ocular Infection
- Library Resources:
  - Eye Dictionary
  - Ophthalmic Assisting
  - Text Books

(Equipment needs should be based on enrollment.)

For more detailed information and performance objectives for each competency, refer to the International Core Curriculum for Ophthalmic Assistants and International Core Curriculum for Refractive Error. They are available online at www.icaccreditation.org.
Training Program Schedule

The International Curriculum for Ophthalmic Assisting Technicians Schedule is designed to provide new programs with a recommended sequence of courses and hours required per content area.

The suggested sequence of courses to be taught to students is identified as Introduction to Ophthalmology, Basic Skills and Advanced Skills. Demonstration of attainment of knowledge and skills is required for advancement to the next level.

Certain topics are listed under Basic Skills and Advanced Skills. The Advanced course are a continuum of the basic courses, and have greater depth and breadth of knowledge. The time breakdown is divided into “Lecture”, “Hands on (Lab)”, and “Clinical”.

- Lecture time is defined as formal instruction as an educational talk would be given to an audience.
- Hands-on time is referred as Lab time by some institutions. The definition of hands-on time is simulation of performing a skill. Students can perform tasks on a schematic eye if appropriate, on each other in a controlled environment with direct supervision of a qualified instructor, or on a computer simulation.
- Clinical time refers to supervised time in a clinical setting. Supervision can be by an ophthalmologist or qualified AOP. In this setting, the student sees patients and works towards competency attainment of their ophthalmic skills.

All durations are recommendations and may be adjusted as the program needs. It is recognized that lecture times can vary and that students may achieve skill competence at different rates.

Resources for Programs and Students

Resources
EyeCareCE
www.eyecarece.org
The largest, most comprehensive online continuing education resource available for the eye care team.

- Over 300 comprehensive courses including interactive simulations
- 20 Ophthalmic categories
- Basic, Intermediate, Advanced Levels
- Courses for Ophthalmic Medical Technicians, Refractionists, Nurses, Photographers, Orthoptists, Opticians

Webinars
https://store.jcahpo.org/calendarschedule.aspx
The IJCAHPO webinar (web-based seminars) continuing education series is a cost-effective way for the Eye Care Team to take courses and earn credits from the convenience of their home or office. Webinars are courses or lectures transmitted over the internet from a remote location to registered attendees. Currently scheduled for three lectures per month, IJCAHPO seminars can be viewed anywhere the attendee has a high-speed internet connection.

IJCAHPO Bookstore
https://store.jcahpo.org
The IJCAHPO bookstore offers an expanded inventory of the latest ophthalmic publications including, but not limited to the Clinical Skills and Reference Guide, Certified Ophthalmic Assistant (COA®), Certified Ophthalmic Technician (COT®), & Certified Ophthalmic Medical Technologist (COMT®) Exam Study Guides, JCAHPO® Learning Systems®, JCAHPO® Contact Lens Learning Systems®, and more!

IJCAHPO Education & Research Foundation
www.jcahpo.org/foundation
The International Joint Commission on Allied Health Personnel in Ophthalmology (IJCAHPO®) established the Education and Research Foundation in 1990 to fund compelling needs in ophthalmic medical assisting, i.e., expansion of training programs, scholarships, support certification, and continued research into psychometric methods of testing and simulation of tasks critical to ensure valid and reliable examinations.
## Training Program Recommended Schedule

<table>
<thead>
<tr>
<th>Topic</th>
<th>Lecture</th>
<th>Hands on Time</th>
<th>Clinical time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Introduction to Ophthalmology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Clinic and Personnel Functions</td>
<td>2 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2. Medical Ethics, Regulatory and Legal Issues</td>
<td>2 hours</td>
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<td>--</td>
</tr>
<tr>
<td>3. Communication Skills, Patient Education and Ophthalmic Counseling</td>
<td>2 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>4. Ophthalmic Patient Services and Relations (Triage)</td>
<td>2 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5. Community Health Eye Care</td>
<td>2 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6. Safety</td>
<td>2 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>7. Administrative Duties</td>
<td>2 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>8. Medical Terminology</td>
<td>4 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>9. General and Ocular Anatomy and Physiology</td>
<td>8 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>10. Pharmacology</td>
<td>4 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>11. Microbiology</td>
<td>4 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>12. History Taking</td>
<td>2 hours</td>
<td>2 hours</td>
<td>16 hours</td>
</tr>
<tr>
<td><strong>B. Basic Skills</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Vital Signs</td>
<td>1 hour</td>
<td>1 hour</td>
<td>8 hours</td>
</tr>
<tr>
<td>2. Visual Testing</td>
<td>2 hours</td>
<td>2 hours</td>
<td>16 hours</td>
</tr>
<tr>
<td>3. Pupillary Assessment</td>
<td>2 hours</td>
<td>2 hours</td>
<td>16 hours</td>
</tr>
<tr>
<td>4. Lensometry</td>
<td>2 hours</td>
<td>10 hours</td>
<td>76 hours</td>
</tr>
<tr>
<td>5. Keratometry</td>
<td>2 hours</td>
<td>10 hours</td>
<td>76 hours</td>
</tr>
<tr>
<td>6. Tonometry</td>
<td>2 hours</td>
<td>6 hours</td>
<td>44 hours</td>
</tr>
<tr>
<td>7. Supplementary Tests - Basic</td>
<td>4 hours</td>
<td>8 hours</td>
<td>60 hours</td>
</tr>
<tr>
<td>8. Clinical Equipment and Supplies Maintenance</td>
<td>2 hour</td>
<td>2 hour</td>
<td>16 hours</td>
</tr>
<tr>
<td>9. Examination of the Eye and Face</td>
<td>2 hours</td>
<td>2 hours</td>
<td>16 hours</td>
</tr>
<tr>
<td>10. Clinical Optics</td>
<td>10 hours</td>
<td>--</td>
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</tr>
<tr>
<td>11. Biometry</td>
<td>2 hours</td>
<td>8 hours</td>
<td>60 hours</td>
</tr>
<tr>
<td>12. Eye Diseases</td>
<td>12 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>13. Systemic Diseases</td>
<td>6 hours</td>
<td>--</td>
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</tr>
<tr>
<td><strong>C. Advanced Skills</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Low Vision</td>
<td>3 hours</td>
<td>3 hours</td>
<td>24 hours</td>
</tr>
<tr>
<td>2. Supplementary Tests – Advanced</td>
<td>8 hours</td>
<td>10 hours</td>
<td>76 hours</td>
</tr>
<tr>
<td>3. Ophthalmic Imaging</td>
<td>8 hours</td>
<td>10 hours</td>
<td>76 hours</td>
</tr>
<tr>
<td>4. Surgical Procedures</td>
<td>4 hours</td>
<td>12 hours</td>
<td>90 hours</td>
</tr>
<tr>
<td>5. Refractometry, Retinoscopy, Refinement</td>
<td>8 hours</td>
<td>16 hours</td>
<td>120 hours</td>
</tr>
<tr>
<td>6. Ocular Motility</td>
<td>8 hours</td>
<td>16 hours</td>
<td>120 hours</td>
</tr>
<tr>
<td>7. Contact Lenses</td>
<td>4 hours</td>
<td>8 hours</td>
<td>60 hours</td>
</tr>
<tr>
<td>8. Supervision and Training Support</td>
<td>2 hours</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>130 hours</td>
<td>140 hours</td>
<td>970 hours</td>
</tr>
</tbody>
</table>
IJCAHPO Certification

IJCAHPO Mission

*To promote global equitable comprehensive eye health through program accreditation and the education, certification and support of Allied Ophthalmic Personnel (AOP) for the eye care team.*

Upon completion of an accredited training program or OJT and work experience, candidates may apply for IJCAHPO certification. Certification reinforces the skills and knowledge that ophthalmic AOP attained through education and training.

Core Levels of Certification

IJCAHPO’s three core levels of certification comprise a solid ladder for progressive career development.

- **Entry Level**
  - **COA®** (Certified Ophthalmic Assistant)

- **Intermediate Level**
  - **COT®** (Certified Ophthalmic Technician)

- **Advanced Level**
  - **COMT®** (Certified Ophthalmic Medical Technologist)

Go to [www.jcahpo.org](http://www.jcahpo.org), Certification/Recertification, “Get Certified” to download the IJCAHPO Certification Criteria Book.

Certificates Worldwide

Certificates in over 40 countries

Certification designates that the candidate is part of an elite group of more than 26,000 certified ophthalmic assistants, technicians, technologists, surgical assistants, and sonographers worldwide. The credentials achieved by the candidate are internationally recognized by physicians, employers, administrators, and patients. The candidate will be recognized as a skilled, highly trained professional.

*Four out of five ophthalmologists agree that certified ophthalmic medical technicians (OMT) render their practice more productive. Studies have shown that certified OMT contribute more than non-certified personnel to the efficiency and quality of care in a practice. Just as in other professions, the value of certification and the importance of employing educated, trained, and qualified professionals should be a best practice in ophthalmology.*

Woodworth K., et al. Eye & Contact Lens 2008; 34(1)
• **Certified Ophthalmic Assistant (COA®)**
The COA is the entry-level designation designed to start eye care professionals on the path to success. The COA designation offers the opportunity for assistants to confirm their knowledge in 19 specific content areas.

• **Certified Ophthalmic Technician (COT®)**
The COT is the second step on the ladder to success. The COT designation confirms knowledge in 19 content areas and 7 skill areas specifically designed to test the Certified Ophthalmic Assistant or program graduate who intends to move to the next level of their career in the eye care field. *The skill areas for the COT Skill Evaluation are shown on the next page.*

• **Certified Ophthalmic Medical Technologist (COMT®)**
The COMT certification designation recognizes those individuals who have progressed through the COA and COT levels or who have graduated from a COMT training program as accomplished eye care professionals. The COMT designation confirms knowledge in 17 content areas and 12 skill areas to include the simulated Skill Evaluation and Performance Test covering specific areas that the ophthalmic professional seeking the COMT designation performs on a daily basis. *The skill areas for the Skill Evaluation and Performance Test are shown on the next page.*

**Sub-Specialty Certification**
Those who are certified at a core level may choose to become certified in the following sub-specialty area.

• **Ophthalmic Surgical Assisting (OSA®)**
Achievement of this sub-specialty certification exemplifies knowledge in the procedures and instrumentation necessary to assist in ophthalmic surgical suites.

**Specialty Certifications**
The following certifications do not require a core-level certification and can be attained separately.

• **Registered Ophthalmic Ultrasound Biometrist (ROUB®)** The designation of ROUB signifies that the individual, who performs A-scan biometry on the eye, has a knowledge base in biometry and physics.

• **Certified Diagnostic Ophthalmic Sonographer (CDOS®)**
The designation of CDOS conveys that the individual, who performs the diagnostic B-scan sonography on the eye, has obtained a knowledge base in the principles and instrumentation needed to perform eye exams using high frequency sound waves.

**Steps to Starting a Training Program**

- Complete a needs assessment for AOP
- Secure a sponsoring institution
- Secure department / Institution support
- Name a Medical Director
- Name a Program Director
- Determine teaching and clinical faculty
- Develop curriculum
- Market the program
- Recruit students
- Apply for and obtain Accreditation
- Encourage certification of graduates

• **Contact Lens Certificate of Completion**
The Contact Lens Certificate of Completion conveys that the individual who performs contact fitting has obtained a knowledge base in the principles, instrumentation and issues associated with the use of contact lenses.

• **Low Vision Certificate of Completion**
The Low Vision Certificate of Completion conveys that the individual has a basic level of knowledge regarding eye diseases associated with low vision, patient evaluation, treatment and occupational assistance regarding vision impairment.

• **Certified Refractionist (CR®)**
The Certified Refractionist (CR) designation conveys that the individual has obtained a knowledge base in the principles and instrumentation to perform refractive error examinations.

**Maintaining Certification**
An initial certification is valid for 36 months. Recertification is required every three years to maintain use of the credential. The recertification process requires ophthalmic medical personnel to stay current on new developments in the field of ophthalmology through continuing education credits or re-examination.

For more information, visit www.jcahpo.org or call (651) 731-2944.
The exam has the same content domains at all levels, but with each level of certification the degree of difficulty increases and exam content tested changes in the depth and breadth of knowledge as well as skill required.

<table>
<thead>
<tr>
<th>Content Areas</th>
<th>Certified Ophthalmic Assistant (COA™)</th>
<th>Certified Ophthalmic Technician (COT™)</th>
<th>Certified Ophthalmic Medical Technologist (COMT™)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSESSMENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. History and Documentation</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>B. Visual Assessment</td>
<td>6%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>C. Visual Fields Testing</td>
<td>4%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>D. Pupil Assessment</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>E. Tonometry</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>F. Keratometry</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>G. Ocular Motility Testing</td>
<td>4%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>H. Lensometry</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>I. Refractometry: Retinoscopy &amp; Refinement</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>J. Biometry</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>K. Supplemental Testing</td>
<td>3%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>ASSISTING WITH INTERVENTIONS AND PROCEDURES</strong></td>
<td>22%</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>A. Microbiology</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>B. Pharmacology</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>C. Surgical Assisting</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>D. Ophthalmic Patient Services and Education</td>
<td>12%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>CORRECTIVE LENSES</strong></td>
<td>4%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>A. Optics and Spectacles</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>B. Contact Lenses</td>
<td>2%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>IMAGING</strong></td>
<td>13%</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>A. Ophthalmic Imaging</td>
<td>5%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>B. Photography and Videography</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>OFFICE RESPONSIBILITIES</strong></td>
<td>19%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>A. Equipment Maintenance and Calibration</td>
<td>3%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>B. Medical Ethics, Legal, and Regulatory Issues</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>C. Communication Skills</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>D. General Medical Knowledge</td>
<td>9%</td>
<td>8%</td>
<td>5%</td>
</tr>
</tbody>
</table>

New COA, COT, COMT Examination Content Areas Effective 8/1/2018

**Skill Areas for the COT Skill Evaluation**
Candidates will be asked to demonstrate their skill in each of the following seven areas:
- Lensometry
- Visual fields
- Ocular motility
- Keratometry
- Retinoscopy
- Refinement
- Tonometry

**Skill Areas for the COMT Performance Test**
Candidates will be asked to demonstrate their skill in each of the seven COT Skill areas and the following five areas:
- Ocular motility using prism and cover tests at distance
- Lensometry - measure and identify prism
- Fundus photography and fluorescein angiography
- Pupil assessment
- Versions and ductions
The ophthalmology profession, like all medical professions, requires Continuing Medical Education (CME) or Continuing Professional Development (CPD) for continuous learning. Allied Ophthalmic Personnel continuing education is typically referred to as CE or CPD. The various designations are based on a common definition such as the definition of Continuing Professional Development by the Australian Health Professional Regulatory Agency (AHPRA, 2011, para. 1) as helping “health professionals to maintain, improve and broaden their knowledge, expertise and competence.”

Continuing Education (CE) is the learning process related to professional activities other than formal training. CE or CPD may involve earning or maintaining professional credentials, academic degrees with formal coursework, and conferences designed to develop technical and non-technical skills required for carrying out professional and technical duties.

CPD extends across the globe and is a common educational practice around the world for all AOP cadres. CE or CPD is typically required for earning or maintaining professional credentials; however, it is not necessarily required in all countries.

Characteristics of CPD around the world include: 1) established Standards for CPD that include specific educational content domains; 2) specified number of hours or points required to be maintained over a specified number of years when the government or professional credential expires; and 3) recognized and valid CPD providers.

The International Joint Commission on Allied Health Personnel in Ophthalmology (IJCAHPO) is the only Allied Ophthalmic Personnel (AOP) organization dedicated to the education and certification needs of AOP on a global scale. IJCAHPO has established CPD standards based on valid ophthalmology CPD systems and processes, validates CPD providers and has accreditation linkages to keep a constant high standard for ophthalmic care worldwide.

IJCAHPO CPD Standards for Ophthalmic Assistants, Technicians, and Medical Technologists
IJCAHPO requires minimum CPD or CE over a three-year period in order for AOP to maintain the various levels of IJCAHPO Certifications. AOP can take CPD courses in the content areas on IJCAHPO’s certification examination and in other approved content areas. IJCAHPO’s Certification Criteria Candidate handbook provides information on the process.

### CPD Resources for Ophthalmic Assistants, Technicians, and Medical Technologists

The International Joint Commission on Allied Health Personnel in Ophthalmology offers CPD globally. IJCAHPO provides continuing education courses at education and training symposiums, national and international congresses, and regional programs that are didactic and laboratory skills-based training.

IJCAHPO has a well-established online educational website that serves the entire Eye Care team: ophthalmic nurses, ophthalmic assistants, technicians and medical technologists, refractionists, orthoptists, ophthalmic photographers, contact lens fitters, vision therapists, and others. There are over 300 online courses that cover 20 ophthalmology domain content areas such as comprehensive ophthalmology, systemic and ocular diseases, retina, glaucoma, spectacles, patient education and others. Course formats include text-based materials, PowerPoint slides, video and audio, and leading-edge simulations. In addition to courses, there are free resources online such as “proper instillation of eye drops and ointments.” Some courses are available for no or a low fee.

### Additional CPD Resources and Providers

There are many universities, ophthalmic nonprofit organizations and associations, NGOs, and for-profit companies that offer CPD. CE providers can be found online and through IJCAHPO’s web site.

<table>
<thead>
<tr>
<th>Types of CPD</th>
<th>CPD Formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didactic Lecture</td>
<td>Classroom-based</td>
</tr>
<tr>
<td>Wet labs and Workshops</td>
<td>Skills-based learning labs with hands-on performance</td>
</tr>
<tr>
<td>Distance Education</td>
<td>Text-based materials</td>
</tr>
<tr>
<td>• Synchronous distance learning</td>
<td>• Correspondence courses</td>
</tr>
<tr>
<td>• Asynchronous distance learning</td>
<td>• Online courses</td>
</tr>
<tr>
<td>• Hybrid distance learning</td>
<td>• Webinars</td>
</tr>
<tr>
<td>• Electronic learning</td>
<td>• Simulations</td>
</tr>
<tr>
<td>• Fixed time online courses</td>
<td>• Multimedia and video courses</td>
</tr>
<tr>
<td></td>
<td>• Video conferencing</td>
</tr>
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<td></td>
<td>• Podcasts</td>
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</table>

Ongoing Support Through the Following Organizations

**The Consortium of Ophthalmic Training Programs (COTP)**
The Consortium of Ophthalmic Training Programs (COTP) is comprised of accredited training program directors and delegates. It is organized exclusively for educational and scientific purposes including, but not limited to, promoting growth of ophthalmic training programs and promoting awareness of ophthalmic medical personnel through communication and interaction with groups affecting ophthalmic training programs.

Consortium of Ophthalmic Training Programs
2025 Woodlane Drive, St. Paul, MN 55125-2998 U.S.A.
(651) 731-7244, cotp@jcahpo.org
www.cotpedu.org

**The Association of Technical Personnel in Ophthalmology (ATPO)**
The Association of Technical Personnel in Ophthalmology (ATPO) represents a diverse group of ophthalmic medical technicians, including (but not limited to) ophthalmic assistants, technicians, technologists, surgical and keratorefractive technicians, photographers, nurses, and orthoptists. In addition to advocating for its members and profession, ATPO provides, expands, and supports scientific and educational opportunities for allied health personnel in ophthalmology.

Association of Technical Personnel in Ophthalmology
2025 Woodlane Drive, St. Paul, MN 55125-2998 U.S.A.
(651) 731-7245, (800) 482-4858
atpomembership@jcahpo.org
www.atpo.org

**The Canadian Society of Ophthalmic Medical Personnel (CSOMP)**
The Canadian Society of Ophthalmic Medical Personnel (CSOMP) represents all allied health care personnel in ophthalmology working in Canada. The goals of CSOMP are to work in association with ICA in accrediting new ophthalmic programs in Canada, to provide continuing education, and to maintain a strong membership consisting of all Canadian ophthalmic medical personnel.

CSOMP Contact Information
Canadian Society of Ophthalmic Medical Personnel
1565 Carling Avenue, Suite 110
Ottawa, ON K1Z 8R1 Canada
Email: simmsc@hdh.kari.net
Website: http://www.cos-sco.ca/csomp/
Checklist for Developing an Ophthalmic Training Program

The purpose of this checklist\textsuperscript{1,2,3} is to provide support for those seeking to set up an ophthalmic training program. The checklist may be adapted for each individual situation. It may be used as a precursor to developing an accredited training program or for evaluating an existing training program preparing for accreditation.

\textsuperscript{1} Adapted from Checklist for Setting up an Education Programme, (2007), Renee du Toit and Ingrid Mason.
\textsuperscript{2} ICA Standards and Guidelines for Accreditation
\textsuperscript{3} IJAHO’s Accreditation Standards and Guidelines

### I. Initial Analysis

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Tasks</th>
<th>Lead Person</th>
<th>Timeline</th>
</tr>
</thead>
</table>
| **A. A Thorough Understanding of the Program Environment is Required** | Obtain information about:  
\- Need for the training  
\- Educational regulations  
\- Professional regulations  
\- Sources from which students may be recruited  
\- Risks of attrition  
\- University, college, or hospital systems of credit  
\- Training programs already in existence | | |
| **B. Stakeholders Analysis** | Identify stakeholders to contribute to program development (e.g., instructors, beneficiaries, professional groups, etc.)  
Document goals of course (match course content and job description of graduate) | | |
| **C. Planning** | Establish a steering committee of key stakeholders | | |
| **D. Development of Training Program** | Convene a workshop to plan and empower those involved in the program  
Report recommendations by steering committee to stakeholders  
Have clear activity plan to take program forward | | |

### II. Recognition of Qualifications

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Tasks</th>
<th>Lead Person</th>
<th>Timeline</th>
</tr>
</thead>
</table>
| **A. Educational Standards** | Establish:  
\- Admission requirements  
\- Length of course  
\- Vocational qualifications  
\- Feasibility of delivering the course within a modular system | | |
| **B. Recognition by Professional Body, e.g., State Societies, Local Ophthalmic Medical Personnel Groups, etc.** | Meet with professional bodies for networking and support | | |
| **C. Accreditation** | Review ICA/IJAHO accreditation process | | |
| **D. Certification** | Review IJAHO certification requirements | | |
### III. Selection of Students

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Tasks</th>
<th>Lead Person</th>
<th>Timeline</th>
</tr>
</thead>
</table>
| A. Documented Selection Criteria and Process | Consider:  
- Interest, aptitude, manual dexterity  
- Experience in eye or health care  
- Academic background  
- Funding/scholarships  
- Job after training |             |          |

### IV. Curriculum Development

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Tasks</th>
<th>Lead Person</th>
<th>Timeline</th>
</tr>
</thead>
</table>
| A. Content          | Ensure that:  
- There is a match between documented role of graduate and job description  
- Learning outcomes include essential knowledge and skills  
- Soft skills/attitudes, e.g., leadership, teamwork, information technology are included  
- Specialist areas, e.g., low vision, systemic diseases, glaucoma, refraction, included where required  
- Training of other eye team members to provide support to clinicians  
- Short courses to train support staff |             |          |
| B. Method           | Teaching methodology, didactic and clinical, should include:  
- Active learning, problem-based approach, self-directed learning, and critical thinking  
- Assessment of practical procedures: logbooks, journals, goal setting  
- Specification of contact hours for knowledge and practical experience |             |          |
| C. Curriculum       | Ensure the curriculum is:  
- Documented and available to faculty, students, and external training institutions  
- Competency-based  
- Includes criteria and indicators to measure success  
- Regularly evaluated |             |          |
| D. Assessment of Learning | Ensure validity/reliability of assessment, e.g., external examiners  
Include both continuous and final assessment knowledge and skills  
Types of assessment:  
- Journals/logbooks, wetlab, and practicals  
- Case studies/presentations  
- Peer and self assessment, e.g., clinical audit against skills |             |          |
| E. Training Faculty | Teaching skills match faculty, selection criteria  
External faculty (specialist areas)  
Number required (permanent or other departments)  
Establish:  
- Opportunities for continuing education  
- Systems for evaluation of teaching |             |          |
| F. Clinical Experience | Ensure that students have at the clinical sites:  
- Supervision and monitoring during training  
- Adequate equipment |             |          |
| G. Final Accreditation | Establish appropriate accreditation/certification by government/university/outside agency/professional body |             |          |
### V. Teaching Institution

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Tasks</th>
<th>Lead Person</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Sharing Teaching and Infrastructure Resources</td>
<td>Establish networks/communities to facilitate: • Use of teaching materials and support staff • Use of other modules, faculty, and visiting faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Training Institution Resources</td>
<td>Obtain and set up systems to maintain: • Clinical sites with affiliation agreements • Teaching aids • Equipment and clinical instruments • Resource center (books, journals, internet) • Course coordinator with organizational skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Student-Related Learning Costs</td>
<td>Document and provide to students information about: • Accommodations • Educational materials/books • Indemnity • Transport to outreach • Examination fees • Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Funding for the Program</td>
<td>Write a budget and obtain funding that includes: • Costs to operate • Equipment • Indemnity for faculty • Regular evaluation (internal and external)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Funding for Graduate Support</td>
<td>Write a budget and obtain funding for support of graduates after training that includes: • Supervisory visits • Workshops/conferences • Professional development/continuing education • Regular evaluation (internal and external)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### VI. Monitoring and Evaluation

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Tasks</th>
<th>Lead Person</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Program Effectiveness</td>
<td>Evaluate the: • Students’ performance–knowledge, skills, and attitude • Faculty–self, peer, and student assessment • Consistency with job description, aim of course, and what is being taught</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### VII. Graduates

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Tasks</th>
<th>Lead Person</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Professional Recognition</td>
<td>Provide support for graduates to establish career structure and salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Professional Development of Graduate</td>
<td>Provide support for graduates to establish: • Job description • Continuing education • Membership in professional body</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE OPHTHALMOLOGIST-LED EYE CARE TEAM

- Technicians: COA, COT, COMT
- Refractionists: CR
- Orthoptists: CO
- Optometrists: OD
- Photographers: CRA, OCT
- Opticians: ABO
- Contact Lens Fitters: NCLE
- Nurses: CRNO
- Technicians: COA, COT, COMT
- Photographers: CRA, OCT
- Opticians: ABO