Objectives of Training in Ophthalmology

This document applies to those who begin training on or after July 1st, 2004.

(Please see also the “Policies and Procedures.”)

DEFINITION

Ophthalmology is that specialty which concerned with the screening, diagnosis and management of optical, medical and surgical disorders and diseases of the eye, its adjacent structures, the visual pathways, and to the visual system.

GOALS

Upon completion of the educational program, a resident is expected to be a competent ophthalmologist capable of assuming a consultant’s role in the specialty. The resident must acquire a working knowledge of the theoretical basis of the specialty, including its foundations in the basic medical sciences and research.

The knowledge of basic sciences necessary to the understanding and practice of the specialty (e.g. genetics, embryology, anatomy, histology, physiology, biochemistry, pathology, microbiology, immunology, pharmacology, optics & refraction including low vision) may be acquired by attendance at special courses in basic science or by spending periods of full-time training in basic science.

The ophthalmologist must possess a sound knowledge of the general principles of surgery and of medicine. Ophthalmology embraces some aspects of neurology, pathology, plastic surgery, dermatology, microbiology, and other specialties, and the candidate should have knowledge in these fields as they relate to this specialty.

Residents must demonstrate the knowledge, skills and attitudes relating to gender, culture and ethnicity pertinent to ophthalmology. In addition, all residents must demonstrate an ability to incorporate gender, cultural and ethnic perspectives in research methodology, data presentation and analysis.

OPHTHALMOLOGY COMPETENCIES

At the completion of training, the resident will have acquired the following competencies and will function effectively as a:
Medical Expert/Clinical Decision-Maker

Specialists possess a defined body of knowledge and procedural skills, which are used to collect and interpret data, make appropriate clinical decisions, and carry out diagnostic and therapeutic procedures within the boundaries of their discipline and expertise. Their care is characterized by up-to-date, ethical, and cost-effective clinical practice and effective communication in partnership with patients, other health care providers, and the community. The role of medical expert/clinical decision-maker is central to the function of specialist physicians, and draws on the competencies included in the roles of scholar, communicator, health advocate, manager, collaborator, and professional.

General Requirements:
- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
- Access and apply relevant information to clinical practice.
- Demonstrate effective consultation services with respect to patient care, education and legal opinions.

Specific Requirements:
1. Elicit a history that is relevant, concise, accurate and appropriate to the patient’s problem(s).
2. Perform an ophthalmological examination that is relevant, sufficiently elaborate, and appropriate.
3. Select medically appropriate investigative tools in a cost-effective, ethical and useful manner.
4. While collecting data by the three above means, demonstrate cognitive and process skills toward solving the individual patient's problem(s).
5. Demonstrate effective consultation skills in presenting well documented assessments and recommendations in written and/or verbal form in response to a request from another health care provider.
6. Demonstrate the attitudes and the skills necessary to retrieve and implement the information necessary to provide health care services to patients in meeting the needs and expectations of the community.
7. Access, retrieve, assist and apply relevant information of all kinds to problem-solving and introduce new therapeutic options to clinical practice.
8. Demonstrate medical expertise in situations other than those involving direct patient care (e.g. presentations, medico-legal cases, etc.).
9. Demonstrate insight into his/her own limitations of expertise by self-assessment.
10. Use all of the pertinent information to arrive at complete and accurate clinical decisions specifically in the fields of:
   10.1 cornea/external disease
   10.2 glaucoma
10.3 lacrimal/lid/orbit
10.4 neuro-ophthalmology
10.5 refraction and principles of optics
10.6 retina/vitreous
10.7 strabismus/pediatric ophthalmology
10.8 and emergency eye conditions

11. Apply knowledge and expertise to become competent in performance of technical skills relevant to ophthalmology, including:

11.1 interpretation of diagnostic imaging of the eye and visual system (including CT, MRI, and ultrasound images)
11.2 topical and regional anesthesia of the eye and periocular structures
11.3 laser therapy including retinal, glaucoma and posterior capsule
11.4 cryotherapy of the eye and ocular adnexa
11.5 surgery for cataract, enucleation, eyelids, lacrimal apparatus, glaucoma, ocular surface (e.g. pterygium, conjunctiva) and strabismus
11.6 surgical management of trauma to the eye and orbit
11.7 refraction
11.8 recognize and manage complications arising during medical and surgical treatment.

Communicator

To provide humane, high-quality care, specialists establish effective relationships with patients, other physicians, and other health professionals. Communication skills are essential for the functioning of a specialist, and are necessary for obtaining information from, and conveying information to patients and their families. Furthermore, these abilities are critical in eliciting patients’ beliefs, concerns, and expectations about their illnesses, and for assessing key factors impacting on patients’ health.

General Requirements:
• Establish therapeutic relationships with patients/families.
• Obtain and synthesize relevant history from patients/families/communities.
• Listen effectively.
• Discuss appropriate information with patients/families and the health care team.
Specific Requirements:
1. Recognize that being a good communicator is an essential function of a physician, and understand that effective patient-physician communication can foster patient satisfaction and compliance as well as influence the manifestations and outcome of a patient’s illness.

2. Establish relationships with the patient characterized by understanding, trust, respect, empathy and confidentiality.

3. Gather information not only about the disease but also about the patient’s beliefs, concerns and expectations about the illness, while considering the influence of factors such as the patient’s age, gender, ethnic, cultural and socio-economic background, and spiritual values on that illness, including the psychological, occupational and social consequences of visual impairment.

4. Deliver information to the patient and family in a humane manner and in such a way that it is understandable, encourages discussion and promotes patient’s participation in decision-making to the degree that they wish.

5. Understand and demonstrate the importance of cooperation and communication among health professionals involved in the care of individual patients such that the roles of these professionals are delineated and consistent messages are delivered to patients and their families.

6. Demonstrate skills in working with others who present significant communication challenges such as anger or confusion, or an ethno-cultural background different from the physician’s own.

7. When appropriate, effectively provide information to the general public and media about areas of local concern.

Collaborator

Specialists work in partnership with others who are appropriately involved in the care of individuals or specific groups of patients. It is therefore essential for specialists to be able to collaborate effectively with patients and a multidisciplinary team of expert health professionals for provision of optimal patient care, education, and research.

General Requirements:
• Consult effectively with other physicians and health care professionals.
• Contribute effectively to other interdisciplinary team activities.

Specific Requirements:
1. Identify and describe the role, expertise and limitations of all members of an interdisciplinary team required to optimally achieve a goal related to patient care, a research problem, an educational task, or an administrative responsibility.

2. Develop a care plan for a patient they have assessed, including investigation, treatment and continuing care, in collaboration with the members of the interdisciplinary team.
3. Participate in an interdisciplinary team meeting, demonstrating the ability to accept, consider and respect the opinions of other team members, while contributing specialty-specific expertise him/herself.

4. Describe how health care governance influences patient care, research and educational activities at a local, provincial, regional, and national level.

5. Effectively communicate with the members of an interdisciplinary team in the resolution of conflicts, provision of feedback, and where appropriate, be able to assume a leadership role.

Manager

Specialists function as managers when they make everyday practice decisions involving resources, co-workers, tasks, policies, and their personal lives. They do this in the settings of individual patient care, practice organizations, and in the broader context of the health care system. Thus, specialists require the abilities to set priorities and effectively execute tasks through teamwork with colleagues, and make systematic decisions when allocating finite health care resources. As managers, specialists take on positions of leadership within the context of professional organizations and the dynamic Canadian health care system.

General Requirements:
- Utilize resources effectively to balance patient care, learning needs, and outside activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize information technology to optimize patient care, life-long learning and other activities.

Specific Requirements:
1. Understand how to function effectively in health care organizations, ranging from an individual clinical practice to organizations at the local, regional and national level.

2. Understand the structure, financing, and operation of the Canadian health system and its facilities, function effectively within it and be capable of playing an active role in its change.

3. Have an ability to access and apply a broad base of information to the care of patients in ambulatory care, hospitals and other health care settings.

4. Make clinical decisions and judgments based on sound evidence for the benefit of individual patients and the population served. This allows for an advocacy role primarily for the individual but in the context of societal needs when monitoring and allocating needed resources.

5. Be open to working effectively as a member of a team or a partnership and to accomplish tasks whether one is a team leader or a team member.

6. Understand population-based approaches to health care services and their implication for medical practice.
7. Facilitate access to local and national resources available for those with visual impairments (e.g. special needs education through the school systems, low-vision services, Canadian National Institute for the Blind).

8. Set realistic priorities and use time effectively in order to optimise professional performance.

9. Understand the principles of practice management relevant to ophthalmology.

**Health Advocate**

Specialists recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. They recognize advocacy as an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, and the broader community. Health advocacy is appropriately expressed both by the individual and collective responses of specialist physicians in influencing public health and policy.

**General Requirements:**
- Identify the important determinants of health affecting patients.
- Contribute effectively to improved health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate, including facilitating access to low vision services and other resources for the visually impaired.

**Specific Requirements:**
1. Demonstrate an understanding of the following:
   1.1 Determinants of health by identifying the most important determinants of health. Specifically, to encourage those behaviours which promote visual health and safety, and discourage those behaviours, which endanger patients’ visual health and safety. This can be applied at individual patient level, to a practice population, or at the general societal level.
   1.2 Public policy for health by describing how public policy is developed; identifying current policies that affect health, either positively or negatively. In particular, to act to promote policies which: encourage appropriate visual screening of populations at risk for ocular disease; help to protect populations at risk of ocular injury; or provide appropriate resources to those affected by ocular injury or disease; and citing examples of how policy was changed as a result of actions by physicians.

2. Demonstrate an understanding of these concepts as applied to the following three levels:
   2.1 In the management of individual patients by identifying the patient's status with respect to one or more of the determinants of health (i.e., unemployment); adapting the assessment and management accordingly (i.e., the medical history to the patient's social circumstances); and assessing the patient's ability to access various services in the health and social system.
2.2 In the analysis of a specialist's practice population work with the specialty society and other associations in identifying current "at risk" groups within a given specialty practice (e.g. Canadian Ophthalmological Society, Canadian National Institute for the Blind) and applying the available knowledge about prevention to "at risk" groups within the practice; and contributing "group data" for better understanding of health problems within the population.

2.3 In relation to the general population by describing, in broad terms, the key issues currently under debate regarding changes in the Canadian health care system, indicating how these changes might affect societal health outcomes and advocating to decrease the burden of illness (at a community or societal level) of a condition or problem relevant to ophthalmology, through a relevant specialty society (e.g. Canadian Ophthalmological Society), community-based advocacy group, other public education bodies, or private organizations.

Scholar

Specialists engage in a lifelong pursuit of mastery of their domain of professional expertise. They recognize the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the appraisal, collection, and understanding of health care knowledge, and facilitate the education of their students, patients, and others.

General Requirements:
• Develop, implement and monitor a personal continuing education strategy.
• Critically appraise sources of medical information.
• Facilitate learning of patients, house staff/students and other health professionals.
• Contribute to development of new knowledge.

Specific Requirements:
Participate in grand rounds, journal clubs, research day presentations, research projects, scientific presentations and publications to satisfy the requirements in the following areas:
1. Clinical:
   1.1 pose a clinical question in ophthalmology;
   1.2 recognize and identify gaps in knowledge and expertise around the clinical question;
   1.3 formulate a plan to fill the gap:
      i. conduct an appropriate literature search based on the clinical question;
      ii. assimilate and appraise the literature;
      iii. develop a system to store and retrieve relevant literature;
      iv. consult others (physicians and other health professionals) in a collegial manner;
   1.4 propose a solution to the clinical question;
   1.5 implement the solution in practice. Evaluate the outcome and reassess the solution (re-enter the loop at 1.3.i. or 1.3.ii);
   1.6 identify practice areas for research.

2. Research:
   2.1 pose a research question (clinical, basic or population health);
2.2 develop a proposal to solve the research question:
   i. conduct an appropriate literature search based on the research question;
   ii. identify, consult and collaborate with appropriate content experts to conduct the research;
   iii. propose a methodological approach to solve the question;
2.3 where applicable, carry out the research outlined in the proposal;
2.4 and defend and disseminate the results of the research;
2.5 identify areas for further research that flow from the results.

3. Education:
   3.1 demonstrate an understanding of, and the ability to apply, the principles of adult learning, with respect to oneself and others;
   3.2 demonstrate an understanding of preferred learning methods in dealing with students, residents, and colleagues.

Professional

Specialists have a unique societal role as professionals with a distinct body of knowledge, skills, and attitudes dedicated to improving the health and well being of others. Specialists are committed to the highest standards of excellence in clinical care and ethical conduct, and to continually perfecting mastery of their discipline.

General Requirements:
• Deliver highest quality care with integrity, honesty and compassion.
• Exhibit appropriate personal and interpersonal professional behaviours.
• Practise medicine ethically consistent with obligations of a physician.

Specific Requirements:
1. Discipline - Based Objectives:
   1.1 display attitudes commonly accepted as essential to professionalism;
   1.2 use appropriate strategies to maintain and advance professional competence;
   1.3 continually evaluate one's abilities, knowledge and skills and know one's limitations of professional competence, seeking advice when necessary and accepting constructive criticism gracefully.

2. Personal/Professional Boundary Objectives:
   2.1 adopt specific strategies to heighten personal and professional awareness and explore and resolve interpersonal difficulties in professional relationships;
   2.2 consciously strive to balance personal and professional roles and responsibilities and to demonstrate ways of attempting to resolve conflicts and role strain.

3. Objectives Related to Ethics and Professional Bodies:
   3.1 know and understand the professional, legal and ethical codes to which physicians are bound;
   3.2 recognize, analyse and attempt to resolve in clinical practice ethical issues such as truth-telling, consent, advanced directives, confidentiality, end-of-life care, conflict of interest, resource allocation, research ethics, etc.;
   3.3 understand and be able to apply relevant legislation that relates to the health care system in order to guide one's clinical practice;
   3.4 recognize, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and provincial regulations.