OPHTHALMOLOGY

EDUCATIONAL EXPERIENCE

During an Ophthalmology rotation the resident will see ophthalmology patients with the faculty member in his office and will follow any inpatients during that time as well. The residents observe the diagnostic phase, the operation phase (observing and assisting in the operating room whenever possible), and the post-operative phase of care. The resident will be expected to learn to perform routine eye examinations and recognize normal vision and when to refer to a specialist for care. This 2 week rotation is located at a private Ophthalmologist's office.

Goals

- To be able to evaluate and treat common eye conditions.
- To become proficient in the eye examination, including the funduscopic exam.
- To be aware of eye manifestations of systemic illnesses.
- To be able to recognize ophthalmologic emergencies such as glaucoma and make timely referrals.
- To be proficient in the measurement of visual acuity.
- To be able to recognize funduscopic abnormalities
  - papilledema,
  - hemorrhage,
  - microaneurysms,
  - exudates
- To be proficient in examining the eye for foreign body or corneal abrasion, including fluorescein staining.
- To know the causes of acute vision loss (transient or sustained, monocular or binocular), appropriate work-up and indications for referral.
- To know the causes of chronic loss of vision (cataracts, age-related macular degeneration, glaucoma, diabetic retinopathy) and when to refer.
- To know the differential diagnosis of the "red eye"
- To be able to differentiate conjunctivitis from other causes (acute iritis, acute glaucoma, keratitis, conjunctival hemorrhage) and know when urgent referral is indicated.
- To know the causes and treatment of conjunctivitis (bacterial, viral, Chlamydia, allergic).
- To be aware of the potential complications in contact lens wearers.
- To know the causes of dry eyes, the symptomatic management and indication for referral.
- To know the causes of excessive tearing and indication for referral.
- To know the common disorders of the eyelid (chalazion, stye) and how to treat.
- To be able to recognize the funduscopic findings of systemic disease (diabetes, hypertension, AIDS).

PATIENT CARE

Goal

- Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
- The resident will be able to have the ability to evaluate and appropriately common eye conditions and recognize a patient that needs ophthalmology referral.
- The resident will be able to gather and synthesize information and make sound clinical decisions for each patient.
- The resident will be able to perform a complete funduscopic exam and fluorescein staining of the cornea.

2011-2012
Family Medicine Residency Program

Competencies

At the completion of their training,

- Family Medicine Residents are expected to demonstrate compassion and empathy in caring for their patients.
- Family Medicine residents are expected to demonstrate the ability to perform a complete history and physical examination on patients with ophthalmology problem of all ages.
- Family Medicine residents are expected to demonstrate the ability to skillfully perform technical diagnostic and therapeutic procedures warranted by their patients' conditions.
- Family Medicine residents are expected to demonstrate the ability to recognize patients with immediate life-threatening conditions requiring critical care and to institute an appropriate initial course of therapeutic management.
- Family Medicine residents are expected to demonstrate the ability to manage both acute and chronic health problems and to use consultants when appropriate.
- Family Medicine residents are expected to demonstrate the ability to use systematic approaches for promoting, maintaining and improving the health and health-associated behaviors of individuals and populations through counseling, public education and community action.

Objectives

At the completion of this rotation

1. Perform a details history and focused physical examination of the eye
2. Perform a basic eye examination
3. Recognition and treatment of common ophthalmology problems presented in an office practice
4. Perform visual acuity
5. Perform visual field testing
6. Perform Cover uncover test
7. Understand Tonometry
8. Diagnostic medications (fluorescein staining, mydriatics, and topical anesthetics)
9. Perform Slit lamp
10. Treatment of inflammation, infections, and allergic conditions (conjunctivitis, blepharitis, hordeolum and chalazion, uveitis, corneal ulcers)
11. Pterygium
12. Application of patch and shield

MEDICAL KNOWLEDGE

Goal

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate sciences and the application of this knowledge to patient care. Residents are expected to demonstrate an investigatory and analytical thinking approach to clinical situations. In addition they should know and apply the following:

Competencies

At the completion of their training,

- Family Medicine residents are expected to demonstrate an understanding of the scientific basis of medicine and the ability to apply that understanding in the care of their patients.
Family Medicine residents are expected to demonstrate the ability to comprehend diseases and to incorporate wisely modern diagnostic and therapeutic modalities in the care of their patients.

Family Medicine doctors are expected to demonstrate knowledge of the most frequent clinical, laboratory, roentgenologic and pathologic manifestations of diseases in all patient populations.

Family Medicine doctors are expected to demonstrate the ability to interpret the results of diagnostic procedures, to reason deductively and utilize sound medical judgment in solving their patient's clinical problem and to construct appropriate management strategies in the care of their patients.

Family Medicine doctors are expected to demonstrate an understanding of, and be sufficiently knowledgeable about, the efficacy of non-traditional modes of therapy available for both common and rare diseases.

Family Medicine doctors are expected to demonstrate knowledge about relieving pain and ameliorating the suffering of patients and their families.

Family Medicine doctors are expected to understand the principles of health maintenance and the influence of the environment on health.

Objectives

At the completion of this rotation the resident will be able to:

1. Diagnosing and treating patients with common ophthalmologic problems encountered as part of primary care but which may not require involving a specialist including:
   a. conjunctivitis
   b. conjunctival hemorrhage
   c. corneal abrasions
   d. sty
   e. minor non-penetrating trauma to the eye
   f. Glaucoma
2. Ocular evaluation (history, physical examination, laboratory, x-rays)
3. Visual impairment evaluation
4. Motor alterations (strabismus and amblyopia) evaluation
5. Recognize neoplasms (benign and malignant) of the eye
6. Recognize common and rare Ophthalmological manifestations of systemic disease
7. Recognize degenerative disease of lens, vitreous and retina
8. Manage and recognize pharmacology
   a. local effects of topical agents
   b. systemic effects of topical agents
   c. ocular effects of systemic medications
9. Surgical options in common ophthalmological conditions
10. Be able to perform a details history and focused physical examination of the eye
11. Be able to perform a basic eye examination
12. Be able to use an ophthalmoscope
13. Perform procedures such as removal of simple foreign bodies from the cornea.
14. Understand the indications, contraindications, dosing and side effects of commonly used ophthalmologic medications
15. Be able to recognize and get urgent referral for the following ophthalmologic emergencies:
   a. Retinal artery occlusion.
   b. Acute angle closure glaucoma.
   c. Optic nerve infarction (giant-cell arteritis).
   d. Retinal detachment.
   e. Iridocyclitis (iritis, anterior uveitis).
   f. Endophthalmitis.
   g. Alkali burn.
h. Trauma.
i. Periorbital cellulitis.

PRACTICE- BASED LEARNING AND IMPROVEMENT

Goal

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

Competencies

At the completion of their training,

- Family Medicine doctors are expected to demonstrate a preparedness to serve as members, as leaders and as consultants in health care teams caring for patients
- Family Medicine doctors are expected to provide or arrange health maintenance services for their patients
- Family Medicine doctors are expected to demonstrate the ability to utilize community resources to enhance the effectiveness of community services to patients and their families.
- Family Medicine doctors are expected to demonstrate knowledge on the management of maladies within the context of evidence-based medicine.
- Family Medicine doctors are expected to demonstrate knowledge about the non-biological risk factors that contribute to the development of diseases and injury and how to utilize disease and injury prevention practices in reducing their incidence and prevalence.
- Family Medicine doctors are expected to demonstrate the capacity to recognize and accept limitations in their knowledge and clinical skills and a commitment to engage in lifelong learning and self-improvement.
- Family Medicine doctors are expected to demonstrate an ability to design and implement an individualized learning (ILP) plan.

Objectives

1. Be able to use the internet to access current literature about various problems seen in subspecialty clinics
2. Be able to critically evaluate literature about subspecialty medical care
3. Be able to work well in the context of various subspecialty clinics
4. Be able to implement changes in patient care based on new information obtained from the physicians subspecialist, clinical experience, review of the literature and other sources

SYSTEMS BASED PRACTICE

Goal

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

Competencies

At the completion of their training,

- Work effectively in various health care delivery settings and systems relevant to their clinical specialty
- Coordinate patient care within the health care system relevant to their clinical specialty
- Learn the consultation guidelines for the optimal care of patients with ophthalmologic conditions
- Incorporate considerations of cost awareness and risk-benefit analysis in patient care
- Advocate for quality patient care and optimal patient care systems
- Work in interprofessional teams to enhance patient safety and improve patient care quality
- Participate in identifying systems errors and in implementing potential systems solutions

**Objectives**

At the completion of this rotation

1. Demonstrate understanding of the care of the patient with outpatient medical and/or surgical conditions in the context of the current health care system. Coordinate care with ancillary services to improve the healthcare of the patient.
2. Assist patients and their families in dealing with the medical or surgical condition of the patient.

**PROFESSIONALISM**

**Goal**

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

**Competencies**

At the completion of their training,

- Family Medicine doctors are expected to demonstrate a commitment to advocate at all times the interests of their patients.
- Family Medicine doctors are expected to demonstrate integrity and honesty in all their personal and professional activities.
- Family Medicine doctors are expected to demonstrate respect for their patients' privacy as well as respect for the dignity of patients as persons.

**Objectives**

At the completion of this rotation

1. Demonstrate cultural competency
2. Demonstrate the ability to act in the best interests of the patients
   a. Respect for confidentiality
   b. Respect for patient autonomy
3. Be professional in all aspects of patient care
   a. Accepts personal responsibility for patients
   b. Accepts feedback in all aspects of care, including the six Core Competencies
   c. Timeliness
   d. Appropriate attire

**INTERPERSONAL AND COMMUNICATION SKILLS**

**Goal**

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Residents are expected to:

**Competencies**

At the completion of their training,

- An ability to communicate effectively and compassionately with patients and families.
- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- Work effectively with others as a member or leader of a health care team or other professional group

Objectives

At the completion of this rotation

1. Communicate effectively with patients
   a. Able to communicate in a manner in which the patient with a medical or surgical condition can understand the underlying disease, treatment plan and prognosis
   b. Able to listen to and address the concerns of patients and their families
2. Communicate effectively with colleagues
   a. Able to work efficiently in the context of the ambulatory Able to work efficiently with the support staff in the care of the ambulatory clinic patient

TEACHING METHODS

Residents must be prepared to participate in the comprehensive care of patients' problems in the context of an ongoing continuity relationship. Residents must first identify the health needs of patients, across the spectrum of age, gender and socioeconomic background. This will require patient-centered interviewing techniques for determining patients' needs, including their preferences for diagnostic and therapeutic decisions, and end-of-life decisions. This will be learned using modeling, direct observation with feedback. Formative instruction is carried out by direct and indirect observation followed and intercalated with constructive feedback and Socratic questioning. Residents also will need to be able to apply basic principles of therapeutic decision making, such as outlining treatment options, listing distinguishing features of the options, describing potential outcomes, and predicting likelihood of those outcomes. This will be learned by role-modeling, Socratic teaching, and facilitated case-based discussions.

ASSESSMENT METHOD (RESIDENTS)

The primary faculty and senior resident will evaluate the resident based on the standard six domains of competency. The attending faculty will observe the resident's skill and competence directly in the patient care context and in the learning environment as the source of information for faculty evaluation. Each supervising faculty completes an evaluation form at the end of the rotation.

ASSESSMENT METHOD (PROGRAM EVALUATION)

Residents also provide an evaluation of faculty and their educational experience on each rotation, grading the quality of the education and supervision they receive using New Innovation electronic system.

LEVEL OF SUPERVISION

Residents are under continuous direct supervision of the attending ophthalmologist Faculty

EDUCATIONAL RESOURCES

Recommended Readings

3. Wilmer Eye Institute at Johns Hopkins http://www.wilmer.jhu.edu
6. All about vision http://www.allaboutvision.com
Additional Resources

The Washington manual of Medical Therapeutics
Harrison's Text Book of Medicine
Journal Articles as assigned
Up-to-Date