

Ophthalmology Rotation	
Primary Goals for this Rotation	Competencies
GOAL I: Prevention, Counseling and Screening (Ophthalmology). Understand the pediatrician's role in preventing ophthalmic disease, injury and dysfunction through counseling, screening and early intervention.	
1. Counsel patients and families regarding prevention strategies related to the eyes, including: a) Prophylaxis in the neonatal period for ophthalmia neonatorum b) Importance of protective eye wear for sports, chemical splashes, ultraviolet light exposure and other activities that warrant eye protection (e.g., helmet with cage or face mask, goggles) c) Full-time eye protection for children with irreversible poor vision in one eye	K, PC, IPC
2. Provide routine screening for visual acuity and eye disorders in the newborn nursery, office and school setting. Screen for: a) physical findings (white pupil, etc.) b) Visual acuity c) Strabismus/amblyopia	K, PC
3. Screen for and routinely refer infants with family history of any of the following conditions: a) Pediatric cataract b) Pediatric glaucoma c) Retinoblastoma d) Strabismus/amblyopia e) Metabolic or genetic disorders / syndromes	K, PC
4. Screen for and provide routine ophthalmology referral for children with medical conditions associated with eye disease, including: a) Juvenile rheumatoid arthritis b) Extreme low birth weight c) Prematurity d) Suspected shaken baby syndrome e) Severe head trauma	K, PC, IPC, SBP
GOAL II Normal vs. Abnormal (Ophthalmology). Differentiate normal from pathologic eye conditions.	
1. Explain to parents the normal development of visual acuity and visual tracking in children.	K, IPC
2. Distinguish normal or clinically insignificant eye findings from potentially serious ones, including:	K

a) Variations in pupil size b) Variations in eyelid structure c) Coloration of the conjunctiva d) Coloration of the iris e) Appearance of the optic disk f) Variation of tearing and minor eye discharge g) Pseudostrabismus h) Pseudostrabismus vs. strabismus i) Anomalous head position (tilt) j) Variation in eyelid position (ptosis)	
3. Demonstrate ability to do a good funduscopic examination on children, using mydriatics if needed.	K, PC
4. Request or perform and interpret the following clinical studies useful in evaluating eye conditions: conjunctival swab for culture and chlamydia FA, fluorescein eye exam, radiologic studies of head and orbit, including plain film, CT and MRI.	K, PC, IPC
GOAL III: Undifferentiated Signs and Symptoms (Ophthalmology). Evaluate and appropriately treat or refer commonly presenting ophthalmologic signs and symptoms.	
1. Create a strategy to determine if the following presenting signs and symptoms are caused by an ophthalmologic condition, and if so, treat or refer appropriately: a) Red eye (painless or painful) b) Strabismus (exotropia, esotropia, pseudoesotropia, lazy eye, crossed eyes) c) White light reflex d) Scleral pigmentation e) Eyelid swelling f) Ptosis g) Decreased visual acuity h) Asymmetric pupillary size or light response i) Unequal red reflex j) Unequal visual acuity or fixation k) Blurry or indistinct optic disc margins (papilledema, optic neuritis)	K, PC, IPC, SBP
GOAL IV: Common Conditions Not Referred (Ophthalmology). Diagnose and manage patients with common ophthalmologic conditions that generally do not require referral.	
1. Diagnose and manage the conditions listed below: a) Non-herpetic viral and non-gonococcal bacterial conjunctivitis b) Corneal abrasion c) Periorbital cellulitis (uncomplicated, in the child 5 years or older) d) Hordeolum (stye) and chalazion e) Simple congenital nasolacrimal duct obstruction in the first year of life f) Uncomplicated foreign bodies of the conjunctiva	K, PC

g) Minor lid lacerations not involving the lid margin, lacrimal system or ptosis h) Small subconjunctival hemorrhage (unless 360 degrees) i) Periocular ecchymosis	
GOAL V: Conditions Generally Referred (Ophthalmology). Recognize, provide initial management and refer appropriately conditions that usually require ophthalmologic referral.	
1. Recognize, provide initial evaluation and management of, and appropriately refer these conditions: a) Amblyopia b) Cataract c) Corneal opacity or edema d) Ectopia lentis e) Chemical burns/conjunctivitis f) Complicated and intraocular foreign bodies g) Decreased visual acuity h) Sight-threatening ptosis i) Strabismus and nystagmus j) Glaucoma k) Herpetic conjunctivitis/keratitis l) Gonococcal conjunctivitis m) Uveitis n) Red eye and/or corneal ulcer in the contact lens-wearer o) Aniridia p) Periorbital cellulites (complicated, or in a child under 5 years of age) q) Orbital cellulitis r) Retinopathy of prematurity in at-risk neonates s) Acute infantile dacryocystitis with cellulitis t) Significant eye trauma manifested by hyphema, extraocular muscle palsy u) Globe penetration, irregular pupil, iritis, or orbital fracture v) White, black (absent), or significantly asymmetric pupillary reflex w) Congenital malformations of the eye or periocular structures (e.g., periorbital hemangiomas) x) Orbital tumor (e.g., rhabdomyosarcoma with proptosis) y) Papilledema	K, PC, IPC, SBP
2. Discuss the role and scope of practice of optometrists, pediatric and general ophthalmologists, and ophthalmology subspecialists (e.g., retina, cataracts); describe situations where referral is indicated to an individual with pediatric expertise; work effectively with these professionals in the care of children.	K, PC, IPC, P, SBP
GOAL VI: Ophthalmologic Signs of Systemic Disorders. Recognize various signs of ophthalmologic pathology that may be manifestations of systemic disorders.	
1. Recognize these signs as potential manifestations of systemic disorders and manage and refer when appropriate: a) Retinal hemorrhages (e.g., child abuse, leukemia) b) Iritis (e.g., juvenile rheumatoid arthritis, inflammatory bowel disease)	K, PC, IPC, SBP

c) Cataracts (e.g., metabolic disorders, genetic malformation syndromes) d) Papilledema (e.g., increased intracranial pressure) e) Chorioretinitis (e.g., toxoplasmosis, cytomegalovirus) f) Subconjunctival hemorrhage (e.g., pertussis, thrombocytopenia, covert suffocation) g) Periorbital ecchymosis (e.g., neuroblastoma) h) Ectopia lentis (e.g., Marfan syndrome, homocystinuria) i) Nystagmus (e.g., central nervous system abnormalities, chemical poisoning) j) Incomplete eye movements (e.g., VI cranial nerve palsy due to increased intracranial pressure, metastatic tumor to orbit) k) Painful red eye (e.g., endophthalmitis due to sepsis or meningitis, orbital involvement of leukemia, thyroid eye disease)	
GOAL VII: Diagnostic and Screening Procedures (Ophthalmology). Perform diagnostic and screening procedures associated with pediatric ophthalmology.	
1. Develop proficiency in the following procedures: a) Vision screening (acuity and strabismus; color blindness) b) Fluorescein dye test to detect corneal abrasion c) Conjunctival swab for bacteria and chlamydia d) Removal of simple corneal foreign body e) Contact lens removal f) Lid eversion g) Funduscopy exam h) Eye irrigation i) Cover-uncover test (strabismus) j) Corneal light reflex test	K, PC
2. Request and interpret (with the radiologist) results of common imaging procedures used in the diagnosis and management of ophthalmologic conditions (orbital radiographs, head CT, head MRI).	K, PC, IPC
Procedures	
GOAL VIII: Technical and therapeutic procedures. Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.	
Conjunctival swab	
Eye: contact lens removal	
Eye: irrigation	
Eye: eyelid eversion	
Eye: patch	
Eye: fluorescein eye exam	
Foreign body removal (simple): conjunctiva	
GOAL IX: Diagnostic and screening procedures. Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.	

Vision screening	
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Core Competencies: **K** - Medical Knowledge
PC - Patient Care and Procedural Skills
IPC - Interpersonal and Communication Skills
P - Professionalism
PBLI - Practice-Based Learning and Improvement
SBP - Systems-Based Practice

Performance Expectations by Level of Training

	Beginning	Developing	Accomplished	Competent
	Description of identifiable performance characteristics reflecting a beginning level of performance.	Description of identifiable performance characteristics reflecting development and movement toward mastery of performance.	Description of identifiable performance characteristics reflecting near mastery of performance.	Description of identifiable performance characteristics reflecting the highest level of performance.
Medical Knowledge	PL1	PL1, PL2	PL2, PL3	PL3
Patient Care and Procedural Skills	PL1	PL1, PL2	PL2, PL3	PL3
Interpersonal and Communication Skills	PL1	PL1, PL2	PL2, PL3	PL3
Professionalism		PL1	PL2, PL3	PL3
Practice-Based Learning and Improvement	PL1	PL1, PL2	PL2, PL3	PL3
Systems-Based Practice	PL1	PL1, PL2	PL2, PL3	PL3

Milestones assessed on this rotation are:

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops an answerable clinical question and demonstrates how to access available evidence, with guidance	Independently articulates clinical question and accesses available evidence	Locates and applies the evidence, integrated with patient preference, to the care of patients	Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence to guide care tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients