

Binocular Vision: Entry-Level Competencies and Learning Objectives

Competency 1. Case History

In addition to performing a standard case history, be able to ask questions regarding pregnancy, birth, developmental, and academic history.

Objective 1A: Identify and document symptoms related to patients with non-strabismic binocular vision and accommodative disorders, strabismic binocular vision disorders, amblyopia, visual-perceptual disorders, special population, and acquired brain injury patients.

Objective 1B: Perform a problem-focused case history contingent upon a thorough patient chart review of previous diagnoses and treatments.

Competency 2. Visual acuities

Be able to perform visual acuity testing on pediatric and special population patients using appropriate charts with proper documentation, while being aware of age-expected visual acuity based on the selected test performed.

Objective 2A: Select appropriate acuity test based on the patient's age and ability.

Objective 2B: Perform appropriate acuity test based on the patient's age and ability.

Objective 2C: Document appropriately the acuity testing used and results

Competency 3. Refraction

Be able to perform free space retinoscopy and refraction techniques on pediatric patients and understand techniques necessary for infants and special population patients

Objective 3A: Identify age-appropriate refractive error for pediatric patients.

Objective 3B: Perform appropriate retinoscopy techniques on pediatric patients.

Objective 3C: Determine when cycloplegia is necessary and should be capable of performing a cycloplegic refraction.

Objective 3D: Prescribe corrective lenses that are appropriate for the patient's age.

Objective 3E: Understand treatment options for myopia control and manage patients or refer appropriately.

Competency 4. Binocular Vision Testing

Be able to perform and analyze appropriate oculomotor, accommodative, and vergence testing techniques in free-space and in-instrument when applicable. Be able to

Objective 4A: Perform appropriate testing for oculomotor skills: fixation, pursuits, and saccades.

Objective 4B: Perform appropriate testing for accommodative skills in free-space or in-instrument when applicable: accommodative amplitude, accommodative posture, and accommodative facility.

Objective 4C: Perform appropriate testing for vergence skills in free-space and in-instrument when applicable: near point of convergence, vergence ranges and vergence facility

Objective 4D: Diagnose oculomotor, accommodative, and non-strabismic vergence disorders

Objective 4E: Understand treatment options for non-strabismic binocular vision dysfunctions and know when to make proper referrals.

Objective 4F: Prescribe lenses and prisms and understand their therapeutic impact on binocular vision problems.

Competency 5. Strabismus and Amblyopia

Be able to conduct appropriate procedures to assess strabismus and amblyopia, including objective and subjective evaluation of motor and sensory characteristics.

Objective 5A: Perform appropriate testing for diagnosis of strabismic conditions: comitancy, sensory and motor fusion, degrees of fusion, stereopsis, and correspondence

Objective 5B: Perform appropriate testing for diagnosis of amblyopic conditions: presence of visual crowding, contrast sensitivity, central suppression, and learn to exclude other conditions that could cause vision loss

Objective 5C: Diagnose strabismus and amblyopia and recognize physical and neurological comorbidities. Be able to perform additional neurological screeners to properly diagnose.

Objective 5D: Understand and initiate treatment (e.g., occlusion, atropine) for amblyopia patients when applicable.

Objective 5E: Understand treatment options for strabismus and know when to make proper referrals.

Competency 6. Visual Information Processing

Be able to understand standardized visual information processing testing as appropriate for the patient's needs

Objective 6A: Ability to identify which visual information processing tests would address a patient's academic and developmental concerns

Objective 6B: Make proper intraprofessional and interprofessional referrals when indicated.

Competency 7. Ocular health

Be able to perform appropriate anterior and posterior health assessments in pediatric patients.

Objective 7A: Know alternative testing techniques for pediatric patients

Objective 7B: Identify, diagnose, and manage common pediatric ocular diseases

Objective 7C: Make proper intraprofessional and interprofessional referrals for the management of pediatric ocular and systemic disease when indicated.

Competency 8. Neuro-optometric Rehabilitation

Be able to identify and understand treatment options for acquired brain injury patients with binocular and ocular health conditions.

Objective 8A: Understand common visual symptoms and conditions for acquired brain injury/traumatic brain injury patients

Objective 8B: Understand basic treatment options for acquired brain injury/traumatic brain injury patients.

Objective 8C: Make proper intraprofessional and interprofessional referrals when indicated.

****Approved by BOD March 13, 2025****