

# Minimum Requirements for a BASIC OPTHALMOLOGIC EXAMINATION and Recommendations for Eye Care in the Philippines

## A. Scope

The term "Eye Exam" is used for various tests of the visual system. This paper defines the comprehensive ophthalmologic examination performed by a qualified ophthalmologist which is patently different from the visual screening performed by personnel of regulatory agencies such as the LTO prior to the issuance of a driver's license, the visual acuity testing and refraction performed by optometrists in the course of dispensing corrective lenses, and, the visual acuity tests and gross eye examination done at primary health units or clinics as part of routine physical examination or pre-employment check-up (see Table).

When a patient is referred to an ophthalmologist or an ophthalmology clinic, it is expected that the ophthalmologic examination described below will be undertaken according to the minimum standards enumerated.

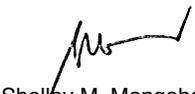
## B. Definition of Basic Ophthalmologic Examination

A basic ophthalmologic examination is a series of tests that assesses the functional and anatomic health of the eye and is a prerequisite to the diagnosis and treatment of an eye condition. These tests are performed by a certified ophthalmologist and his/her designated assistant or trainee, and should be properly documented in the patient's medical record.

This examination can help detect potentially blinding eye diseases and/or ocular manifestations of systemic disease. It is recommended that all people should have periodic and thorough eye examinations as part of routine health care, especially since many eye diseases are asymptomatic.

## C. Components of a Basic Ophthalmologic Examination

1. Medical and ophthalmologic history, including assessment of impact of visual function on daily living and activities.
  - 1.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training, medical doctor or medical/ophthalmic assistant. Information should be verified by a certified ophthalmologist if initially done by another person.
  - 1.2. Minimum equipment required: none
2. Visual Acuity
  - 2.1. Distance (uncorrected and best corrected)
  - 2.2. Personnel: Certified ophthalmologist, ophthalmologist-in-training medical doctor, optometrist or medical/ophthalmic assistant
  - 2.3. Minimum equipment required: Snellen, ETDRS or similar chart (wall or projector based). The testing distance between patient and the test chart should be based on the recommendation of the manufacturer
3. Near (uncorrected and best corrected)
  - 3.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training, medical doctor, optometrist or medical/ophthalmic assistant
  - 3.2. Minimum equipment required: Jaeger or similar near vision chart

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<b>General</b>	<b>Dec 4, 2015</b>	<b>GEN-001-00-04</b>	<b>4</b>
Standards Committee Chair	PAO President	PBO Chair	PAO Secretary
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Eye Exams	Vision Testing	Optometric Examination	Visual Screening	Medical Eye Examination	Ophthalmologic Examination
<b>Circumstance</b>	As required by a regulatory agency and similar situations	Part of optometric procedures	Part of an annual or pre-employment physical exam and similar situations	Part of a physical and neurological examination by a doctor who is not an ophthalmologist	As part of an ophthalmologic consultation
<b>Procedure</b>	Visual acuity testing with and without spectacles Other simple exams such as confrontation and color vision testing	Visual acuity testing and refraction Other eye exams depending on capability of the optometrist for the purpose of detecting eye disease or to rule them out	Visual acuity testing with and without spectacles Gross examination of the external eye and adnexae	Gross examination of the external eye and adnexae Visual acuity testing Checking pupillary reflex, EOM movement, Funduscopy	As enumerated below
<b>Intent</b>	To determine if visual acuity or visual function is adequate for regulated task	To determine if visual impairment can be corrected with spectacles or other visual aids; detect if patient should be referred to an ophthalmologist	To determine visual acuity and detect if a referral to an optometrist or ophthalmologist is necessary	To determine if there are ocular problems that require ophthalmologic referral, or, to find ocular manifestations associated with a medical or neurological condition, e.g. traumatic injury and papilledema	To determine clinical reasons for a patient's ocular complaints, or, to rule out the presence of an eye disease
<b>Performed by</b>	Personnel of a government or private agency (e.g. LTO)	Optometrists	Trained nurses, medical personnel, community workers or employees of a medical clinic	Medical doctor who is not an ophthalmologist	Ophthalmologist

4. Refraction

- 4.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training or optometrist
- 4.2. Minimum equipment required:
- 4.3. Trial lens set or phoropter
- 4.4. Retinoscope or automated refractor

5. Pupil function

- 5.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training or medical doctor
- 5.2. Minimum equipment required: flashlight

6. Ocular alignment and motility

- 6.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training or medical doctor
- 6.2. Minimum equipment required: flashlight

7. Gross external eye examination

- 7.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training or medical doctor
- 7.2. Minimum equipment required: flashlight

8. Intraocular pressure measurement

- 8.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training, ophthalmic assistant

- 8.2. Minimum equipment required: Goldman applanation tonometer, Perkins handheld tonometer or tonopen,
- 9. Slit-lamp examination anterior segment and adnexae
  - 9.1. Personnel: Certified ophthalmologist or ophthalmologist-in-training
  - 9.2. Minimum equipment required: Slit-lamp biomicroscope
- 10. Retina examination (undilated)
  - 10.1. Personnel: Certified ophthalmologist or ophthalmologist-in-training
  - 10.2. Minimum equipment required: Direct ophthalmoscope or slit-lamp biomicroscope with fundus lens

## D. Special Examinations

Additional examinations that should be performed when indicated based on the results of the required components stated in section C

1. Gonioscopy
  - 1.1. Personnel: Certified ophthalmologist or ophthalmologist-in-training
  - 1.2. Minimum equipment required: Slit-lamp biomicroscope and indirect gonioscopes (e.g., Goldman 3 mirror lens or a Possner-type lens)
  - 1.3. Should be performed regularly in patients with or at risk for angle closure
2. Stereoscopic examination of the retina through a dilated pupil
  - 2.1. Personnel: Certified ophthalmologist or ophthalmologist-in-training
  - 2.2. Minimum equipment required: Indirect ophthalmoscope or slit-lamp biomicroscope with a fundus lens
  - 2.3. Should be performed regularly in patients with or at risk for any retinal diseases (e.g., diabetic retinopathy, macular degeneration, etc.)
3. Visual field (gross confrontation)
  - 3.1. Personnel: Certified ophthalmologist, ophthalmologist-in-training or medical doctor
  - 3.2. Minimum equipment required: none
4. Amsler Grid test
  - 4.1. Personnel: Certified ophthalmologist or ophthalmologist-in-training
  - 4.2. Minimum equipment required: amsler grid
  - 4.3. Should be performed regularly in patients with or at risk of macular diseases (e.g., macular edema, epiretinal membrane, macular degeneration, etc.)
5. Color Vision Test
  - 5.1. Personnel: Certified ophthalmologist or ophthalmologist-in-training
  - 5.2. Minimum equipment required: Ishihara color plates
  - 5.3. Should be performed in patients to screen for color vision anomalies
6. Dry Eye Tests (TBUT and Schirmer)
  - 6.1. Personnel: Certified ophthalmologist or ophthalmologist-in-training
  - 6.2. Minimum equipment required: fluorescein strip, schirmer strip, saline solution, anesthetic eye drops, slit-lamp biomicroscope
  - 6.3. Should be performed regularly in patients with or at risk of ocular surface diseases (e.g. dry eye disease, meibomian gland dysfunction, etc.)

Other special ophthalmologic examinations can be done based on the assessment and findings from above.

## E. Standard Practice for Visual Acuity Testing

Both distance and near vision should be tested routinely for each eye.

1. Uncorrected and best-corrected visual acuity (BCVA) should be measured and recorded. BCVA may not be done if uncorrected visual acuity is 20/20.
2. Vision charts for distance that are acceptable include: standard Snellen chart, ETDRS, Bailey Lovey chart, Landolt C chart, and others
3. Near vision is tested using Jaeger chart
4. The testing distance follows the manufacturer's recommendations.
6. Notation may be Metric, English, decimal or Logmar.

7. In infants and young children, the visual attention should be checked monocularly using an interesting target during examination. For older children an age-appropriate vision chart is used.
8. Cycloplegic refraction is recommended in children 10 years old and below when indicated.

## **F. Recommended Frequency of Eye Examination**

1. Subjective visual acuity should be attempted as soon as the child is cooperative enough to participate in the test. This usually begins at 3 years of age, and is repeated every 1-2 years afterward. It is essential that a formal testing of visual acuity be performed in all children before the age of 6 years.
2. For adults please refer to Tables 1 and 2 in the Appendix, as adapted from the 2010 AAO preferred practice pattern for comprehensive medical eye evaluation of adults.
3. Individuals with eye or certain systemic disorders/ diseases may require more frequent exams
4. Patients who will be placed on medications with potential ocular side effects should have preliminary and periodic eye examinations while on the drug.

## **G. Definition of Terms**

1. Ophthalmologist: licensed physician, who is either board certified or completed training in a training program recognized by the PBO.
2. Ophthalmologist in Training: licensed physician, undergoing formal post-graduate training in Ophthalmology or one of its sub-specialties
3. Ophthalmic Assistant: An employee of a certified ophthalmologist or one who is under the supervision of an ophthalmologist in a health facility
4. Optometrist: one duly licensed to practice Optometry in the Philippines