

# PROFESSIONAL BOARD FOR OPTOMETRY AND DISPENSING OPTICIANS

# CLINICAL GUIDELINES FOR BASIC, GENERAL AND COMPREHENSIVE EYE EXAMINATIONS

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## INTRODUCTION

The PBODO is mandated to protect the public and guide the professions registered under it. As the Regulatory authority in South Africa, it is essential for the guidelines published by the PBODO to consider and align to internationally recognized best practices and recommendations that are evidence and/or consensus based.

The clinical guideline covered here delineates the tests that should be conducted in a basic, general and comprehensive eye examination and caters for the three categories that are currently recognised within the scope of practise of optometry viz.

- a. Independent Practice
- b. Independent Practice Diagnostic
- c. Independent Practice -Ocular Therapeutics

The guideline serves as a set of formally developed recommendations for patient care and defines a standard of care for which practitioners are held accountable and against which the quality of care is measured. **ANNEXURE A** provides additional guidance on the equipment required to meet the standard of care.

### 1. BASIC EYE EXAMINATION

The basic eye exam conducted by all optometrists registered as independent practitioners should, at the minimum, consist of the examination procedures delineated in this guideline as follows:

# 1.1 Patient History/Case History

The case history is an ongoing component of eye examination. It should elicit information regarding the following:

- a. the patient's chief complaint and/or nature of their problem/concerns
- b. symptoms experienced by the patient and/or signs that the patient may have noticed.
- c. general health history including medical/systemic conditions
- d. ocular health history
- e. relevant family medical and eye health history,
- f. medication being taken
- g. allergies
- h. the patient's visual requirements/needs in consideration of vocational and nonvocational tasks
- i. risk factors associated with development and progression of myopia

## 1.2 Clinical Examination

1.2.1 Visual Acuity: to be measured monocularly and binocularly.

- a. at distance and near
- b. unaided
- c. Aided with habitual prescription
- d. Pinhole (if indicated)

## 1.2.2 Preliminary Examination

- a. ocular motility, saccades, pursuits, near point of convergence,
- b. ocular alignment cover test for tropias and phorias
- c. pupil assessments: size, reflexes -direct, consensual and afferent
- d. Visual Field Screening

### 1.2.3 Refraction

- a. Objective refraction: retinoscopy
- b. Subjective refraction: monocular and/or binocular sphero-cyl balanced refraction at distance and near

# 1.2.4 Binocular vision evaluation, accommodation evaluation

## 1.2.5 Ocular Health Assessment

- a. External ocular health examination Slit-lamp examination of external ocular structures and its adnexa
- b. Internal ocular health examination: Slit-lamp evaluation of anterior segment; ocular media evaluation, and fundoscopy
- c. Tonometry (record type of instrument & time of day)

## 1.2.6 Dispensing:

- a. spectacle frame selection
- b. determination of suitable ophthalmic lenses and/or products
- c. taking necessary ophthalmic measurements
- d. Laboratory order
- e. verifying and dispensing the spectacle prescription
- f. frame and spectacle adjustments and repairs
- g. advising patients on adaptive symptoms, use and care of spectacles & other ophthalmic devices.

# 1.3 Patient Management

## 1.3.1 Patient Education and Counseling

- a. At the conclusion of the eye examination the patient should be informed of the examination findings, recommended treatment/management plan and prognosis.
- b. Advice should be provided on relevant health promotion issues such as ergonomic and/or occupational eye health considerations.
- c. Discuss risk factors associated with non-treatment/non-compliance in conditions such as glaucoma etc.
- d. Appropriate referrals should be made, where necessary with the appropriate degree of urgency indicated.

## 1.3.2 Dispensing

- a. spectacle frame selection
- b. Laboratory order
- c. advising patients on adaptive symptoms, use and care of spectacles & other ophthalmic devices.

### 2. GENERAL EYE EXAMINATION

In addition to the above-mentioned tests and procedures the following investigative techniques should be conducted in a **general** eye examination when indicated:

- 2.1 Systemic assessments e.g., measuring of blood pressure, checking blood glucose levels
- 2.2 colour vision evaluation
- 2.3 stereopsis
- 2.4 keratometry
- 2.5 visual field testing
- 2.6 contrast sensitivity

## 3. COMPREHENSIVE EYE EXAMINATION

Further to the above, optometrists registered under the category of Independent Practice – Diagnostics and/or Ocular Therapeutics, may use the appropriate approved pharmaceutical agents for the following diagnostic clinical techniques as part of a **comprehensive** eye examination:

- 3.1 Dilated fundus examination
- 3.2 Cycloplegic eye examination
- 3.3 Gonioscopy
- 3.4 Goldmann contact tonometry
- 3.5 testing to differentiate between conditions e.g., differentiating scleritis from episcleritis

# 4. THERAPEUTIC PRESCRIPTION OF PHARMACEUTICAL AGENTS

Following the accurate diagnosis of ocular disease practitioners registered in the category of Independent Practice: Ocular Therapeutics, may prescribe therapeutic pharmaceutical agents as approved and listed in the Medicines and Controlled Substances Act 75, (Act 101 of 1965).

## ANNEXURE A: EQUIPMENT LIST

## MINIMUM EQUIPMENT

The practitioner must utilize the following equipment in conducting a basic eye examination:

- 1. Visual acuity charts: distance and near
- 2. PD Rule or pupillometer
- 3. Ocular occluder
- 4. Near fixation target/s for ocular motilities, near point of convergence
- 5. Penlight torch or similar light source for assessing pupil reflexes
- 6. Age-appropriate targets for binocular visual skills assessments
- 7. Retinoscope
- 8. Ophthalmoscope
  - direct handheld ophthalmoscope
- 9. Slit-lamp biomicroscope
- 10. Trial lenses and trial frame
- 11. Phoropter (optional)
- 12. Colour vision test
- 13. Stereopsis test
- 14. Visual field screening test
- 15. Tonometer

### ADDITIONAL EQUIPMENT

In addition to the above-mentioned equipment the following may be required when conducting additional tests:

- 16. Keratometer/keratography
- 17. Visual field analyzer
- 18. Sphygmomanometer (Blood pressure measurement)
- 19. Glucometer & glucose strips
- 20.90D,20D or similar condensing lenses
- 21. Binocular Indirect Ophthalmolscope
- 22. OCT

# References:

- 1. Comprehensive Adult Eye and Vision Examination, American Optometric Association 1995, 2002, 2015.
- 2. Standard of Practice for Optometrists and Dispensing Opticians, General Optical Council, April 2016.