AUGUST 1, 2021



# INDIAN ENTRY LEVEL OPTOMETRY COMPETENCY SKILL STANDARD

ASSOCIATION OF SCHOOLS & COLLEGES OF OPTOMETRY-INDIA

43, AMRUT KESHAVENAIK MARG, FORT, MUMBAI – 400001. TEL.:022 2201 2358, FAX.: 022 2207 0048 E-MAIL.: OP.MANAGER@ASCO-INDIA.ORG; WWW.ASCO-INDIA.ORG

### Acknowledgment

 This document has been developed by a team of educators chosen by ASCO-India and we wish to thank Optometry Council of India for the support rendered for the development of this document.





ASCO India has always aspired to make Indian Optometry updated, upgraded and competent as per the evolving science and practicing standards across the globe. We felt that an update was imminent as the last edition of IELOCS was published a decade back. I am extremely thankful to the entire team, (including a number of new faces) who came forward immediately to support us. My grateful thanks to Mrs. Sumathi Narayanan, who accepted our invitation to help us with the section on communication skills. We have endeavored to make the latest edition robust and user friendly. We have included a section on the minimal and desirable equipment required which will help entrepreneurs as well as academic institutions in Optometry. My sincere thanks to my board at ASCO India which made this happen in a record time. We all hope to see a better informed and competent Optometry India.

"Lead us from darkness unto light."

Aditya Goyal, President, ASCO – India.



.

### ASSOCIATION OF SCHOOLS & COLLEGES OF OPTOMETRY (A.S.C.O)

### Foreword

Dear Colleagues,

"Competency" is the link between knowledge, judgement, skills and the daily activities required by a practicing optometrist. In 2011, a team of enthusiastic academicians and professionals in the field of optometry from across the country came together and took a decisive step to draft the Indian Entry Level Optometry Competency Skills (IELOCS).

A decade later, as the profession has evolved with time, a need to revise the document was identified. Once again, the task started with putting together a team. As expected, most of the initial team members agreed to participate in this exercise. After some intense discussions and brain storming the team finally agreed on the format of the revised document. The subject experts provided their inputs on relevant subjects and now the document is ready! It gives us immense pleasure to present to you the "Indian Entry Level Optometry Competency Skills (IELOCS) 2021."

I take this opportunity to thank each and every individual who has contributed directly or indirectly to make this document possible.

Sincerely,

Nilesh Thite M. Optom, FIACLE, FAAO Executive Manager of Educational Programs International Association of Contact Lens Educators(IACLE) Email: nilesh\_thite@yahoo.comMobile: +91 9004387930

#### ACKNOWLEDGEMENT FOR CONTRIBUTORS

#### A. COMMUNICATION SKILLS

SUMATHI NARAYANAN, PHD IN HUMAN DEVELOPMENT, DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF MADRAS, CHENNAI. CCMCMADRAS@GMAIL.COM

RASHIMA, BS OPT, M PHIL, PHD HEAD - OCCUPATIONAL OPTOMETRY SERVICES, ASSISTANT PROFESSOR, ELITE SCHOOL OF OPTOMETRY, SANKARA NETHRALAYA, CHENNAI. RASHIMA@SNMAIL.ORG

#### B. PROFESSIONAL CONDUCT

PRASAD SAWAT, M. OPTOM, F.LVPEI, F.BFS, F.IACLE, F.BCLA, FAAO. CLINICAL ASSOCIATE, PROSE PROVIDER PARTNER CLINIC, THE EYE SUPER SPECIALTIES, GHATKOPER, MUMBAI. SAWANTOC@GMAIL.COM

AMOD S GOGATE, M.OPTOM ASSOCIATE DIRECTOR & PROFESSOR, EDUCATION & TRAINING, PBMA'S H V DESAI EYE CARE INSTITUTE, PUNE. AMODGOGATE@GMAIL.COM

#### C. PATIENT EXAMINATION

R KRISHNA KUMAR, PHD FREELANCE OPTOMETRIST & EDUCATIONALIST, FORMER PRINCIPAL, ELITE SCHOOL OF OPTOMETRY CHENNAI. RAMANI\_KK@YAHOO.COM

VALARMATHI ARUNACHALAM, B.S., M.PHIL, ASSISTANT PROFESSOR, SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH, CHENNAI. AVMATHI@GMAIL.COM

#### C1. CONTACT LENSES

NILESH THITE, M. OPTOM, FIACLE, FAAO EXECUTIVE MANAGER OF EDUCATIONAL PROGRAMS INTERNATIONAL ASSOCIATION OF CONTACT LENS EDUCATORS (IACLE) NILESH\_THITE@YAHOO.COM

YESHWANT SAOJI, M OPTOM., FLVPEI., FIACLE CONSULTANT OPTOMETRIST AND EDUCATOR SAOJI VISION CARE, NAGPUR. YESHWANTSAOJI@HOTMAIL.COM

LAKSHMI SHINDE, B.OPT, M.SC OPTOM (UNSW), FIACLE, FAAO EXECUTIVE MANAGER, GLOBAL EDUCATION INTERNATIONAL ASSOCIATION OF CONTACT LENS EDUCATORS (IACLE) BANGALORE. LAK.SHINDE@GMAIL.COM

#### C2. BINOCULAR VISION

ADITYA GOYAL, M.OPTOM PRINCIPAL, SANKARA COLLEGE OF OPTOMETRY, BANGALORE. ADITYAGOYAL@HOTMAIL.COM

DIWAKAR RAO, M.OPTOM, HOD & ASSOCIATE PROFESSOR, SANKARA COLLEGE OF OPTOMETRY, SANKARA EYE HOSPITAL, BANGALORE. DOT\_DIWAKAR@YAHOO.CO.IN

#### C3. VISUAL IMPAIRMENT

PREMA K CHANDE, M.OPTOM, DBM, FIACLE HOD, LOTUS COLLEGE OF OPTOMETRY LOTUS EYE HOSPITAL, MUMBAI. PREMACHANDE@HOTMAIL.COM

SARIKA GOPALAKRISHNAN, BS (OPT), FAAO, DOCTORAL RESEARCHER LOW VISION REHABILITATION SERVICES, SANKARA NETHRALAYA SENIOR FACULTY, ELITE SCHOOL OF OPTOMETRY CHENNAI. SARIKA@SNMAIL.ORG

#### D. OPTICAL DISPENSING

GOPI VANKUDRE, M.OPTOM FACULTY, COLLEGE OF HEALTH SCIENCES, DEPARTMENT OF OPTOMETRY, UNIVERSITY OF BURAIMI, SULTANATE OF OMAN. GOPI\_VANKUDRE@YAHOO.CO.IN

K.SAMUEL LIVINGSTONE, M.OPTOM, FVT, FBDO(O/S), FIACLE LECTURER, SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH, CHENNAI. SML.LIVINGSTONE@GMAIL.COM

USMAN MEMON, M.OPTOM, FIACLE (AUS), B.SC, PGDIM, PHD SCHOLAR (GUJ. UNI) SR.LECTURER AND CONTACT LENS CONSULTANT NAGAR SCHOOL OF OPTOMETRY, AHMEDABAD. USMMEMON@YAHOO.CO.IN

#### E. DOCUMENTATION

AJAY SHINDE, M. OPTOM ADJUNCT FACULTY, SANKARA COLLEGE OF OPTOMETRY, BANGALORE. SECCBEL@GMAIL.COM

ISHA DAVE, B.SC (HONS), M.SC, MCOPTOM, FIACLE ADJUNCT FACULTY, LOTUS COLLEGE OF OPTOMETRY, LOTUS EYE HOSPITAL, MUMBAI. ISHADAVECLC@GOOGLEMAIL.COM



### Indian Entry Level Optometry Competency Skill Standard (IELOCS)

COMPETENCY STANDARDS FOR ENTRY LEVEL INTO THE PROFESSION OF OPTOMETRY IN INDIA

These standards have been developed for the profession, as it exists in 2011 and are expected to be altered as technology and knowledge expand, optometrists' clinical skills and community expectations broaden and professional aspirations are fulfilled

### What is a competency?

'Competency is the **Ability** to perform the activities within an occupation or function to the standard expected inemployment'. OR

Competency has been defined as the **Ability** to perform the responsibilities required of professionals to the standards necessary for safe and effective practice.

A competency will be a combination of the specification and application of a knowledge or skill within the occupation, to the appropriate standard. It will include the requirement to perform individual tasks; to manage a number of different tasks, to respond to irregularities and breakdowns in routine and to deal with the responsibilities and expectations of the work environment. Thus, it will be a combination of task skills, task management skills, contingency management skills and job/role environment skills.

Competency-based standards are seen to encompass all forms of achievement of competence rather than only formal indicators such as formal qualifications from educational institutions and could have a role in the process of articulation or linkage between professions and related trades or occupations.

## What is the goal of developing Entry Level Optometry Competency Skill document?

The goal of the IELOCS is to enable the schools of optometry in India to design their curriculum based on this document so that the optometry students passing out from their institute achieve the expected competency skills in/for the profession of optometry



### Terminology:

 Some terms used in this document have specific meanings within the context of competencystandards.

**Unit:** A major segment of the overall competency of the profession, typically representing a major function orrole of the profession.

**Performance criteria:** Evaluative statements which specify the required level of performance.

**Indicators:** Measurable and observable features, which can assist in determining whether a competency is achieved.



# Classification Units of Competency Skills at Entry level for Optometrists

A) Communication Skills

- B) Professional Conduct
- C) Patient Examination and Management.
- D) Optical Dispensing
- E) Documentation

I		Ability to communicate effectively with the patient, taking into accounts his/
	A. Communication	
	Skills	herphysical, emotional, intellectual, social and cultural background.
		<b>Ability</b> to build rapport and empathy with patients from all backgrounds <b>Ability</b> to take a structured, efficient, accurate history from patients with or
		without anyophthalmic and / or systemic problems and needs.
		Ability to impart information in a manner which is appropriate to the recipient
		Ability to be flexible in routine so as to make assimilation of information easy
		especially with illiterates, people with special needs
		Ability to protect patient data and records for confidentiality.
	B. Professional	Ability to manage patients in a safe, appropriate and confidential environment
	Conduct	Ability to comply with legal, professional and ethical issues relating to practice.
		Ability to measure vision and visual acuity
	C. Patient	Ability to detect and measure the spherical, astigmatic and presbyopic corrections
	Examination and	Ability to prescribe refractive correction for different age groups and visual
	management	needs.
		Ability to examine and identify abnormalities of the external eye and
		adnexa usingappropriate instruments and techniques
		Ability to differentiate and grade normal and abnormal findings
		Ability to examine and identify abnormalities of the cornea using appropriate
		instruments and techniques
		Ability to use contact and non-contact tonometers to measure intraocular pressure
		and analyse and interpret the results
		Ability to examine and identify abnormalities in the anterior chamber
		Ability to examine and identify abnormalities in the iris and assess pupil reflexes
• •		Ability to examine and identify abnormalities in the crystalline lens using
		appropriate instruments and techniques
•••		Ability to examine and identify abnormalities in the vitreous and fundi using appropriate
		instruments and techniques
		Ability to diagnose and manage the case within the purview of the optometry care.
		Ability to select appropriate, and use safely, the range of ophthalmic drugs and
		diagnostic stains available to an optometrist
		Ability to formulate the follow up routines
		Ability to refer where appropriate for further management
		Ability to interpret all investigation reports.
		Ability to take relevant history including previous contact lens wear Ability to prescribe Contact lanses appropriate for different are groups and visual
		Ability to prescribe Contact lenses appropriate for different age groups and visual needs
	C1. Contact Lenses	Ability to assess anterior eye health as a part of pre-fitting evaluation
		Ability to quantify corneal shape and size, and pupil
		Ability to select the optimum lens
		Ability to assess and optimise lens fit
		Ability to teach a patient to safely insert, remove and care for contact lenses
		<b>Ability</b> to monitor the anterior eye health of contact lens wearers and refer where appropriate

		Ability to assess eye alignment and eye movements
		Ability to assess sensory fusion and stereopsis.
	C2. Binocular	Ability to assess oculomotor function.
	vision	Ability to assess convergence and accommodation
		Ability to prescribe orthoptic exercises appropriate for different age groups and visual
1		needs.
		Ability to refer where appropriate for further management
		Ability to formulate the follow up routines
		Ability to take an appropriate history of a visually impaired patient
		<b>Ability</b> to accurately quantify visual impairment and relate it to the underlying pathology and functional consequences
	C3. Visual	Ability to advise on the use of optical and non-optical aids
	Impairment (Low Vision)	Ability to prescribe Low Vision devices appropriate for different age groups and visual needs.
		Ability to refer where appropriate for further management Ability to formulate the follow up routines.
		Ability to interpret spectacle prescriptions
	D. Optical Dispensing	Ability to take frame and facial measurements
	Dispensing	Ability to recommend the appropriate lens and frame material and design based on
		wearers needs and prescription
		Ability to verify, modify and adjust spectacles
		Ability to advice patients on appropriate use of Optical devices
		Ability to record relevant information, results for various examination procedures.
	E. Documentation	Ability to record treatment, management and follow up plans
		Ability to obtain patient consent wherever required.

### **Communication Skills**

**Description:** Ability of the optometrists to seek and communicate information from and to the patients. It also means the ability of the optometrist to share the relevant information to the eye care professionals in different contexts.

**Required tools:** Clinical set up with clean and quiet room, supporting materials such as awareness pamphlets/ leaflets, diagrams, visual simulations, models of the eye / clinical conditions

Performance		Indicators		
Criteria	Knowledge	Skill	Behavior	
Ability to make the patient comfortable and gather information from the patient	<ul> <li>Has basic knowledge on important details pertaining to the purpose of visit and history taken to be ascertained from the patient / attender.</li> </ul>	<ul> <li>Greets the patient in a culturally and socially appropriate way</li> <li>Ability to build and sustain rapport and trust</li> <li>Demonstrates ability to listen actively to the patient, understand and summarize the information to get confirmation from the patient</li> </ul>	<ul> <li>Smiles and greets the patient and their attendant</li> <li>Listens to patient and responds politely</li> <li>Uses friendly tone of voice</li> </ul>	
Ability to identify and respond appropriately to patients' fears, anxieties and concerns about their visual welfare	<ul> <li>Understanding of verbal and non-verbal communication</li> <li>Understanding of how to recognise emotions in patients and their expressions.</li> </ul>	<ul> <li>Establishes and maintains a good professional and clinical conduct with the patient to inspire trust and confidence.</li> <li>Explores patient concerns and provides reassurance where appropriate, using explanations that are relevant to that patient.</li> </ul>	• Empathy • Patience	
Ability to understand the patient's spoken and unspoken expectations and aspirations for vision care. Manage situations when there is a challenge to fulfil.	<ul> <li>Have understanding on the roles of optometrists and the extent to which they can deliver information to patient</li> <li>Know about the protocol and ethical practice in medical care.</li> </ul>	<ul> <li>Explores and understands patients' expectations</li> <li>Appropriately guide and refer the patient to other professionals as per the need of the patient</li> </ul>	Same as above	

Ability to communicate with patients who have language difficulties, or who are confused, reluctant / give inaccurate information	<ul> <li>Knows alternative ways to examine and explain medical condition to patients and attenders</li> <li>Knows necessary languages</li> </ul>	<ul> <li>Conveys clinical conditions in an informative and understandable way using simpler terms.</li> <li>Makes effective use of body language to support explanation.</li> <li>Uses appropriate supporting material like patient awareness documents, models etc. for explaining the clinical condition</li> <li>Takes help from interpreters wherever needed</li> </ul>	• Same as above
Ability to discuss with thepatient the importance of systemic disease and itsocular impact, its treatment and the possibleocular side effects of medication.	• Have thorough understanding of the disease process in cases such as diabetes, hypertension and other common systemic diseases having common ocular manifestations.	<ul> <li>Provides simple explanation to the ocular manifestations of the systemic disease in question</li> </ul>	• Same as above and creativity
Ability to explain to the patient the implications of their pathological orphysiological eye condition	<ul> <li>Have understanding on the ocular conditions and physiology</li> </ul>	<ul> <li>Gives factually relevant information in a clear and understandable way, avoiding jargon and technical terms.</li> <li>Uses appropriate supporting material, for example, diagrams or leaflets.</li> </ul>	<ul> <li>Same as above and creativity</li> </ul>
Ability to communicate effectively with any other person involvedin the care of the patient	<ul> <li>Based on the diagnosis have understanding on the psychological state that can be expected from the patient</li> </ul>	• Establish good rapport with the patient/attender and explains the details about the diagnosis, prognosis and management plan	• Same as above
Ability to explain to the patient the Examination and management plan	<ul> <li>Has an understating of the disease and steps for diagnosis based on history</li> <li>Knows the appropriate management plansfor the clinical condition</li> </ul>	<ul> <li>Summarizes the history and informs about the expected examination protocol within the role of the optometrist</li> <li>Explains the management plan clearly</li> </ul>	• Same as above

### **Professional Conduct**

**Description:** The optometrist's ability to understand optometry profession's job responsibilities, its limitations, code of conduct and to comply with the legal, ethical and professional aspects of the practice. Optometrist should also be aware of rights of the patients who are seeking the optometric service for dignity, privacy and confidentiality.

This professional conduct should demonstrate to the patients and peers, your commitment to the very highest clinical, ethical and professional standards. We believe this code will increase public trust and confidence in the profession, therefore, will improve inunderstanding the role of the optometrist in primary eye care.

**Required tools:** Computer, relevant software, stationery, codes and guidelines of professional organization and regulatory bodies

		Indicators	
Performance Criteria	Knowledge	Skill	Behavior
<ul> <li>Ability to consider vision and general health as first priority</li> </ul>	$\bullet$ Should have in depin	<ul> <li>Recognises and considers patient's specific needs and requirements in vision care</li> <li>Demonstrates best of the resources to improve the visual requirements</li> <li>Explains the course of present and planned treatment</li> </ul>	<ul> <li>Greets and respects all patients and their attendants in a caring, sensitive and appropriate manner</li> <li>Positive attitude and patience towards patient's requirements</li> <li>Ensures equal care and treatment is provided to all patients</li> </ul>

<ul> <li>Ability to manage confidentiality of patient's demographic and medical record data</li> </ul>	<ul> <li>Should have adequate knowledge of data protection and how this will impact security, access and confidentialityof the patient's records</li> <li>Should have essential knowledge to ensure the patient environment will remain safe and user-friendly, in terms of access and facilities</li> </ul>	<ul> <li>Conversant in using various digital devices, access cloud storage platforms and saves electronic medical records on system-based software programs and keeps them safe</li> <li>Demonstrates how to store and retrieve manual medical records</li> </ul>	<ul> <li>Seeks consent of the patient before providing information to external stake holders</li> <li>Restricts self from discussing patient information and condition in any open forum/external communication</li> </ul>
• Ability to adhere to health and safety policies of the practice	<ul> <li>Should have vital knowledge about appropriate personal hygiene, cleanliness of the practice, hygiene relating to instrumentation, contact lenses, disposal of clinicalwaste etc.</li> <li>Should be aware of policies of the local governing body and professional organizations</li> </ul>	<ul> <li>Implements appropriate measures for infection control</li> <li>Maintains comfortable, hygienic and risk-free environment</li> </ul>	<ul> <li>Proactive approach to health and safety issues</li> </ul>
<ul> <li>Ability to promote ethical and cordial relationship with other health care professionals</li> </ul>	<ul> <li>Should have essential knowledge of how to maintain practice in accordance with other professional health care standards</li> </ul>	<ul> <li>Explains the condition that are treatable/correctable beyond your practice standards</li> <li>Refers to respective specialties with careful diagnosis and referral letter</li> </ul>	<ul> <li>Honesty and understanding of own limitations</li> </ul>
<ul> <li>Ability to comply with legal, professional and ethical guidelines, law and codes</li> </ul>	<ul> <li>Should have in depth knowledge of ethical practice and standard operating procedures followed in the clinical examination and referrals</li> <li>Should have vital knowledge of the law, codes and guidelines set by the regulatory body of profession and is fully aware of the consequences if not followed.</li> </ul>	<ul> <li>Explains the uses of various diagnostic tests and their importance in the process of examination</li> <li>Follows the code of conduct set down by thecouncil/appropriate authorities</li> </ul>	

### **Patient Examination and Management**

**Description**: Ability of the optometrist to obtain accurate history, to perform (according to internationally accepted standard procedures) clinical refraction, anterior and posterior segment evaluation, status of cranial nerves related to eye and adnexa, ability to evaluate for, select and prescribe contact lens and low vision devices, evaluate binocular vision status, arrive at the diagnosis, manage/ co- manage, counsel, prescribe and/or refer them to appropriate health care professionals /rehabilitation professionals.

### **Required instruments and tools:**

### Must have

- Distance acuity charts
- Near vision charts
- Contrast sensitivity chart
- Trial frame
- Trial lenses
- Jackson cross cylinder
- Stereopsis chart
- Colour vision chart
- Torch light

- Lensmeter (focimeter)
- Retinoscope
- Keratometer
- Slit lamp biomicroscope
- Non-contact tonometer
- Direct Ophthalmoscope
- Perimeter
- Schirmer's strips
- Fluorescein strips

### Desirables

- Autorefractor
- Corneal topographer
- Applanation tonometer
- Non-mydriatic fundus camera
- Anterior and posterior segment imaging equipment
- Glare tester
- Perimeter
- Rose Bengal stain
- Sterile water vials
- Syringe
- 26-gauge needle

Performance	Indicators		
Criteria	Knowledge	Skill	Behavior
Ability to obtain relevant history and information relating to general health, previous ocular health, previous surgical/laser interventions, information on the investigation done, medication,family history, work, lifestyle and personal requirements	<ul> <li>In depth knowledge on different ocular and systemic conditions.</li> <li>A deep understanding of what aspects of history are relevant andwhat questions to ask and how to ask.</li> <li>Awareness of evidence based optometric practice literatures or guidelines to avoid errors related to clinical practice.</li> </ul>	<ul> <li>Elicits the chief complaints, laterality, associated symptoms, past ocular history, family history, past medical history, medical (past and present) and surgical interventions (past), investigations (past and recent) and medicinal allergies.</li> <li>Ascertains social history, travel history, ethnicity or developmental history wherever necessary</li> </ul>	<ul> <li>Greets the patient, establishes eye contact, and rapport, allows the patient to speak initially and remainan active listener.</li> </ul>

		<ul> <li>Documents the history in a logical, structured and comprehensive manner and mentally arrive at tentative diagnosis as well as possible other diagnosis (differential diagnosis)</li> <li>Probes by asking relevant questions to the patient</li> </ul>	
Ability to assess the well-being of the patient before proceeding with the various tests	<ul> <li>Extensive knowledge in the fundamental anatomy and physiology of the human body</li> </ul>	<ul> <li>Observes the patients' faces and expressions</li> <li>Observes the patients' gait, posture and decubitus*</li> <li>Observes clothing and paraphernalia</li> <li>Observes stature and habitus</li> <li>Observes patient's demeanor</li> <li>Listens to the patients' quality of voice and cough sounds</li> <li>Observes if patient is cachectic or obese</li> </ul>	<ul> <li>Being observant, investigative, awareness of theclues</li> </ul>

Ability to	<ul> <li>Has thorough</li> </ul>	Assesses monocular and     Conducts the various
determine the	understanding of	binocular visual acuity assessments with
visual acuity /	theconcept,	testing using equipment confidence
vision of the	various methods	such as Snellen chart/    Is analytical in
patient	and notations	picture charts / illiterate interpreting thetest
		charts / LogMAR / ETDRS outcomes
		charts etc.
	• Is conversant with	
	standard precautions	Conducts selective age-
		appropriate assessments
		Measures improvement of
		vision with pinhole were
		indicated
		Assesses vision through
		objective method if
		indicated
		Assesses contrast
		sensitivity
		<ul> <li>Documents the results</li> </ul>
		appropriately

		1	
Ability to determine the refractive status of the patient objectively	<ul> <li>Has in-depth understanding of the optics of the eye</li> <li>Has in-depth knowledge on the various methods and the process of assessing the refractive status of the eye</li> <li>Understands the role of accommodation in determining the refractive state of the eye</li> <li>Understands the need for cycloplegia and knowledge of various cycloplegic agents</li> </ul>	<ul> <li>Determines the refractive status of the patient eye objectively using retinoscope</li> <li>Cross checks retinoscopy with keratometry and autorefractor values if required</li> <li>Carries out cycloplegic refraction judiciously within legal boundaries</li> </ul>	<ul> <li>Is proficient, confident and culturally sensitive to the use of various instruments like retinoscope, keratometer, autorefractors, pertained to the assessment of refractive status objectively</li> <li>Is analytical in interpreting the test outcomes</li> </ul>
Ability to determine the refractive status of the patient subjectively and prescribe appropriate glasses.	<ul> <li>Understands the visual characteristics of various refractive states of the eye namely emmetropia and ametropia</li> <li>Has general understanding of the relationship between disease states and refractive state of the eye</li> <li>Understands the need for clear vision.</li> </ul>	<ul> <li>Determines and confirms monocular spherical and cylindrical spectacle prescription</li> <li>Perform binocular balancing wherever necessary</li> <li>Determines the near correction of the patient based on relevant factors</li> <li>Records the values appropriately and prescribes the spectacle for the patient</li> </ul>	<ul> <li>Can appraise and analyse patient's situations</li> <li>Is empathetic and supports patients in the use of spectacles</li> </ul>

	<ul> <li>Understands the influence of age, accommodation ocular structures like cornea and lens on the refractive state of the eye</li> <li>Understands the prescribing guidelines for various refractive errors</li> </ul>		
Ability to determine the pupillary functions and ability to refer in indicated cases	<ul> <li>Essential knowledge on pupil dimensions and color, pupillary pathway, and the ocular conditions associated with pupil.</li> <li>Adequate knowledge of evidence-based practice guidelines on pupillary examination, interpretation, documentation and referral/management</li> <li>Knowledge on the role of ophthalmologist and optometrist in relation to pupillary abnormalities</li> </ul>	<ul> <li>Informs the patient while evaluating the pupils in two different lighting (less lighting and normal ambient lighting)</li> <li>Appreciates the pupil size, anisocoria, shape and reaction to light and near objects and differentiate normal from abnormal pupil.</li> <li>Appreciates direct and consensual light reflex and relative afferent pupillary defect and light -near dissociation of pupil</li> <li>Documents the findings following a standard protocol</li> </ul>	<ul> <li>Before using the torch light, ensure that patient is comfortable with the intensity of the light.</li> </ul>

Ability to assess tear dynamics and ability to manage tear abnormalities or refer in indicated cases	<ul> <li>In-depth knowledge about tear film layers, its structure, functions, properties, composition and associated abnormalities</li> <li>Keep abreast of the new evidences in the practice of diagnosing and managing tear film abnormalities</li> <li>Knowledge of the basic optical principles of instruments used for evaluating tear film</li> <li>Knowledge on the role of ophthalmologists and optometrists in relation to conditions associated with tear film.</li> </ul>	<ul> <li>Evaluates the tear film layers, associated corneal and conjunctival changes by using appropriate equipment and questionnaire.</li> <li>Performs relevant tests to assess the tear film</li> <li>Documents the findings in appropriate way and arrives at the diagnosis.</li> <li>Manages and /or refers the patients appropriately</li> </ul>	<ul> <li>Seeks approval before performing tests</li> <li>Demonstrates patience while performing various procedures on the patients</li> </ul>
Ability to examine the Anterior segment of the eye and ability to refer indicated cases appropriately	<ul> <li>In-depth knowledge related to anterior segment structures, their functions, normal dimensions and abnormal conditions associated with anterior segment</li> <li>Knowledge on the optical principles of various ophthalmic instruments used for evaluating the anterior segment</li> <li>Knowledge on the role of ophthalmologists and optometrists in</li> </ul>	<ul> <li>Evaluates the anterior segment using torch light (with or without loupe) and slit lamp bio- microscope.</li> <li>Differentiates normal and abnormal findings in anterior segment</li> <li>Arrives at the probable diagnosis</li> <li>Interprets the report related to various imaging techniques used to evaluate anterior segment.</li> </ul>	Same as above

	relation to anterior segment conditions		
Ability to assess the intraocular pressures of the eye and ability to refer indicated cases	<ul> <li>Adequate knowledge about various types of tonometers, their optical principles, advantages and disadvantages</li> </ul>	<ul> <li>Demonstrate the usage of various kinds of contact and non-contact tonometers</li> <li>Calibrates the tonometer before use</li> </ul>	<ul> <li>Patiently clarifies the doubts and fear related to the test performed</li> </ul>
	<ul> <li>Adequate knowledge about the physiology of maintaining intraocular pressure and probable mechanisms of abnormal intraocular pressure</li> </ul>	<ul> <li>Explains the purpose and the procedure of the test performed on the patient</li> <li>Interprets the readings got from tonometers</li> </ul>	
	• Knowledge on indications and contraindications of usage of different types of tonometers	<ul> <li>Plans further tests essential for those who had deviated eye pressure</li> <li>Documents the readings in a standard format.</li> </ul>	
		• Performs tonometry in the follow-up case and counsel or refer to the glaucoma expert.	
Ability to examine the posterior segment of the eye and ability to refer indicated cases	<ul> <li>In-depth knowledge on posterior segment anatomy and physiology as well as pathology along with understanding of various posterior ocular</li> </ul>	<ul> <li>Evaluates central and peripheral retina with appropriate instruments</li> <li>Uses mydriatic agents, when necessary, within legal boundaries</li> </ul>	• Same as above
	<ul> <li>diseases.</li> <li>Adequate knowledge on the optical principles of various ophthalmic instruments used in diagnosis of posterior segment diseases</li> </ul>	<ul> <li>Manages i.e., counsels and /or refers appropriately to retina specialist or low vision care expert with adequate, relevant information</li> </ul>	

	<ul> <li>Knowledge about usage of mydriatics.</li> <li>Appropriate knowledge on the role of ophthalmologists and optometrists in relation to posterior segment conditions</li> </ul>		
Ability to perform ancillary tests based on patient's history and preliminary examination	<ul> <li>Adequate knowledge about various eye conditions, the different ancillary tests to confirm the diagnosis, the basic principle of those tests, the advantages and limitations of those tests, interpretation of the results based on the normative values or master reference document.</li> <li>Knowledge on existing best clinical guidelines and evidences, to decide on the ancillary tests</li> </ul>	<ul> <li>Performs appropriate ancillary tests based on the preliminary findings and complaints. Examples: Colour vision tests, contrast sensitivity function tests, stereopsis test, Gonioscopy, photostress test, perimetry, Amsler grid test, commonly used anterior segment and posterior segment imaging tests, potential acuity meter etc.</li> <li>Interprets the results/ reports and corroborates other clinical findings and diagnoses the condition.</li> <li>Identifies or detects unreliable findings either due to human error or because of the instrument error.</li> <li>Calibrates the diagnostic instruments or seeks the support of bioengineer or instrument manufacturers when required.</li> </ul>	Same as above

\*Decubitus refers to the observed posture of the patient in bed

### **Contact Lenses**

**Description:** Ability of the optometrist to elicit relevant history, perform necessary diagnostic tests and ascertain appropriate type of contact lenses. Optometrist should be able to fit and dispense various types of contact lenses, counsel the patients, manage after care and refer / manage / co-manage patients with the specialists when required.

### **Required instruments and tools:**

### Must have

- Torch light
- Keratometer
- Slit lamp biomicroscope
- Fluorescein strips
- Contact lens trial sets (RGP) & disposable trial lenses (soft)
- Area to teach lens insertion and removal
- Mirror
- CL solutions
- Hand towels/tissues
- Wash Basin

### Desirables

- Wratten filter
- Burton lamp
- Infographics and written
   instructions
- Corneal topographer

Performance	Indicators				
Criteria	Knowledge	Skill	Behavior		
Ability to ensure patient safety in contact lens practice	<ul> <li>Understanding of various contact lens solutions and their interactions with different type of lenses and materials.</li> <li>Awareness of various ways of disinfecting contact lens trial sets to make them safe for usage.</li> <li>Understanding of various microbes that may cause issues with lens wear and how to eliminate them</li> </ul>	<ul> <li>Demonstrates proper contact lens cleaning and disinfecting steps using various cleaners and even lab cleaners</li> <li>Makes and follows a disinfecting routine of all trial sets conscientiously</li> </ul>	<ul> <li>Prioritize patient's safety</li> </ul>		

Ability to accord		Awarapass of how the		Elicits proper	• Po a good listopor
Ability to assess the suitability of contact lenses as a form of correction for a patient and counsel the patient accordingly	•	Awareness of how the lifestyle, vocational needs, vision, refraction, comfort, duration of wear, environment affects contact lens wear Knowledge and understanding about the ocular physiology and systemic diseases	•	Elicits proper history that is relevant for contact lens wear based on the understanding of theory Assesses ocular integrity and physiology (using slit lamp, keratometer,	<ul> <li>Be a good listener and ask probing questions without intimidating the patient.</li> <li>Should be polite and understanding yet be confident and assertive when conveying the lens</li> </ul>
	•	and their interaction with contact lens materials/types Ability to spot risks contraindicated to		vital staining, tear function tests) and correlate them to the history to conclude the type of lens design and material to be	<ul> <li>Confident and efficient in performing tests</li> </ul>
	•	contact lens wear and knowledge to reduce these risks by taking appropriate actions In depth knowledge of	•	prescribed Counsels the patients regarding probable risk factors, if any and what steps need to be taken to make contact lens wear	
Ability to fit and		all contact lens materials and lens types including specialty contact lenses	•	safe. Recommends right lens using professional expertise	Patience and
Ability to fit and order the most appropriate parameters of soft contact lens based on examination of various ocular parameters	•	Understanding about the various soft contact lens parameters and how they translate into lens fitting Understanding of fitting characteristics of optimum, flat and steep fit and how to modify	•	Based on the profiting evaluation, selects appropriate soft lens parameters – Back vertex power, base curve, Total Diameter, material, design, within the available range of parameters	• Patience and conscientiousness
		the fit if not optimum	•	Assesses the fit of lenses using a variety of techniques and instruments – Coverage, centration, post blink movement, lens lag, lower lid push-up test, vision, comfort etc.	
			•	Makes appropriate adjustment in lens	

Ability to train the patient in soft lens handling and how to wear and maintain them	<ul> <li>Knowledge of the tricks that may be used to apply and remove the lenses confidently, how various contact lens solutions are different and have detailed understanding about the dos and don'ts of contact lenses</li> </ul>	<ul> <li>parameters for best fit and computes the order for laboratory</li> <li>Writes an appropriate order for a soft lens</li> <li>Trains the patient in the techniques of soft lens application, removal and other relevant handling instructions</li> <li>Guides the patient about the advantages and importance of</li> </ul>	• Exhibits patience, empathy, confidence
		<ul> <li>contact lens maintenance and selects the right soft contact lens care system</li> <li>Instructs the patient on the principles of soft lens wear and care including use of soft lens care products, Dos and Don'ts, aftercare</li> </ul>	
Ability to manage the aftercare of patients wearing soft lenses	<ul> <li>Understanding of adaptation and aftercare issues and how to manage them</li> <li>Understanding of the routine of a soft CL aftercare consultation - schedules after-care visits, replacement schedules, care and maintenance regimen, deposits.</li> <li>Awareness of indications for lens removal, and of seeking</li> </ul>	<ul> <li>Thoroughly examines the eye under microscope to pick un any early and unwanted changes so they can be rectified before it's a cause of concern</li> <li>Trouble shoots in case of any issues</li> <li>Reinforces care and maintenance instructions and assesses the compliance by asking the patient to demonstrate</li> </ul>	• Be assertive like a consultant and not to compromise at this step.

Ability to select, fit and order the most appropriate rigid gas permeable contact lens based on patient's refraction, visual requirements and other findings	<ul> <li>Detailed knowledge of the range of rigid lens materials and designs available.</li> <li>Understanding of all the parameters, range of Base curve, diameter and power availability of various RGP CL companies that are available.</li> <li>Knows how to modify the parameters of various RGP CL in order to obtain an appropriate fit</li> <li>Knowledge of how to assess fluorescein pattern and the influence of lids on the RGP fit</li> <li>Knowledge about RGP lenses used in specialty fitting such as Keratoconus, OrthoK, scleral lenses, mini scleral lenses</li> </ul>	<ul> <li>Makes the appropriate choice of rigid lens parameters – Back vertex power, base curve, total diameter, optic zone diameter, design, material etc.</li> <li>Assesses the fitting of a rigid lens – Dynamic and static (understands and interprets fluorescein patterns)</li> <li>Makes appropriate adjustment in lens parameters for best fit</li> <li>Writes an appropriate order for a rigid lens</li> </ul>	<ul> <li>Be empathetic towards any discomfort patient experiences</li> <li>Patience</li> </ul>
Ability to instruct the patient in rigid lens handling, how to wear and care for them	<ul> <li>Understanding of the rigid lens care systems         <ul> <li>Disinfectants, intensive cleaners etc.</li> </ul> </li> </ul>	<ul> <li>Instructs the patient in the techniques of RGP lens insertion, removal and other relevant handling instructions</li> </ul>	• Be patient while instructing and while the patient is learning how to use CL
	<ul> <li>Knowledge to instruct the patient on how to insert and remove RGP CL.</li> </ul>	<ul> <li>Instructs a patient on the principles of RGP lens wear and care including the use of RGP lens care products, Dos and Don'ts</li> </ul>	<ul> <li>Do not intimidate the patient while teaching how to handle the CL.</li> </ul>
	<ul> <li>Awareness of the complications in case of a non-compliant patient</li> </ul>	<ul> <li>Explain importance of hand hygiene and lens case hygiene</li> </ul>	<ul> <li>Be firm and professional while delivering instruction for CL care.</li> </ul>

Ability to managethe	•	Understanding of rigid	•	Carries out the relevant	•	Observation skills
aftercare of patients wearing rigid lenses	•	lens adaptation and aftercare issues and how to manage them Knowledge of the		tests and assessments which are required in a routine rigid lens aftercare consultation		as you elicit history of patient and complaints if any
		content and routine ofa rigid CL aftercare consultation	•	Schedules appropriate time lines for after care		
			•	Analyses the care regimen that the patient is following and correlate with what was prescribed		
			•	Asks probing questions to patient in terms of how he/she handles and takes care of CL.		
			•	Requests patient to demonstrate cleaning procedure in front of the practitioner		
Ability to manage astigmatic patientswith contact lenses	•	Knowledge of the types of astigmatism Understanding of the designs and materials available in toric contact lenses	•	Chooses the appropriate type of CL correction to meet the relevant needs of the patient Assesses the fit and orientation and makes appropriate adjustments in the final prescription –(application of LARS / CAAS rule in toric lenses)	•	Explain the need for such a lens and the benefits of the same to patient.

Ability to manage presbyopic patientswith contact lenses	<ul> <li>Understanding of presbyopia</li> <li>Knowledge of various modes of correction for presbyopia such as single vision, multifocal lenses</li> <li>Understanding of oculardominance and troubleshooting in case patient is dissatisfied with the outcome</li> </ul>	<ul> <li>Explains to the patient various options that are available in correcting presbyopia with CLs and explains their benefits to enhance the lifestyle of the patient.</li> <li>Chooses the appropriate type of CL correction to meet the relevant needs of the patient</li> <li>Assesses fit, vision and modifies the prescription/fit if</li> </ul>	<ul> <li>Active listening, probing and counselling</li> </ul>
Ability to verify the parameters on receiving the lenses	<ul> <li>Understanding of prescription format and lens packaging</li> <li>Awareness of acceptable norms and standards</li> <li>Knowledge of principles, construction, step-by- step process and calibration of instruments used to verify parameters</li> </ul>	<ul> <li>necessary.</li> <li>Checks material, power, base curve, diameter of the delivered lens against the prescription order</li> <li>Verifies power, base curve, diameter of the lens againstthe denoted parameters</li> </ul>	<ul> <li>Eye for detail and conscientiousness</li> <li>Be polite yet firmand specific in dealing with the manufacturers incase of discrepancy</li> </ul>
Ability to recommend and prescribe therapeutic and cosmetic/ prosthetic contact lenses	<ul> <li>Demonstrates an understanding of conditions requiring these lenses – Aniridia; trauma; amblyopia; corneal scar, recurrent corneal erosion, bullous keratopathy etc.</li> <li>Knowledge of materials, parameters and availability of bandage lenses</li> <li>Knowledge of fitting, aftercare and complications of these lenses</li> </ul>	<ul> <li>Makes appropriate choice of lens parameters –base curve, total diameter, material, tint etc.</li> <li>Accurately assesses the fit of the lens</li> <li>Recommends appropriate after care schedule</li> </ul>	<ul> <li>Empathetic towards patient during the entire procedure</li> <li>Shows patience and confidence while smoothly maneuvering through various steps</li> </ul>

Ability to identify and manage Contact lens related complications	• Knowledge of etiology, symptoms, signs and management of contactlens related complications	<ul> <li>Identifies CL complications on the basis of etiology, type of lens, structures</li> <li>Evaluates previous wear compliance</li> <li>Demonstrates skilled bictory taking related to</li> </ul>	<ul> <li>Be a good listener and ask probing questions</li> <li>Exhibits patience, empathy, confidence to get the best out of the patient</li> </ul>
		<ul> <li>history taking related to problem solving</li> <li>Manages the complication within the scope of practice and demonstrates understanding of timely referral</li> </ul>	<ul> <li>Demonstrates observation and analytical skills to connect the symptoms and signs</li> </ul>
Ability to refer special cases to contact lens experts	• Knowledge of various conditions that can be alleviated by specialty contact lenses	<ul> <li>Identifies conditions that require specialty contact lens fitting - Keratoconus, irregular corneas, dry eye, post refractive surgery, myopia management etc.</li> <li>Refers the patients to relevant practitioner</li> </ul>	<ul> <li>Shows respect while interacting with other professionals</li> <li>Crisp and clear communication</li> </ul>

### **Binocular Vision**

**Description:** Ability of the optometrist to elicit appropriate history, to understand and perform relevant clinical binocular vision diagnostic tests and ascertain appropriate diagnosis for strabismic and non-strabismic anomalies. He/she should also be able to perform basic vision therapy and refer / manage / co-manage patients with the specialists in the field of binocular vision and vision therapy.

### **Required instruments and tools:**

### Must have

- Worth's Four Dot Test
- Accommodative flippers (+/- 1.50, 2.50)
- Thorington card (distance and near)
- Maddox rod and trial lenses (complete trial set)
- Prism bars (horizontal and vertical)
- Stereo acuity test
- Streak Retinoscope
- Direct Ophthalmoscope

### Desirables

- Vergence flippers
- Transilluminator
- Translucent occlude
- Gulden sticks
- Rotary prism
- MEM cards
- WFDT torch
- Loose prism set

Performance			
Criteria	Knowledge	Skill	Behavior
Ability to assess and interpret the diagnostic parameters of motor binocular vision and oculomotor performance.	<ul> <li>In depth knowledge of Binocular vision, its functions, and abnormal conditions associated with binocular vision.</li> <li>Anatomical and physiological knowledge of the extra ocular muscles, vestibulo ocular complex, their neurological connections and nerve supply.</li> <li>Essential knowledge related to pathophysiology of various conditions</li> </ul>	<ul> <li>Demonstrates good communication skills and explains the tests and the procedures to the patient/ the care giver in a simple language without using technical jargon.</li> <li>Performs a detailed assessment of oculomotor functions in infants, children and adults using standard clinical procedures and interprets these findings in the light of the underlying physiology of these responses: steady-state fixation, eccentricity of fixation, etc.), ductions, saccades, pursuits, various forms of physiological and</li> </ul>	<ul> <li>Able to establish eye contact, and rapport, allows the patient to speak initially and remains an active listener.</li> <li>Should have a good observation and analytical capacity to notice and interpret small changes in the movements of the eyes and body while performing the tests.</li> <li>Should have patience to</li> </ul>

Ability to assess	<ul> <li>associated with extra ocular muscles.</li> <li>Knowledge of normal and adverse oculomotor responses related to: Stability and eccentricity of fixation, versions, vergences, near vision complex, ductions, saccades, pursuits, ocular deviations, comitancy, physiological and pathological nystagmus.</li> <li>Essential knowledge of the principles and procedures for various oculomotor and vestibulo ocular tests used for evaluating binocular vision anomalies.</li> <li>Knowledge of standard terminologies and abbreviations used in the interpretations and analysis of the tests performed.</li> <li>Awareness of the role of optometrist in relation to oculomotor anomalies</li> <li>Essential knowledge</li> </ul>	<ul> <li>pathological nystagmus, vestibulo-ocular reflex.</li> <li>Performs a detailed assessment of the binocular oculomotor functions in infants, children and adults using standard clinical procedures sequentially, using appropriate equipment and interpret these findings in the light of the underlying physiology of these responses: vergence (fusional, accommodative, proximal), horizontal and vertical phorias, graphical analysis of the zone of clear and single binocular vision, versions and comitancy of deviations.</li> <li>Explains the tests and the</li> </ul>	<ul> <li>carry out the tests and repeat them if required. Should be able to explain and clarify the questions confidently and adequately.</li> <li>Should be confident, adaptable, and culturally sensitive towards the patients.</li> <li>Should be empathetic towards the patient and understand their difficulty if they are not able to perform any procedure adequately.</li> <li>Same as above</li> </ul>
and interpret	of mechanism of	the care giver in a simple	
accommodative	accommodation,	language without using	
status.	accommodation	technical jargon.	

	<ul> <li>amplitude of accommodation and the ocular conditions associated with accommodation.</li> <li>Knowledge of the tests to assess magnitude, facility, response and relative cooperation of accommodation with vergence.</li> </ul>	<ul> <li>Able to measure near point of accommodation and amplitudes (monocular and binocular), relative accommodation, accommodative facility (monocular and binocular), accommodative response and accuracy using standard test procedures and equipment.</li> </ul>
	<ul> <li>Adequate knowledge to interpret results of accommodation examination, management, co management and referral of the patients appropriately.</li> </ul>	
Ability to assess and interpret the diagnostic parameters of sensory binocular vision	<ul> <li>Adequate knowledge of neuroanatomy of the visual system, purpose and relevance of sensory processing.</li> <li>Knowledge of sensory tests, their principles, procedures, and interpretation of the test results.</li> </ul>	<ul> <li>Explains the tests and the procedures to the patient/ the care giver in a simple language without using technical jargon.</li> <li>Performs a detailed assessment of various aspects of the sensory binocular system using standard clinical procedures and equipment.</li> <li>Same as above Same as above above and equipment.</li> </ul>
	<ul> <li>Knowledge of use of appropriate illumination levels, complimentary colours, their wavelength and the</li> </ul>	<ul> <li>Interprets the findings in the light of underlying physiology of these responses: normal and abnormal forms of sensory</li> </ul>

·		<u> </u>
	<ul> <li>effects on the sensory status.</li> <li>Understanding of neural adaptation, its mechanism, and its application clinically.</li> </ul>	correspondence, fusion, diplopia, suppression, stereopsis, distortions in space due to abnormal binocularity (e.g., those induced due to aniseikonia, anisometropia, etc.).
Ability to diagnose and manage amblyopia.	<ul> <li>Understanding of the causes for development of amblyopia.</li> <li>Adequate knowledge</li> </ul>	<ul> <li>Explains the tests, procedures, and possible prognosis to the patient/caregiver.</li> <li>Performs diagnostic tests to evaluate the underlying</li> </ul>
	<ul> <li>of neuro plasticity and its mechanism.</li> <li>Knowledge of the Latest treatment/ management modalities for</li> </ul>	sensory and spatial adaptations in amblyopia (e.g., decreased visual acuity, contrast sensitivity, crowding, suppression).
	<ul> <li>Understanding of how to manage, co- manage, and further refer the patient</li> </ul>	<ul> <li>Performs tests to evaluate underlying motor discrepancies resulting in amblyopia (e.g., poor accommodative and vergence behaviour, eccentric fixation, etc.).</li> </ul>
	appropriately.	<ul> <li>Manages and co-manages the patient using non- surgical procedures such as different types of occlusions, lenses (spectacles and contact lenses), and basic vision therapy procedures.</li> </ul>
		<ul> <li>Refers the patient appropriately for surgical or medical management.</li> </ul>

Ability to identify and manage children at risk of developing	<ul> <li>Knowledge and understanding of neural and ocular development (pre,</li> </ul>	<ul> <li>Identifies signs and symptoms in relation to personal / family history.</li> <li>Same as above</li> </ul>
binocular vision anomalies.	<ul> <li>Sufficient knowledge of delay/improper neural/ocular development at different stages.</li> <li>Knowledge of eliciting appropriate family history and understands developmental disorders leading to binocular vision anomalies.</li> </ul>	<ul> <li>Administers and interprets age-appropriate procedures required to assess developmental ability.</li> <li>Provides appropriate management to the child within the scope of practice, co-manages when required and refers timely for further management.</li> <li>Schedules follow up routine appropriate to underlying condition/s.</li> </ul>
	<ul> <li>Knowledge of age- appropriate tests and procedures to diagnose the anomalies.</li> </ul>	

### **Vision Impairment**

**Description:** Ability of the optometrist to obtain accurate history, to perform (according to internationally acceptedstandard procedures) clinical refraction, anterior and posterior segment evaluation, status of cranial nerves related to eye and adnexa, ability to evaluate for, select and prescribe contact lens and low vision devices, evaluate binocular vision status, arrive at the diagnosis, manage/ co- manage, counsel, prescribe and/or refer them to appropriate health care professionals /rehabilitation professionals

### **Required tools:**

### Must have

- Standardized proforma for history taking
- Distance visual acuity charts (logMAR)
- Near visual acuity charts (logMAR)
- Refraction kit
- Color vision / Amsler / Field of vision instruments
- Contrast sensitivity charts for adults and children
- Low vision devices (Primary / Secondary / Tertiary)
- Non-optical devices
- Legal concession forms

### Desirables

- Self-illuminated LogMAR chart
- Illuminated contrast sensitivity test
- Full Aperture trial box and Universal Trial Frame
- Electronic Low vision devices
- In-House Rehabilitation Facility

Performance	Indicators			
Criteria	Knowledge	Skill	Behavior	
Ability to identify patients benefiting from low vision services	<ul> <li>In depth knowledge on different ocular and systemic conditions.</li> <li>A deep understanding of what aspects of history are relevant and what questions to ask and how to ask.</li> </ul>	<ul> <li>Takes relevant history from the patient with emphasize on task related history.</li> <li>Elicits the chief complaints, laterality, associated symptoms, past ocular history, family history, past medical history, medical (past and present) and surgical interventions (past), investigations (past and recent) and medicinal allergies.</li> <li>Ascertains social history, travel history, ethnicity</li> </ul>	<ul> <li>Greets the patient, establishes eye contact, and rapport, allows the patient to speak initially and remain an active listener.</li> <li>Empathy- understands the psychological status of the patient and counsels if needed before starting the LVD trial</li> <li>Clear and crisp communication</li> </ul>	

Ability to perform comprehensive low vision work up	<ul> <li>Knowledge of a comprehensive Low vision work up, including VA, accurate objective and/or subjective refraction, functional vision assessment and suitable rehabilitation.</li> </ul>	<ul> <li>or developmental history wherever necessary</li> <li>Documents the history in a logical, structured and comprehensive manner and mentally arrive at tentative diagnosis as well as possible other diagnosis (differential diagnosis)</li> <li>Probes by asking relevant questions to the patient</li> <li>Assesses functional vision tests, like LogMAR visual acuity for distance and near. Contrast Sensitivity for distance and near.</li> <li>Functional visual field assessment using devices and Amsler test. If patient is SVI category to perform confrontation.</li> <li>Records other visual functions like color vision and reading speed.</li> </ul>	<ul> <li>Remains calm and patient while answering the questions of patients with low vision</li> <li>Same as above</li> </ul>
Ability to identify and prescribe low vision devices suited to the patient's visual requirements and functional needs	<ul> <li>Knowledge of pathology associated with low vision; and awareness of indications and contraindications of different devices for low vision pathology</li> <li>Awareness of incidental optical effects, low vision aid design, aberrations, unwanted prismatic effects, tints, lighting requirements</li> </ul>	<ul> <li>Selects and prescribes the most appropriate optical and/or non- optical low vision device</li> <li>Considers the ability of the patient to manipulate the device and to meet the cost.</li> <li>Considers the physical ability and the age factor of the patient to manage different devices.</li> </ul>	• Same as above

	associated with different devices.		
Ability to demonstrate a range of low vision devices	<ul> <li>Knowledge of correct working distances with magnification requirements.</li> <li>Knowledge of appropriate lighting conditions</li> <li>Knowledge of training requirements for the success of low vision devices for near and distant tasks.</li> <li>Awareness of patient's compliance with the device.</li> <li>Knowledge of</li> </ul>	<ul> <li>Demonstrates selection of correct working distance to the patient for the power selected.</li> <li>Evaluates and monitors the success of the low vision device and prescribes additional or alternative devices</li> <li>Schedules appropriate follow up routine and understands its importance</li> </ul>	Same as above
	simulation of the condition and devices to the escort.		
Ability to instruct the patient about the use of low vision devices	<ul> <li>Knowledge of optics of LVDs and how the patient needs to be instructed to use device for best performance.</li> <li>Knowledge of eccentric viewing techniques for understanding preferred eye and retinal loci.</li> </ul>	<ul> <li>Reviews follow up visits, re-assessment of the vision and the efficacy of the device for the functional needs of the patient.</li> <li>Identifies appropriate non-optical device which will be useful along with optical aid for better</li> </ul>	<ul> <li>Maintains patience throughout the learning and training duration and if needed to get patient to come for multiple visions</li> </ul>
		<ul> <li>Frovides proper instructions on handling the devices and ensures that the patient has understood the process</li> </ul>	

Ability to inform and if necessary, refer the patient to other rehabilitative services.	•	Knowledge of correct referral to tertiary Low vision clinics, other practitioners, co- management team (Ophthalmologist, Rehabilitation specialist, Orientation and mobility expert) Awareness of career opportunities based on functional vision	•	Refers appropriately for further management i.e., Speech therapist, Physiotherapist, Occupational Therapist, Special Educators, Neuro- physicians. Refers to appropriate centers for training for job-oriented competencies	•	Maintains motivating tone and provides confidence through appropriate approach Infuses hope in patient/ guardian even if devices do not benefit career and other opportunities are present and there is hope.
	•	Knowledge on visual disability as per Government, handicap certificates and various concessions and job reservations that are provided to visually impaired population.				

### **Optical Dispensing**

**Description:** Ability to counsel, guide and dispense appropriate spectacle lenses (in accordance with international standards), spectacle frames based on the prescription, facial and frame measurements, need and demand of patient upon eye examination done by the optometrist or any other eye care practitioner. It further offers the ability to counsel, guide and dispense appropriate spectacle to pediatric and special populations. It can also be viewed as a common guideline for the optometric institutions to meet the consensus during the dispensing related pedagogic activities. Moreover, the document also provides the list of minimum required equipment necessary to meet the competencies during core institutional education.

### **Required instruments and tools:**

### Must have

- Lensometer
- Geneva lens measure
- Trial box
- Axis, PAL's marking & grid chart
- Set of Ophthalmic lens types
- Set of tinted lens types
- Set of lenses with coatings
- Trial frame (with vertex reading, PD)
- Set of variety of spectacle frames

- Frame measurement ruler
- PAL's Dispensing set
- PD ruler
- Pupilometer
- Facial measurement gaugeHead & temple width
- caliper
- Plier set
- Frame warmer

### Desirable

- Thickness gauge
- UV tester
- Polarizing tester
- Edger
  - Spectacle accessories (nose pads, spectacle bands etc.)

Performance	Indicators			
Criteria	Knowledge	Skill	Behavior	
Ability to understand the patient's expectations and visual needs	<ul> <li>In Depth knowledge to classify the visual task, its corrective aid and plan relevant questions accordingly.</li> <li>Adequate knowledge of lens designs, materials and enhancements and where to recommend them.</li> </ul>	<ul> <li>Analyze the prescription, visual complaints/demands of customers and explain it in an appropriate manner.</li> <li>Compute, relate, predict various vocational and avocational visual needs. Make appropriate choices of spectacles and discuss them with customers.</li> <li>Analyze individual's personality, style</li> </ul>	<ul> <li>Greet the patient, establish eye contact and rapport.</li> <li>Initiate with appropriate questions. Allows the patient to speak and remain as an active listener.</li> </ul>	

	<ul> <li>Differentiate between patient expectations and over expectations.</li> </ul>	<ul><li>quotient, visual habits,</li><li>behavior and needs.</li><li>Document the findings.</li></ul>	
Ability to identify errors & interpret the prescription	•Understanding of the refractive correction, specifications and notations in a prescription.	<ul> <li>Analyses the prescription, identifies the refractive correction and clarifies any queries pertaining to it</li> </ul>	• Crisp and clear communication
		• Detects any documentation errors, unusual addition or prism (values & orientation) in the prescription.	
		• Explains and relates the need for correction and their adaptive symptoms.	
		• Ensures the standard, validity of the prescription and recognizes any possible errors.	
Ability to identify parameters of previous spectacle and to address the	<ul> <li>Understanding of different optical parameters and related instruments.</li> <li>Knowledge of different</li> </ul>	• Identifies and measures parameters of previous lens design using appropriate tools.	<ul> <li>Actively listens to the patient's feedback with their current spectacles and future expectations</li> </ul>
associated concerns	<ul> <li>forms of transposition.</li> <li>Adequate knowledge of the lens forms, materials and apparent errors.</li> <li>Knowledge of various frame materials, types and dimensions essential for fitting.</li> </ul>	<ul> <li>Transposes ophthalmic prescriptions in required forms.</li> <li>Analyses and correlates patient concerns with previous spectacles based on the assessment of the fitted ophthalmic lens and frame.</li> </ul>	<ul> <li>Patience- Allows sufficient time for the individual to explain the required spectacle- related modifications while setting realistic patient expectations</li> </ul>
		• In case of customized lenses: correlates the habitual prescription to the actual prescription.	

		<ul> <li>Plans the most suitable spectacle to address patient concerns.</li> </ul>	
Ability to assess suitability of spectacles with respect to patient needs	• Knowledge of refractive errors, visual demands depending on occupational or sports/leisure activities and effect of spectacle correction on visual performance.	<ul> <li>Selects and recommends appropriate spectacle frames &amp; lenses based on needs, personality and lifestyle.</li> <li>Documents the findings</li> </ul>	• Confident communication and thoughtful recommendation with clinical decision making.
	• Ergonomics: understanding of customer's habits, behavior, visual needs, personality and lifestyle quotient		
Ability to assist the patient in making right choice of frame material, type and designs	<ul> <li>In-depth knowledge of frame materials, types, designs and their pros &amp; cons.</li> <li>Understanding of the suitability of frames based on the patient's lifestyle &amp; requirements.</li> </ul>	<ul> <li>Selects frames based on the patient's physiological factors, features - benefits; suitability, fashion, safety factors, proposed usage and cost.</li> <li>Correlates magnitude of refractive power and its need to select appropriate frame size and type</li> <li>Suggests frame designs which suit different age groups/gender, profession and cosmesis.</li> </ul>	• Same as above
Ability to relate facial shape and its proportions in suggesting appropriate spectacle frames.	<ul> <li>Understanding of facial shape and its proportions.</li> <li>Understanding of relating general anatomical features of face to appropriate frame selection.</li> </ul>	<ul> <li>Assesses the proportions of the face, differentiates its shape/cosmesis and suggests frame shapes accordingly.</li> <li>Takes precise facial measurements and correlates them with the frame size and fit.</li> <li>Confirms that the selected frame offers</li> </ul>	<ul> <li>Confidence and efficiency while taking facial measurement</li> </ul>

		comfort, functionality and suitable fit.	
Ability to recommend appropriate spectacle frames for paediatric age groups	<ul> <li>Knowledge on development of a child's facial features and difference between the facial characteristics between a child and an adult.</li> <li>Knowledge of safe frame materials, type and temple styles for a child's active lifestyle.</li> <li>Comprehensive knowledge on facial features in special children and awareness of customized frames.</li> </ul>	<ul> <li>Takes accurate facial measurements and appreciates the implications of developing anatomical features</li> <li>Selects frame that fits appropriately with consideration to prescription and cosmesis.</li> <li>Orders customized/handmade frames based on facial measurements.</li> </ul>	<ul> <li>Exhibits good communication to ease the child during the entire process. Involves parent/guardian in the process when required</li> <li>Empathetic and encouraging behavior</li> </ul>
Ability to recommend the appropriate ophthalmic lenses, enhancements with protective standards	<ul> <li>Knowledge and understanding of contemporary lenses, enhancements and their availability.</li> <li>Knowledge of the types of ocular hazard and conditions for recommending appropriate lens treatments/ enhancements.</li> <li>Understanding of the requirement of accepted norms related to spectacle wear.</li> <li>Understanding of the conditions requiring special optical appliances.</li> </ul>	<ul> <li>Selects, recommends and prescribes special lens designs and enhancements based on prescription and the need.</li> <li>Chooses and recommends appropriate special optical appliances based on the condition.</li> </ul>	<ul> <li>Empathy and confident communication and thoughtful recommendation with clinical decision making</li> </ul>

Ability to recommend ophthalmic lenses in paediatric age group	<ul> <li>Understanding of the need for frequent prescription change and choice of ophthalmic lens and enhancements.</li> <li>Adequate knowledge about special lens/prism fitting techniques in special conditions.</li> </ul>	<ul> <li>Effectively integrates lens materials, designs and enhancements to suit the prescription and needs.</li> <li>Prescribes suitable tints, filters and prisms for children with special needs.</li> <li>Thoroughly explains the importance to the child/parent about spectacle compliance and follow up visits.</li> </ul>	• Effective communication, patience and listening skills while addressing the child and the parents.
Ability to perform face and frame measurements and markings in adults/pediatrics	<ul> <li>Knowledge of various factors related to facial features development with age, prescription, frame selection and its importance.</li> </ul>	<ul> <li>Measures face and frame parameters using appropriate tools. Documents the findings.</li> <li>Performs frame markings, and correlates to one another. Document the findings.</li> </ul>	Confidence, etiquettes and appropriate communication
Ability to document and order the parameters of ophthalmic lens and frame to the manufacturer	• Understanding of the need and importance of documenting different parameters for the laboratory and the accepted format of the documentation.	<ul> <li>Records, updates and retrieves the patient information throughout the follow-up visit or during legal issues.</li> <li>Assesses the availability and orders the recommended parameters.</li> <li>Highlighting the special instructions within the order form.</li> </ul>	<ul> <li>Crisp and clear communication, conscientiousness</li> </ul>

Ability to check whether the finished spectacles follow international standards & tolerance norms	<ul> <li>Knowledge of international standards (ANSI &amp; BS)</li> <li>Recognizes the importance of implementing stringent verification of spectacles and reducing patient returns.</li> </ul>	<ul> <li>Applies international standard &amp; tolerance level to decide on acceptance or rejection of the spectacle parameters.</li> <li>Cross-checks the frame parameters and dimension as per the original order.</li> <li>Plans a course of action if the spectacle is being</li> </ul>	• Same as above
Ability to adjust and align spectacle to standard - before and at the time of delivery	<ul> <li>Understanding of the importance of precise spectacle adjustment and alignment to enhance the visual outcome and comfort and the consequence of inappropriate alignment.</li> <li>Knowledge of different tools/pliers to be utilized for adjusting and aligning spectacles.</li> </ul>	<ul> <li>rejected.</li> <li>Accurately adjusts and aligns the spectacle as per requirements without causing any damage.</li> <li>Provides spectacle handling instructions &amp; resources to avoid misalignment or damage.</li> </ul>	
Ability to instruct the patient about adaptation and maintenance of the spectacles	<ul> <li>Knowledge of various adaptive symptoms and their solutions.</li> <li>Adequate knowledge of care and maintenance of the spectacles and counselling methods.</li> <li>Knowledge of frequently asked questions and their appropriate answers related to spectacle, usage, refractive error, ocular health, market trends, eye care products etc.</li> </ul>	<ul> <li>Counsels for adaptation and usage of the new spectacle.</li> <li>Demonstrates best practices for handling the spectacle and its accessories.</li> <li>Sets realistic expectations with the new spectacles.</li> </ul>	<ul> <li>Respect and respond positively to all the questions and instruct in a structured manner.</li> </ul>
Ability to gather information & manage patients with complaints (Trouble- shooting)	<ul> <li>Comprehensive understanding of complaints of the patient and their root cause.</li> <li>Knowledge of step-by-step procedure to resolve the</li> </ul>	<ul> <li>Probes by asking relevant questions to gather details on the core area of concern.</li> <li>Re-evaluates frame &amp; lens parameters and</li> </ul>	<ul> <li>Listens actively, ask relevant questions and uses investigative approach</li> <li>Empathy</li> </ul>

	complaints and underlying cause.	correlate any errors to patients' complaints.	
		<ul> <li>Rechecks spectacle fit (on face). Identifies and corrects any misalignments using proper tools.</li> </ul>	
		• Decides to re-order of lens for non-rectifiable errors.	
Ability to manage Inventory	• Understanding of the concept of inventory management and stock keeping	<ul> <li>Observes/oversees purchasing, receiving and sale in the optical business.</li> <li>Reviews vendor's product availability.</li> </ul>	Conscientiousness

### Documentation

**Description:** Ability of the optometrists to document all the procedures, interactions and dispositions done to the patient in either electronic records (EMR) format or the hard copy; and preserve the document for a specific period as per the legal requirements.

**Required Tools**: Printed stationery of the work up sheet. Pen, color pencils and a computer with basic software e.g., Excel / EMR software.

Performance	Indicators				
Criteria	Knowledge	Skill	Behavior		
Ability to record all relevant information pertaining to the patient in a format which is understandable and useable by the optometrist and his/her colleagues	<ul> <li>Knowledge of documenting a standard flow of complete comprehensive eye examination, hard copy / EMR</li> <li>Knowledge of documenting relevant procedures which are followed in optometry sub-specialty such as CL, BV, LVA, Glaucoma</li> </ul>	<ul> <li>Documents date &amp; time, patient's name and address, examiner's name.</li> <li>Documents positive and negative history E.g., H/O diabetes, hypertension &amp; IHD</li> <li>Using standard terminology records the following –external examination / SLE / Refraction in detail / IOT/</li> </ul>	<ul> <li>Attention to detailof all procedures conducted</li> <li>Conscientiousness</li> </ul>		
	<ul> <li>Knowledge of what instrument is used for what purpose and a clear description, drawing or photo is provided for clinical findings.</li> </ul>	<ul> <li>Netraction in detail / 101/ ortho-optic work up / ophthalmoscopy etc.</li> <li>Documents with a clear description, drawing or photo is for clinical findings.</li> <li>Records brief clear notes on diagnosis / discussion and consultation.</li> </ul>			
	<ul> <li>Knowledge of the internationally accepted abbreviations and ICD codes</li> </ul>	<ul> <li>Gives clear instructions for the next follow up visit.</li> <li>Provides referral notes to concerned specialist, ocular /medical and urgency of referral with details of tests carried out and provisional diagnosis</li> </ul>			

Ability to keep	Basic computer	Maintains permanent &Legible	• Same as
patient records in	knowledge (Microsoft	labelling on physical copy	above
areadily	excel) to retrieve	• Detrieves data humans ( data of hinth	
retrievable	physical copy of file / electronic medical	• Retrieves data by name/ date of birth	
format and	record (EMR) entry.	(DOB)/ phone no. (EMR & physicalcopy).	
physically secure	Tecoru (EIVIK) eritry.		
	<ul> <li>Knowledge of correct</li> </ul>		
	labelling of physical		
	copies with respect to		
	entries in excel.		
	<ul> <li>Cross referencing</li> </ul>		
	<ul> <li>Staff understanding</li> </ul>		
	and training of filing		
	system.		
	<ul> <li>Knowledge of EMR</li> </ul>		
	back up to cloud or		
	external hard drive.		
Ability to ensure	<ul> <li>Knowledge of relevant</li> </ul>	• Secures records, from anyphysical	• Same as
that access to	laws relating to	damage.	above
records are limited	confidentiality and		
to	duration of preservation	<ul> <li>Maintains records in accordance with</li> </ul>	
authorized	of the medical records	ethical standards and the law, patient names and addresses are not released	
personnel and	of the patient.	for use in mailinglists. Anonymity of the	
release only with		patient is maintained when confidential	
theconsent of the	Knowledge of online	information regarding the patient is discussed with others unless those	
patient	security protocols are	parties are engaged in themanagement	
	followed for cloud based EMR systems	of the patient or prior consent of the	
	based Livin systems	patient is obtained.	
		<ul> <li>Maintains EMR back up and stores</li> </ul>	
		them safely incloud/ hard drive	
		• Ensures every patient signsa consent	
		form to state that they have been	
		informed of and have understood the	
		data protection policy	
Ability to write	Knowledge of the	Writes the prescriptions forspectacles,	
Ability to write prescriptions in the	format in which the	• Writes the prescriptions for spectacles, CL Low vision aids and other	
appropriate format	prescriptions for	therapeuticsas per the accepted	
-pp. eprinte format	spectacles, CL Low	formats	
	vision aids and other		
	therapeutics are to be		
	written.		

\*\*\*\*\*\*