Health Professions Council of Zambia

CORE COMPETENCIES AND MINIMUM STANDARDS FOR OPTOMETRY TECHNOLOGIST TO PRACTISE IN ZAMBIA

CORE COMPETENCIES & MINIMUM STANDARDS

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QUALIFICATION AND RESPONSIBILITIES

Title of the Programme: Diploma in Optometry

Key accountability for the job: First line contact with patient in a health facility.

Primary roles and responsibilities:

1. Patient care in eye health within a health facility set up
2. Conducting community and school outreach eye health activities
3. Linking up patients with other support services

INTRODUCTION

The Health Professions Council of Zambia (HPCZ) is a statutory body that was established by the Health Professions Act No. 24 of 2009. The Act renames and continues the existence of the Medical Council of Zambia established by the Medical and Allied Professions Act of 1977. The Health Professions Act No. 24 provides for the registration of health practitioners and regulation of their professional conduct; provides for the licensing of health facilities and the accreditation of health care services provided by health facilities; and provides for the recognition and approval of training programmes for health practitioners.

Following the issuance of the guidelines for introduction of licensing examinations for health professionals to be registered with the Health Professions Council of Zambia, this bulletin provides an outline of the minimum standards of the core competencies for registrants who have completed the Diploma in Optometry course seeking registration as Optometry Technologist practitioners in Zambia.

2.0 EXIT EXAMINATIONS AND AWARD OF DIPLOMA IN OPTOMETRY

Training Institutions, private or public, approved by the Health Professions Council of Zambia are mandated to examine and graduate their students under their own seal and authority as prescribed by the HPCZ act number 24 of 2009. The Diploma in Optometry is designated as a pre-service qualification of the Optometry Technologist, and it is a pre-requisite for eligibility for the Optometry practitioner licensure examinations. Accordingly, a holder of the Diploma in Optometry will be required to take and pass the HPCZ licensure examination to qualify for registration with the Council as an Optometry Technologist.

3.0 LICENSURE EXAMINATIONS BY THE HEALTH PROFESSIONS COUNCIL OF ZAMBIA

A person shall not practice as a health practitioner, unless that person is registered as a health practitioner in accordance with the Health Professions Act No. 24 of 2009. In the exercise of its functions under this Act, the 2nd Council and the 3rd Council of the Health Professions Council of Zambia instituted Licensure Examinations to help maintain standards, given the emergence of multiple private and public training institutions. This "Bulletin provides information on the Core Competencies and Minimum Standards for the Licensure Examinations for Optometry Technologist to Work in Zambia" binds all parties regulated under this Act. Examination fees for licensure examinations, as prescribed by the Council, are payable to the Health Professions Council of Zambia as part of the eligibility to sit for the licensure examinations.

The HPCZ Licensure Examination assesses an Optometry Technologist's ability to apply knowledge, concepts, and principles, and to demonstrate fundamental professionalism, patient-centered as well as community skills, that are important in eye health, that constitute the basis of safe and effective patient care. The HPCZ Licensure Examination includes, but is not limited to

theoretical and clinical skills practical examinations which complement each other's components. No component is a stand-alone in the assessment of readiness for ophthalmic practice in Zambia.

The candidate will be assessed under the following three domains, namely: -

1. Knowledge
2. Skills
3. Attitude

The above domains will be assessed by means of a theory examination comprising of multiple choice questions followed by clinical skills practical conducted in the eye clinic on walk-in patients. The candidate would then make a clinical presentation of the clinical case before a panel of examiners.

The four main subject areas (assessed under all three learning domains) for Optometry Technologist in Zambia are:

1. Ocular and Systemic Diseases
2. Optics and Refraction
3. Low Vision
4. Dispensing Optics

Other subject areas prescribed by the curriculum such as Paediatric Optometry, Binocular Vision, Contact Lens, to name but a few; will only be assessed as cognitive domain in the theory paper. The overall expected outcomes of the licensure examination are to ensure that the Optometry Technologist will meet the minimum standards for the role as a mid-level eye health worker.

4.0 COMPETENCE OUTCOME GUIDELINES

The curriculum must have identified attributes in each educational domain (knowledge, skills and attitude) and presented them to guide student learning and assessment by examiners. HPCZ directs medical practitioners to be compassionate and empathetic in caring for patients and to be trustworthy and truthful in all their professional dealings. Optometry practitioners have a responsibility to respect and provide eye health care that is up to standard for the lives and health that are entrusted by patients. The expectations are largely in six core competences, namely: -

1. Patient Care
2. Medical Knowledge
3. Practice-based Learning and Improvement
4. Communication Skills
5. Professionalism
6. Systems-based Practice

Overall Outcomes

Knowledge, Skills and Performance
- Care of the patient is the first concern.
- Provision of a good standard of practice and care by keeping professional knowledge and skills up to date while recognizing the limits of one's competence.

Safety and Quality
- Prompt action if patient safety, dignity or comfort is compromised.
- Protect and promote the health of patients and the public.

Communication, Partnership, and Teamwork
- Uphold the respect of patient's autonomy and dignity.
- Uphold informed consent and confidentiality.
- Work with colleagues in ways that best serve the patient's interests.
- Work with honesty, integrity and fairness.

Maintaining Trust
- Work with honesty, openness and integrity.
- Uphold fairness with patients or colleagues.
- Safeguard the patient's and public's trust in the practitioner and the profession – never abuse the trust.

Management
- Demonstrate awareness and apply administrative, management and finance principles.
- Take up entrepreneurship challenges to complement public health services in the country

5.0 CORE COMPETENCIES: OPTOMETRY TECHNOLOGIST

DOMAIN 1: KNOWLEDGE		
COMPETENCY	**COMPETENCY STATEMENT**	**SUBCOMPETENCIES IN OPHTHALMOLOGY**
Patient Care	Graduates must be able to provide patient care that is compassionate, appropriate and effective for the treatment of eye and systemic health problems & the promotion of eye health	1. Conduct a clinical consultation and take relevant and detailed medical history, gathering essential and accurate information about patient's illness, in all specific subject areas, including systems review, while ensuring patient's privacy. 2. Interpret findings from the history, physical signs and Slit lamp examination 3. Make informed decisions about diagnostic and therapeutic interventions, based on patient information and preferences, up-to-date scientific evidence, and clinical judgment; 4. Conduct refractions and prescribe spectacles 5. Formulate a plan of investigation and demonstrate understanding of the processes involved in making a differential diagnosis 6. Place patient's needs and safety at the centre of the eye care process. 7. Provide patient care that is compassionate, appropriate, and effective for the treatment of eye and related systemic health problems and the promotion of eye health; 8. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families, taking into consideration patient age, gender identification, impairments, ethnic group, and faith community;

		9. Counsel and educate patients and their families;
		10. Use information technology to support patient-care decisions and patient education;
		11. Provide health care services aimed at preventing eye health problems or maintaining eye health; and
		12. Work with all healthcare professionals, including those from other disciplines, to provide patient-focused care.
Medical – Optometry knowledge	Graduates should demonstrate knowledge about established and evolving biomedical, clinical sciences and application of this knowledge to patient care in Ophthalmology	1. Demonstrate awareness of the clinical responsibilities and role of the Optometry Technologist, making the care of the patient the first concern
		2. Demonstrate knowledge about the correlation between the patient's ocular history, interpret findings from the history and physical signs to formulate a provisional diagnosis and differential diagnosis.
		3. Differentiates the common refractive errors, ocular and systemic related ocular disease presentations
		4. Demonstrate knowledge of the management of refracrive errors, low vision assessment and optical dispensing
		5. Demonstrate knowledge of the relationship between ocular disease, systemic diseases and refractive errors
		6. Demonstrate knowledge of the common ocular diseases, and identifies those that need referral, and refers as soon as possible
		7. Demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioural) sciences and apply this knowledge to patient care;
		8. Demonstrate knowledge about the biomedical basis of eye diseases, and its application in ophthalmic practice
		9. principles and best clinical evidence.;

		10. Know and apply the basic and clinically supportive sciences, which are appropriate to Optometry practice

DOMAIN 2: SKILLS		
Clinical Practice-Based Learning & Improvement	Graduates should be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidences & improve their Optometry patient care practice	1. Conduct refractive error related community and school eye health activities 2. Provide Eye health promotions to communities and schools 3. Investigate and evaluate patient care practices; appraise and assimilate scientific evidence; and improve patient care practices; 4. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness 5. Conduct refractive error related community and school eye health activities 6. Use information technology to manage information, access online medical information, support ongoing personal professional development; and facilitate the learning of students and other healthcare professionals. 7. Refer eye conditions which require the attention of the next level of competence 8. Be aware of own personal and professional limitations and enlist the help of colleagues and supervisors when necessary. 9. Pass on the art and practise of Optometry, by being an effective mentor and teacher to colleagues and others. 10. Function within a Multi-disciplinary and Professional team 11. Administration, Management Entrepreneurship 12. The graduate should be able to effectively take up administrative and

		management responsibility in the health sector. The graduate should be able to: 13. Take up entrepreneurship challenges to complement public health services in the country. 14. Utilize best practices from routine patient care audits 15. Apply recommendations of routine updates on patient care 16. Utilize information technology 17. Demonstrate knowledge of the research process to other professionals.

DOMAIN 3: ATTITUDE		
Communication Skills	Graduates must demonstrate interpersonal and communication skills that result in effective information exchange & teaming with patients, families & professional associates	1. Demonstrate communication skills that result in effective information exchange and teaming with patients, patient families, and professional associates; 2. Create and sustain a therapeutic and ethically sound relationship with patients; 3. Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills; 4. Work effectively with others as a member or a leader of a health care team or other professional group. 5. Mentor Optometery students and other health care providers
Professionalism – Attitude and Ethical Practice	Graduates must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, & sensitivity to a diverse patient population	1. Demonstrate a commitment to carrying out professional clinical responsibilities and roles of the Optometry Technologist, adherence to ethical principles, and sensitivity to a diverse patient population. 2. Be polite, considerate, trustworthy and honest, and act with integrity, maintain confidentiality, respect patients' dignity and privacy and understand the role of informed consent. 3. Respect all patients, colleagues and others irrespective of age, socio-

		economic status, political affiliation, race, religion or creed. 4. Demonstrate respect, compassion, and integrity; 5. Demonstrate a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development; 6. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practice; 7. Demonstrate sensitivity and responsiveness to patient culture, age, gender identification, and disabilities.
Systems-based Practice	Graduates must demonstrate an awareness of and responsiveness to the larger context & systems of health care & the ability to effectively call on system resources to provide care that is of optimal value to Optometry patients	1. Understand the framework in which Optometry is practiced in Zambia. 2. Understand and respect the roles and expertise of other health and social professionals in the care of patients as a multi-professional team. 3. Work with colleagues in ways that best serve the interests of the patient. 4. Demonstrate ability to build team capacity and function at various levels within the team. 5. Participate and respond to outcomes of appraisals, performance reviews, and assessments. 6. Demonstrate an awareness of and responsiveness to the larger context and system of health care and effectively call on system resources to provide care that is of optimal value; 7. Understand how patient care and other professional practices affect other health care professionals, the health care organization, and the larger society, and

		how these system elements affect their personal ophthalmic practice;
		8. Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources; and practice cost-effective eye health care and resource allocation that do not compromise quality of care;
		9. Advocate for high quality eye patient care and assist patients in dealing with system complexities;
		10. Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care, and know how these activities can affect system performance.
		11. Know how to partner with services that can improve quality of life (e.g., health, education, livelihoods, social inclusion) of people with long term visual impairment.

6.0 BLUEPRINT WEIGHTING

COMPETENCY	WEIGHTS
1. Patient Care	60%
2. Ophthalmic Knowledge	20%
3. Practice-based Learning and Improvement	5%
4. Communication Skills	5%
5. Professionalism	5%
6. Systems-based Practice	5%

7.0 CORE PROCEDURES

The following procedures are the minimum standards, and a full list could be found in the curriculum:

		Conduct a relevant history taking in all specific subject areas, including systems review.

Common Procedures (these procedure cut across all the four subject areas mentioned in 4.0)		Conduct and interpret the following preliminary examinations 1. Visual acuity 2. Pupillary reactions 3. Extra-ocular motility 4. Colour vision tests 5. Intra-ocular pressure
		Conduct an examination of the ocular adnexa and the anterior segment, and interpret the findings thereof using any of the following instruments: - 1. An examination pen torch 2. A loop magnifier 3. Slit lamp biomicroscope 4. Able to collect eye swabs and other specimen for laboratory investigations
		Conduct an examination of the ocular posterior segment and interpret the findings thereof using any of the following ophthalmic instruments: - 1. Direct ophthalmoscope 2. Slit lamp biomicroscpy using a condensing lens such as a 90D lens
		Being able to perform and interpret some of the specialised ophthalmic investigations such as: - 1. Visual field tests 2. Fundus photography 3. Optical coherence test 4. Biometry - A and B scans 5. Keratometry 6. Pachymetry 7. Corneal topography
		Ability to use diagnostic therapeutics in clinical practices, such as: - 1. Using dilating drops for fundoscopic examination 2. Use of topical anaesthetic drugs for examination
Ocular and Systemic Diseases	1.	Identifies patients with different types of ocular conditions that need first aid and emergency interventions
	2.	Differentiates the common ocular and systemic related ocular diseases' presentation
	3.	Differentiates the common types of ocular neoplasms.
	4.	Manages common ocular diseases, and identifies those that need referral, and refers as soon as possible
	5.	Describes Optometric management modalities for certain ocular diseases

	6	Applies scientific principles, theories and concepts, including counseling, that are fundamental to the care of patients with Ophthalmic conditions
Optics and Refraction	1.	Diagnose refractive errors and binocular vision anomalies, and performs retinosopy for the diagnosis of refractive error
	2.	Describe principles of accommodation, and contorl accommodation during refraction in both adults and children
	3.	Prescribe spectacles and other vision assistive devices
	4.	Measure interpupillary distance
	5.	Assess, verify and dispenses optical and/spectacle devices
	6.	Fits spectacle lenses
	7.	Identification of other visual impairment that need either referral and/or visual rehabilitation
Low Vision	1.	Addresses the psychosocial effects of low vision at developmental stages
	2.	Assess the residual visual function, and performs low vision evaluation
	3.	Provide the prevention and basic interventions for common causes of visual impairment, low vision and blindness
	4.	Prescribes and dispenses low vision aids
	5.	Provides linkages for low vision patients to support services.
Dispensing Optics	1.	Select the most appropriate ophthalmic lens for different patient's needs
	2.	Advise on the appropriate frame for different refractive error needs
	3.	Edge and fit the lens into a frame
	4.	Adjust and deliver the spectacles
	5.	Attend to clients' problems arising during dispensing

8.0 REFERENCE MATERIALS

Ocular and Systemic Diseases		Kanski J. J., Bowling B., (2011). **Clinical Ophthalmology – A Systemic Approach**, **7th Edition**, Elsevier
		Riordan-Eva P., Whitcher J. P., (2007) **Vaughan & Asbury's General Ophthalmology 17th Edition,** McGraw Hill
Optics and Refraction		American Academy of Ophthalmology, (2015), **Clinical Optics Basic and Clinical Science Course, Section 3,** American Academy of Ophthalmology
		Elkington A. R., Frank H. J., and Greaney M. J, (1999). **Clinical Optics**, Blackwell Science Ltd
Low Vision		Freeman P, Randall TJ (1997), **The Art and Practice of Low Vision**, 2nd edition, Butterworth–Heinemann.
		Chaudry M., (2006). **Low Vision Aids**, **1st Edition**, Jaypee Brothers Medical Publishers (P) Ltd, New Dehli, India
Dispensing Optics		Brooks C. & Borish I. (2007), **System of Ophthalmic Dispensing** 3rd Editon, Butterworth Heinemann.
		Wilson D. (2006), **Practical Optical Dispensing** 2nd Edition; OTEN Sydney
Interpersonal & Communication Skills		Guffey ME (2007) *Essentials of Business Communication* 7th ed. Australia: South-Western College Publishing.
		Hybels S, Weaver R (2004) *Communicating Effectively*. 7th ed. New York: McGraw-Hill.
Professionalism		Health Professions Council of Zambia, *Act of 2009 No. 24 of the Laws of Zambia*
		Banda SS (1999) *Medical Ethics for Medical and Health Professions*. London: Oxford Press.
System-Based Practice		Cole A (2002) *Personnel and Human Resource Management*. London: Book Power.
		Handy CB (2000) *Understanding Organizations*. Oxford: Oxford University Press.