

# CORE COMPETENCIES REFERENCE MANUAL FOR DENTAL ASSISTANTS TO PRACTISE IN ZAMBIA

**CORE COMPETENCIES & MINIMUM STANDARDS** 

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# QUALIFICATION AND RESPONSIBILITIES

Title of the Programme: Certificate in Dental Assisting

Key Accountability for the Job: Assisting Dental Practitioners before, during and after Dental Procedures.

## Primary Roles and Responsibilities:

- 1. To Receive and Prepare the Dental Patient for Procedure in a Dental Clinic.
- 2. To Prepare Equipment, Instruments and Materials for Use.
- 3. To Keep the Dental Setup Clean.

#### 1.0 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 of information on the Core Competencies for the Licensing Examination for Dental Assistants 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 licensure examinations.

# 2.0 Exit Examinations and Award of the Certificate In Dental Assisting by Training Institutions

Training institutions, private or public (local and foreign), approved by the Health Professions Council of Zambia are mandated to examine and graduate their students under their own seal and authority. The Dental Assisting Certificate or its equivalent award is designated the primary qualification of the practitioner and it is a pre-requisite requirement for eligibility for licensure examinations. Accordingly, a holder of the certificate or its equivalent award will be required take and pass the HPCZ licensure examination to qualify for registration with the Council as a Dental Assistant.

#### 3.0 Licensure Examinations by the Health Professions Council of Zambia

A person shall not practise 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 2<sup>nd</sup> Council and the 3<sup>rd</sup> Council of the Health Professions Council of Zambia instituted Licensure Examinations to help maintain standards given the emergence of multiple private and public training institution. This bulletin of information on core competencies and minimum standards for the licensure examinations for Dental Assistants to work in Zambia binds all parties regulated under this Act. Examination fess for licensure examinations, as prescribed by the Council, are payable to the Health Professions Council of Zambia as part of the eligibility to sit licensure examinations.

The HPCZ Licensure Examination assesses a Dental Assistant graduate's ability to apply scientific knowledge, skills and performance and professional attitudes, that are important in

health and disease and that constitute the basis of safe and effective patient care practice. The HPCZ Licensure Examination includes, but is not limited to, theoretical and practical examinations which complement each and the other components. No component is a stand-alone in the assessment of readiness for professional practice in Zambia.

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

- 1. Knowledge
- 2. Skills
- 3. Attitude

The above domains will be assessed by means of a theory exam comprising of multiple choice questions, and a composite objective structured practical examination.

The four main **subject areas** (assessed under all three learning domains) for Dental Assistants in Zambia are:

- 1. Applied Dentistry
- 2. Preventive dentistry
- 3. Pre-Clinicals

#### 4.0 COMPETENCE OUTCOME GUIDELINES

The process of licensure seeks to detect the candidate's attainment in each educational domain (knowledge, skills and attitude) and evaluates the minimum competence standards as benchmarks for licensure to practice the profession. It also guides prospective candidate's learning and assessment by examiners. HPCZ, on behalf of the general public and professional stakeholders, expects holders of the certificate or its equivalent to meet the minimum competency standards outlined in this document. The expectations are largely in main competence areas as follows:

#### **Overall Competences**

- a) Explain basic anatomical structures of the head and neck with particular emphasis to oral anatomy and physiology
- b) Explain basic oral microbiology
- c) Receive and make the patient comfortable on the dental Chair
- d) Identify and prepare instruments, equipment and materials in the dental clinic and dental laboratory
- e) Record patient details
- f) Mix dental materials appropriately
- g) Pass materials and instruments to the clinician
- h) Take and process x-rays
- i) Implement infection prevention procedures in the dental clinic and dental laboratory
- j) Implement preventive maintenance in the dental clinic and dental laboratory
- k) Implement First Aid in the dental clinic and dental laboratory
- 1) Give oral hygiene instructions to patients

#### 5.0 CORE COMPETENCIES DENTAL ASSISTING

DOMAIN	COMPETENCY	COMPETENCY STATEMENT	SUB COMPETENCY
SCIENTIFIC KNOWLEDGE	Fundamental knowledge in basic Oral Anatomy	i) Demonstrate knowledge, skills and attitude about Oral Anatomy	i)Identify basic structures of the oral cavity ii. Identify the different types of dentition including periods of eruption of deciduous and permanent teeth. iii. List and explain the functions of teeth and the tongue

	Knowledge in Oral Microbiology.	Demonstrate understanding and application of basic health science concepts relating to Oral Microbiology	iv. Itemize the functions of saliva v. List the functions of the circulatory system vi. Name the functions of the heart vii. Enumerate the functions of the digestive system viii. List the functions of the Respiratory system i. List common oral micro organisms ii. Define bacteria, viruses and fungi iii. Explain disease transmission iv. Implement infection control measures v. Monitor infection prevention vi. Handle sharps correctly
Skills and performance	Identify, prepare and mix materials in the dental clinic and dental Laboratory	demonstrates understanding and application of basic health science concepts relating to dental materials.	<ul> <li>i.) Identify commonly used dental materials</li> <li>ii) Mix materials efficiently</li> <li>ii) Store materials safely</li> </ul>
	maintenance and storage of dental equipment and instruments	demonstrates knowledge and understanding of dental equipment and instruments employed in the care of patients in Zambia	i.)Handle the dental equipment correctly ii.)Handle dental instruments correctly iii.) Comply with maintenance protocols of dental equipment iv).Store dental instruments according to manufacturer instructions
	Take and process x rays	Perform radiographic technics.	

		i Identify and
		i. Identify and name parts and types of x-ray films ii. Use digital and manual x-ray machines iii. Process and order and store x-ray films iv Implement radiation safety measures for the patients and dental staff. v. Comply with routine Maintenance and sterilization protocols of x- ray units vi. Identify by color the correct different types of wastes generated. vii Know regulatory requirements
Participate in Managing a Dental Practice	Manage a Dental Practice in a public or private healthcare setting.	i. Assist in the management of the Dental practice ii. Have the basic knowledge of the legal implications concerning their role in the dental practice iii. Explain the ethics and laws that govern their profession
Communicate Effectively	Effectively communicate as a professional with peers, other healthcare professionals and the public in a professional context.	i.)Communicate clearly,and effectively with colleagues and patients and their care-giver
Utilize Information Communication Technology (ICT)	Demonstrate basic ICT tools that are appropriate to the	1.Utilize basic ICT to communicate Dental information

ATTITUDES, VALUES AND PROFESIONALISM	Team work and Independent Life- long learning	Demonstrate teamwork and independent life-long learning and professional	effectively ii) Develop, store, locate, retrieve and utilize patient Dental information on a database  1.Support development of self in areas of professional practice as a Dental assistant.
	Dental Practice Safety Guidelines	development  Demonstrate ability to adopt, comply and implement Dental safety guidelines	1.Awareness and adherence to local, regional and international standards of safety, including protocols for management and disposal of dental waste.  ii) Promote health and occupational safety at the workplace.
	Professionalism and Ethical Practice .	Demonstrates professionalism, ethical practice and conduct	i) Behave according to ethical and legal frameworks governing the practice of Dental assistants ii) Demonstrate awareness of local, regional and international ethical codes that guide the practice of Dental assistants.  iii) Value and appreciate the roles and responsibilities of Dental assistants in healthcare.  iv) Be polite, considerate, trustworthy and honest, and act with integrity, maintain confidentiality, respect patients' dignity and privacy

	v) Respect all
	patients, colleagues
	and others
	irrespective of age,
	gender, socio-
	economic status,
	political affiliation,
	race, religion or creed.
	vi) Do no harm
	to patients either by
	intention or
	negligence in the
	course of duty.
	vii) Protect
	patients and improve
	care.
	viii) Demonstrate
	global competency
	with regards to
	professionalism,
	patient management
	and practice
	management as
	measured by ongoing,
	continuous and
	progressive
	evaluation utilizing
	defined criteria.

## 6.0 BLUE PRINT WEIGHTS BY COMPETENCIES

Table 2: Weighting of Competence areas for Theory Licensure Examination for Certificate in Dental Assisting

OBJECTIVES	Total
1. To determine the application of knowledge in Dental Sciences	50%
2. To ascertain performance of quality and reliable Clinical techniques proficiently	20%
3. To assess <b>leadership and management skills</b> to effectively manage the Dental Practice	15%
4. To ascertain <b>professionalism</b> and demonstration of <b>ethical conduct</b> , including <b>adherence to good Dental practice, safety and health guidelines</b> .	15%
Total	100%

Table 3: Weighting of Competence Areas for Practical Licensure Examination for Dental Assisting

OBJE	ECTIVES	Total
1.	To determine the application of knowledge in Dental Sciences	5%
2.	To ascertain performance of quality and	
	reliable Clinical Dental science techniques	45%
	proficiently	
3.	To assess leadership and management	
	skills to effectively Participate in managing	5%
	the Dental Practice	
4.	To ascertain <b>professionalism</b> and	
	demonstration of ethical conduct, including	
	adherence to good Dental practice, safety and health guidelines.	15%
Total		100%

# 7.0 CORE PROCEDURES (LIST NOT EXHAUSTIVE)

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

Equipment and Instrumentation	1	Identify and prepare instruments for the dental practitioner
	2	Hand over instruments to the dental practitioner
	3	Store and disinfect instruments, maintain dental equipment
	4	Do basic instrument repairs
Dental Materials	1	Identify, mix and hand over materials to the dental practitioner
	2	Store materials according to recommendations
	3	Know correct instruments to be used with the materials
	4	Correct disposal of dental materials
Dental Radiology	1	Identify correct x ray films and process them
	2	Correctly angulate the x ray tube
	3	Correctly dispose of film processing chemicals
Dental Assisting	1	Welcome patient into the dental room
	2	Prepare patient for procedure
	3	Be able to assist in case of an emergency

# 8.0 SELECTED READING MATERIALS

Oral Anatomy	1	Nelson, S.J., 2014. Wheeler's Dental Anatomy, Physiology and Occlusion-E-Book. Elsevier Health Sciences.
	2	Bath-Balogh, M. and Fehrenbach, M.J., 2006. Dental Embryology, Histology, and Anatomy. St. Louis.
Microbiology	1	Murray, P.R. and Rosenthal, K.S., 2005. <i>Review of medical microbiology</i> . Elsevier Health Sciences.
	2	Marsh, P.D., Martin, M.V., Lewis, M.A. and Williams, D., 2009. <i>Oral Microbiology E-Book</i> . Elsevier health sciences.
Dental Materials, Equipment and Instrumentation	1	Bird, D. and Robinson, D., 2009. Torres and Ehrlich Modern Dental Assisting 9th. <i>Louis, MO: Mosby</i> .
<b>Dental Practice Management</b>	1	Bird, D.L. and Robinson, D.S., 2017. <i>Modern Dental Assisting-E-Book</i> . Elsevier Health Sciences.
<b>Dental Assisting</b>	1	Ritter, A.V., 2017. Sturdevant's Art & Science of Operative Dentistry-E-Book. Elsevier Health Sciences.