



**CORE COMPETENCIES REFERENCE
MANUAL FOR MEDICAL DOCTORS
TO PRACTISE IN ZAMBIA**

CORE COMPETENCIES & MINIMUM STANDARDS



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QUALIFICATION AND RESPONSIBILITIES:

Title of the programme: Bachelor of Medicine and Bachelor of Surgery (MChB) or equivalent.

Key accountability for the job: First line contact with patient in a hospital setting

Primary roles and responsibilities:

- Knowledge of the basic and clinical sciences relevant to the practice of medicine
- Competence in clinical skills and patients care
- Professionalism and ethical practice
- Linking up patients with other support services

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 Doctor 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 core competencies and minimum standards for registrants who have completed the Bachelor of Medicine and Bachelor of Surgery (MBChB) or its equivalent seeking registration as Medical Doctor in Zambia.

2.0 EXIT EXAMINATIONS AND AWARD OF THE DEGREE MBChB

Training institutions, private or public(local and foreign) approved /recognised 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 MBChB or equivalent is designated as a pre-service degree. Accordingly, a holder of this qualification will be required to take and pass the HPCZ licensing examination to qualify for registration with the Council as a Medical Doctor.

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 2nd 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 of Information on the Core Competencies and Minimum Standards for Medical Doctor 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 licensing examination.

The HPCZ Licensing Examination assesses a Medical Doctor’s ability to apply knowledge, concepts, and principles, and to demonstrate fundamental patient-centred skills, that are important in health and disease and that constitute the basis for safe and effective patient care. The HPCZ Licensing Examination includes, but is not limited to, theoretical and clinical examinations which complement each other as prescribed in the curriculum for which this programme was approved. No component is a stand-alone in the assessment of readiness for medical 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 followed by a composite objective structured clinical examination (OSCE).

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

1. Internal Medicine
2. Obstetrics and Gynaecology
3. Paediatrics and Child Health
4. Surgery

Other subject areas prescribed by the curriculum such as Public Health, health systems management and psychiatry may only be assessed as cognitive domains in the theory paper. The overall expected outcomes of the Licensure examination is to ensure that the candidate will meet the minimum standards for the role as a Medical Doctor.

4.0 COMPETENCE OUTCOME GUIDELINES

The curriculum must have identified attributes in each educational domain (knowledge, skills and attitude) and present them to guide student learning and assessment by examiners. HPCZ directs Medical Doctors to be compassionate and empathetic in caring for patients and to be trustworthy and truthful in all their professional dealings. Medical Doctors have a responsibility to respect and provide care that is up to standard for the lives and health that are entrusted by patients.

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: MEDICAL OFFICER

DOMAIN : KNOWLEDGE		
COMPETENCY STATEMENT	COMPETENCY	SUBCOMPETENCIES
Apply Biomedical Sciences, Behavioural & Sociology, and Scientific Principles to the Practice of Medicine	1. Biomedical Scientific Principles	<p>1.1 Explains normal human anatomy, biochemistry, immunology and physiology.</p> <p>1.2 Understands the genetic basis for diseases.</p> <p>1.3 Understands the microbiological basis of disease.</p> <p>1.4 Explains the pathophysiological basis for common diseases.</p> <p>1.5 Justifies and explain the scientific basis of common investigations for diseases and conditions.</p> <p>1.6 Demonstrates knowledge of drugs, drug actions, side effects, and interactions.</p>
	2. Behavioural and Sociology Principles	Applies Behavioral and Sociology Principles to the Practice of Medicine
	3 .Population Health	<p>3.1 Discusses population health principles related to determinants of health, health inequalities, health risks and surveillance.</p> <p>3.2 Discusses issues related to health financing, and clinical guidelines.</p> <p>3.3 Evaluates and apply basic principles of infectious and non-communicable disease control at community and hospital level.</p> <p>3.4 Discusses and apply the principles of primary, secondary, and tertiary prevention of disease.</p>

	4. Medical Research	<p>4.1 Performs critical appraisal of various research and apply it in their day to day work to provide up to date evidence based care.</p> <p>4.2 Formulates research questions, study designs or experiments to address the research questions.</p> <p>4.3 Discusses and apply appropriate research ethics to a research study.</p>
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DOMAIN :SKILL

COMPETENCY STATEMENT	COMPETENCY	SUBCOMPETENCIES
	1. Clinical Consultation	<p>1.1 Take and record a relevant medical history</p> <p>1.2 Perform a full physical examination</p> <p>1.3 Perform a mental state examination</p> <p>1.4 Provide feedback and enlist the patient's participation in their care</p>
	2. Diagnosis and Management	<p>2.1 Interpret findings from clinical consultation</p> <p>2.2 Formulate a provisional diagnosis and differential diagnosis</p> <p>2.3 Plan and interpret investigations</p> <p>2.4 Formulate a plan of treatment, management and discharge</p>
	3. Communication	<p>3.1 Communicate medical management effectively in written, verbally and electronically</p> <p>3.2 Communicate with the patient, patient's family, peers, clinical teams and superiors</p>
	4. Medical Emergency Care	<p>4.1 Assess and recognize clinical conditions requiring emergency care</p> <p>4.2 Provide basic first aid</p> <p>4.3 Provide advanced cardiorespiratory support</p> <p>4.4 Diagnose and manage acute medical conditions</p>
	5. Therapeutics	<p>5.1 Plan appropriate drug therapy for common conditions</p> <p>5.2 Provide a safe and legal prescription</p> <p>5.3 Detect and report adverse drug reactions</p>

	6. Clinical Procedures	6.1 Be familiar with basic clinical procedures expected to be performed by the candidate* 6.2 Carry out clinical procedures safely 6.3 Gain proficiency in executing the clinical procedures
	7. Medical information Use	7.1 Keep accurate legible and complete clinical records 7.2 Access information sources and use the information for patient care, health promotion and education.

	COMPETENCY STATEMENT	COMPETENCY	SUBCOMPETENCIES
Attitude	The candidate should behave in an ethical and professional manner towards patients and colleagues at all times.	1. Professional and ethical practice	1.1 Demonstrate awareness of local, regional and international code of ethics
			1.2 Ensure confidentiality (with the patient and other healthcare professionals)
			1.3 Obtain patient consent (it can be implicit on occasion)
			1.4 Do no harm in their practice
			1.5 Respect patient's autonomy
			1.6 Treat patients with dignity and ensure privacy
		2. Self-management	2.1 Be a team player and understand own role in the team
			2.2 Understand expertise of other team members
			2.3 Demonstrate professional dress code and leadership
			2.4 Demonstrate efficiency and punctuality
			2.5 Prioritize work and implement innovative ideas
		3. Continuous Professional Development (CPD)	3.1 Participate in appraisals, performance reviews and assessments
			3.2 Identify own limitations and act upon them
3.3 Engage in CPD activities			

			3.4 Be an effective mentor and teacher to medical students and colleagues
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6.0 BLUEPRINT WEIGHTING

Domain	Overall	Percentage of Total
Theory Exam (knowledge)	100%	
Biomedical scientific principles		10
Public health		5
Research		5
Diagnostic*		50
Management**		20
Psychiatry, including ethics		10
Total		100
Clinical Exam (Skills and Attitude)	100%	
History taking		30
Physical examination		30
Investigations		15
Management		15
Approach to patient		10
Total		100

*Diagnostics= history, physical examination, investigations

**Management= therapeutics (drugs) and surgical procedures

7.0 CORE PROCEDURES

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

Common Procedures(these procedures cut across all the four subject areas mentioned in 4.0)	1	Conduct a relevant history taking in all specific subject areas
	2	Conduct relevant Physical Examination in all specific subject areas
	3	Interpret common basic radiological examinations findings (X-ray, basic Ultrasonography etc)
	4	Perform bed side procedures such as vene puncture,catheterization,NGT insertion, injection administration etc.
	5	Conduct Cardiopulmonary resuscitation (CPR) incl.HBB in paediatrics
	6	Perform basic laboratory procedure (RDT,RPR,HIV, Microscopy)
	7	Collect specimens and Interpret common laboratory investigation [Blood (FBC, RFT, LFT, ABGs etc.), urine (urinalysis, MCS), stool, sputum etc.]
Internal Medicine	1	Perform lumbar Puncture and interpret the results
	2	Drug administration(dose, form and route)
	3	Interpret basic ECG
	4	Performs Thoracocentecis and abdominocentecis
	5	Oxygen Administrastion
Obstetrics and Gynaecology		
	1	Perform the APGAR scoring
	2	Demonstrate the use of a partograph
	3	Conduct Vaginal speculum Examination (incl. VIA, pap smear collection, HVS)
	4	Perform Manual Vacuum Aspiration (MVA)

	5	Management both normal and abnormal labour
	6	Perform Caesarean section
	7	Perform Dilatation and Curettage
	8	Perform Laparotomy e.g. ruptured ectopic pregnancy
Paediatrics and Child Health		
	1	Conduct Support ventilation (Ambu bag)
	2	Perform and Interpret lumbar Puncture results
	3	Implement EPI
	4	Perform neonatal intubation
	5	Intraoteous fluid administration (done with a senior colleague initially)
Surgery	1	Perform Heimlich manoeuvre (abdominal thrust)
	2	Perform a venous cut down
	3	Perform laparotomy
	4	Perform suturing
	5	Performing wound care and basic wound dressing, applying splints and traction and applying Plaster of Paris correctly
Public health		Identify, plan and implement health promotion activities
		Formulate a research proposal and conduct simple research in a community
		Conduct community diagnosis
		conduct school health services

8.0 REFERENCES MATERIALS

Kindly refer to the curriculum for full list of books.

Biomedical basis of disease	1	Standing S.(2015) Gray's Anatomy (41 ST Ed).Churchill Livingstone/Elsevier
	2	Prescott, et al. (2011) <i>Microbiology</i> 7 th Ed. New York: McGraw-Hill.
	3	Murray KR, Botham KM (2012) <i>Harper's Illustrated Biochemistry</i> 29 th ed. New York: McGraw-Hill
	4	Ganong W. G. A review of Medical Physiology, Lange Medical Publications, California
	5	Bennett P.N, Brown M.J, Sharma P. (2012). <i>Clinical Pharmacology</i> 11 th Ed, Churchill Livingstone, London
	6	Robbins SL and Kumar V, <i>Basic Pathology</i> , 8 th edition. Saunders Elsevier; 2007. USA: The McGraw-Hill Companies Inc.;
Internal Medicine	1	Kumar P, Clark M. Clinical Medicine . Bailliere Tindall, London
	2	Macleod J. Davidson's Principles and Practice of Medicine: a textbook for students and doctors. Churchill Livingstone Edwards C, Munro JF, Broucher I (2010) <i>Davidson's Principles and Practice of Medicine</i> 21 st Ed. Edinburgh: Churchill Livingstone
Obstetrics and Gynaecology	1	E. Malcom Symonds. Essential Obstetrics and Gynaecology. Churchill Livingstone, Edinburgh.
	2	Jeremy Oats, Suzanne Abraham. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology. Elsevier Mosby, Oxford

Paediatrics and Child Health	1	Southall L, Coulter B, Ronald C, Nicholson S, Parke S. Internal Child Healthcare, A Practical Manual for Hospitals Worldwide, A Child Advocacy International. BMJ Books
	2	Marcdante K, et al. (2011) <i>Nelson Essentials of Paediatrics</i> 6th ed. Philadelphia: Saunders Elsevier.
Surgery	1	Rains H, Richie D (2003) Bailey, Hamilton, <i>Bailey & Love's Short Practice of Surgery</i> 26th ed. London: H. K. Lewis.
	2	Ellis H, Calne R, Watson C. Lecture Notes: General Surgery. Wiley Blackwell Publishers, New York
Psychiatry	1	Gelder M, Mayou R, Harrison P, Cowen P (2005). Oxford Textbook of Psychiatry . Oxford: Oxford University
	2	Saddock B, and Saddock v. Kaplan and Saddock's Comprehensive Textbook of Psychiatry. Lippincott Williams and Wilkins
Public health	1	Gordis L Epidemiology, Baltimore, Saunders Elsevier
	2	Rothmans, J K Epidemiology: An introduction, Oxford University Press
INTERPERSONAL & COMMUNICATION SKILLS	1	Guffey ME (2007) <i>Essentials of Business Communication</i> 7th ed. Australia: South-Western College Publishing.
	2	Hybels S, Weaver R (2004) <i>Communicating Effectively</i> . 7th ed. New York: McGraw-Hill
PROFESSIONALISM	1	HPCZ (2016) <i>Guidelines for good practice in the Healthcare profession – Maintaining Patient Confidentiality</i> . HPCZ Lusaka
	2	HPCZ (2016) <i>Guidelines for good practice in the Healthcare profession – Generation and management of patient records</i> . HPCZ Lusaka
	3	HPCZ (2014) <i>Professional code of ethics and discipline: Fitness to Practice</i> . HPCZ Lusaka
	4	HPCZ (2016) <i>Patients rights and responsibilities</i> . HPCZ Bulletin, Lusaka
	5	Banda S.B. Healthcare Ethics and Professionalism Course. https://virtualcityacademy.com/

SYSTEM-BASED PRACTICE	1	Cole A (2002) <i>Personnel and Human Resource Management</i> . London: Book Power.
	2	Handy CB (2000) <i>Understanding Organizations</i> . Oxford: Oxford University Press. Cole A (2002) <i>Personnel and Human Resource Management</i> . London: Book Power.

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