



CORE COMPETENCIES REFERENCE MANUAL FOR MEDICAL LICENTIATES PRACTITONERS TO PRACTICE IN ZAMBIA

CORE COMPETENCIES & MINIMUM STANDARDS

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QUALIFICATION AND RESPONSIBILITIES

Title of the programme: Bachelor of Science in Clinical Science

Key accountability for the job: First line contact with patient in Hospital or level one health facility setting.

Primary roles and responsibilities:

- Provision of curative, promotive and preventive health care services
- Carry out some hospital administrative roles
- Refer patient to appropriate level of health care

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 workers 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 workers.

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 Degree in Clinical Sciences or its equivalent seeking registration as Medical Licentiate Practitioners in Zambia.

2.0 EXIT EXAMINATIONS AND AWARD OF THE BSc CLINICAL SCIENCES (BSc CS)- BY TRAINING INSTITUTIONS

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 BSc CS Award is designated the primary qualification of the practitioner and it is a pre-requisite requirement for eligibility for Medical Licentiate Practitioner licensing examinations. Accordingly, a holder of the BSc award will be required to take part and pass the HPCZ licensing examination to qualify for registration with the Council as a Medical Licentiate Practitioner.

4.0 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 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 institution. This “Bulletin of Information on the Core Curricula and Minimum Standards for the Licensing Examinations for Medical Licentiate Practitioner 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 licensing examinations.

The HPCZ Licensing Examination assesses a Medical Licentiate Practitioner’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 of safe and effective patient care. The HPCZ Licensing Examination includes, but is not limited to, theoretical and clinical examinations which complement each and the other components. 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:-

- Knowledge,
- Skills
- 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 Licentiate Practitioner 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 Community Health, Health systems management and diagnostics and therapeutics will only be assessed as cognitive domain in the theory paper. The overall expected outcomes of the MEDICAL LICENTIATE PRACTITIONER licensure examination is to ensure that the candidate will meet the minimum expectations for the role as a front line health worker in the primary health care setting

5.0 COMPETENCE OUTCOME GUIDELINES

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

Medical knowledge

- Basic and clinical sciences in the management of patients appropriate to their level of care.
- Order and interpret appropriate investigations.

Patient care

- Obtain a thorough medical history
- Develop and carry patient management plans.
- Counsel and educate patients and their families.
- Competently perform medical and surgical procedures considered essential in the area of practice.

- Demonstrate caring and respectful behaviours when interacting with patients and their families
- Provide health care services and education aimed at maintaining health and preventing health problems.
- Work effectively with other health care professionals to provide patient-centred care.

Interpersonal and communication skills

- Communicate effectively with the patients, family and health care team.
- Demonstrate emotional resilience and stability, adaptability, flexibility, and tolerance of ambiguity and anxiety.
- Accurately and adequately document and record information regarding the care process for medical, legal, quality and financial purposes

Professionalism

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Exhibit -culturally sensitive and acceptable behaviour when interacting with patients, family, other caregivers and as well in their communities.
- Adhere- to ethical, legal and regulatory requirements of the profession.

System based practice

- Apply medical information and clinical data systems to provide effective and efficient patient care.
- Manage and refer patients to appropriate levels of care
- Demonstrate understanding of the funding sources and payment systems that provide coverage for patient care.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Work in a multidisciplinary team of health care professionals.
- Use information technology to support patient care

6.0 CORE COMPETENCIES: MEDICAL LICENTIATE PRACTITIONER

DOMAIN: KNOWLEDGE			
DOMAIN	COMPETENCY	COMPETENCY STATEMENT	SUBCOMPETENCIES
Knowledge	1. Medical knowledge	Graduates should be able to apply knowledge about established and evolving biomedical, basic sciences, clinical medicine and application of this knowledge to patient care	<ul style="list-style-type: none"> ○ Demonstrate knowledge of the normal structure and function of the human body, from molecules to cells,-organs- and to the whole organism. ● Apply investigatory and analytic thinking to patient care ● Evaluate & recommend changes to investigations ● Synthesise and apply knowledge of biomedical sciences ● Demonstrate knowledge in Medicine, Paediatrics, Obstetrics/Gynaecology, Surgery & sub specialities

DOMAIN: SKILL		
COMPETENCY	COMPETENCY STATEMENT	SUBCOMPETENCIES
2. Practice-based learning & improvement	Graduates should be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidences & improve their patient care practice	<ul style="list-style-type: none"> • Conduct patient care audits • Perform routine patient care technical support • Evaluate and recommend changes based on scientific evidence • Utilize information technology • Conduct research • Utilize scientific evidence from studies • Consult senior colleagues in patient management
3. Interpersonal & communication skills	Graduates must demonstrate interpersonal and communication skills that result in effective information exchange & teaming with patients, families & professional associates	<ul style="list-style-type: none"> • Demonstrate ability in creating a therapeutic relationship with patients • Demonstrate listening skills in a patient encounter • Demonstrate ability in educating patients and family • Demonstrate skills in communicating patient related findings to colleagues • Evaluate patient & family outcomes to care

<p>4. Patient care</p>	<p>Graduates must be able to provide patient care that is compassionate, appropriate and effective for the treatment of health problems & the promotion of health</p>	<ul style="list-style-type: none"> • Demonstrate caring & respectful behaviours • Conduct effective consultation (medical interviewing) • Taking and recording a comprehensive history • Conducting systematic and accurate physical examinations including mental state examination. • Ordering appropriate diagnostic test and interpret results correctly • Develop & carry out patient management plans • Perform appropriate medical procedures • Perform preventive & promotive health care • Manage different medical conditions effectively • Performing basic surgical skills • Managing appropriate surgical conditions including common surgical emergencies • Demonstrating basic surgical skills in obstetrics and gynaecology and surgery, including performing surgery independently and managing common obstetric and gynaecological and appropriate surgical emergencies • Carry out clinical practical procedures safely and effectively
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DOMAIN: ATTITUDE

COMPETENCY	COMPETENCY STATEMENT	SUBCOMPETENCIES
5. Professionalism	Graduates must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, & sensitivity to a diverse patient population	<ul style="list-style-type: none"> • Demonstrate ethically sound practice • Practice informed decision making • Respect patients privacy in handling matters • Practice confidentiality with patient information • Demonstrate adherence to code of practice • Demonstrate sensitivity to cultural, age, gender, disability issues
6. Systems-based practice	Graduates must demonstrate an awareness of and responsiveness to the larger context & system of health care & the ability to effectively call on system resources to provide care that is of optimal value	<ul style="list-style-type: none"> • Demonstrate knowledge of the interaction of their practices with the larger system. • Practice cost-effective care • Demonstrate knowledge of management principles in health care management • Advocate for patients within the health care system

7.0 BLUEPRINT WEIGHTS BY COMPETENCIES

S/N	Competency	Weights
1	Medical knowledge	20%
2	Patient care	60%
3	Practice-based learning & improvement	5%
4	Interpersonal & communication skills	5%
5	Professionalism	5%
6	System-based practice	5%

8.0 CORE PROCEDURES (LIST NOT EXHAUSTIVE)

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

Common Procedures(these procedure 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 specific radiological and sonographic investigation (X-ray, basic Ultrasonography)
	4	Perform bed side procedures (resuscitation, vein puncture, physical exams, bedside diagnostic tests - RDT, RBS, Injection administration & others).
	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, Ultrasound result
	4	Performs Thoracocentecis and abdominocentecis
	5	Oxygen Administrastion
Obstetrics and Gynaecology	1	Demonstrates APGAR scoring
	2	Demonstrate the use of a partograph
	3	Conduct Vaginal speculum Examination (incl. VIA, pap smear collection)
	4	Repairing of trauma of birth canal
	5	Performing Forceps delivery

	6	Conducting Vacuum Extraction
	7	Conducting Assisted Breech Delivery
	8	Performing Caesarean section
	9	Subtotal hysterectomy in case of an emergency
	10	Performing removal of retained placenta
	11	Managing uterine rupture
	12	Performing Dilatation and Curettage
	13	Performing Manual vacuum aspiration
	14	Performing Manual removal of the products of conception
	15	Performing cervical biopsy
	16	Performing bilateral tubal ligation
	17	Performing Laparotomy e.g. ruptured ectopic pregnancy
	18	Managing a vaginal delivery
Paediatrics and Child Health		
	1	Conduct Support ventilation (Ambu bag)
	2	Perform lumbar Puncture & interpret results
	3	Implement EPI
	4	Managing nebulising
	5	Conduct Referral procedures
	6	Conduct IMCI
	7	Manage common paediatric emergencies - dehydration, pneumonia, meningitis, PEM, Heart Failure, sickle cell crisis
	8	Perform cutdown.
Surgery	1.	Perform Heimlich manoeuvre (abdominal thrust)
	2.	Immobilising (POP, splinting, arm sling etc.)
	3.	Performing skin suturing
	4.	Perform skin grafting

	5.	Performing excision
	6.	Performing appendectomy
	7.	Performing non-complex amputation
	8.	Perform Eye Irrigation & Superficial FB removal from eye
	9.	Perform FB removal from Ear & Nose
	10.	Perfom Male Circumcision
	11.	Perform Chest & abdominal aspiration
	12.	Perform Suprapubic aspiration and puncture
	13.	Perform emergency tracheostomy
	14.	Anaesthesia-Local, Regional, General(Ketamine)
Public health		
	1	Identify, plan and implement health promotion activities
	2	Formulate a research proposal and conduct research in a community
	3	Conduct community diagnosis
	4	Conduct school health services

9.0 REFERENCE MATERIALS

This list is not exhaustive and a full list can be obtained from the curriculum

Biomedical basis of disease	Tortora J, Derrickson B (2014) <i>Principles of Anatomy and Physiology</i> 14th ed. Hoboken, NJ: John Wiley and Sons.
	Prescott, et al. (2011) <i>Microbiology</i> 7th Ed. New York: McGraw-Hill.
	Murray KR, Botham KM (2012) <i>Harper's Illustrated Biochemistry</i> 29th ed. New York: McGraw-Hill
	American Academy of Orthopaedic Surgeons (2013) <i>Emergency Care and Transportation of the Sick and Injured</i> . Orange Book series, USA.
	Bennett P.N, Brown M.J, Sharma P. (2012). <i>Clinical Pharmacology</i> 11 th Ed, Churchill Livingstone, London
	Robbins <i>Basic Pathology</i> , 8th edition. Saunders Elsevier; 2007. USA: The McGraw-Hill Companies Inc.;
Internal Medicine	Edwards C, Munro JF, Broucher I (2010) <i>Davidson's Principles and Practice of Medicine</i> 21st Ed. Edinburgh: Churchill Livingstone
	Kumar, P. & Clark, M.(2005). <i>Kumar and Clark's Clinical Medicine</i> , 6 th ed. London: Elsevier Saunders
Obstetrics and Gynaecology	Monga A, Dobbs S (2006) <i>Gynaecology by Ten Teachers</i> 18th Edition. London: Hodder Arnold
	Malcolm, S., Ian M. Symonds (2006) <i>Essential Obstetrics and Gynaecology</i> 4th edition. Edinburgh: Churchill Livingstone

Paediatrics and Child Health	Marcdante K, et al. (2011) <i>Nelson Essentials of Paediatrics</i> 6th ed. Philadelphia: Saunders Elsevier.
	Goldbloom R.B. (1992) Paediatric Clinical Skills , London: Churchill Livingstone
Surgery	Rains H, Richie D (2003) Bailey, Hamilton, <i>Bailey & Love's Short Practice of Surgery</i> 26th ed. London: H. K. Lewis.
	Bhat, S. R. (2012). <i>SRB's Manual of Surgery</i> (4 th Ed.), Jaypee Brothers Medical Publishers, Inc.
Psychiatry	Gelder M, Mayou R, Harrison P, Cowen P (2005). Oxford Textbook of Psychiatry . Oxford: Oxford University
	American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders (4th Ed). Washington, DC: American Psychiatric Association Press.
Public health	McKenzie J, Pinger R. (2011) <i>Introduction to Community Health</i> 7th ed. Burlington, MA: Jones & Barlett Learning.
	Kothari CR (2004) <i>Research Methodology Methods and Techniques. New Delhi:</i> New Age International (P) Limited Publishers.
INTERPERSONAL & COMMUNICATION SKILLS	Guffey ME (2007) <i>Essentials of Business Communication</i> 7th ed. Australia: South-Western College Publishing.
	Hybels S, Weaver R (2004) <i>Communicating Effectively</i> . 7th ed. New York: McGraw-Hill
PROFESSIONALISM	HPCZ (2016) <i>Guidelines for good practice in the Healthcare profession – Maintaining Patient Confidentiality</i> . HPCZ Lusaka
	HPCZ (2016) <i>Guidelines for good practice in the Healthcare</i>

	<i>profession – Generation and management of patient records.</i> HPCZ Lusaka
	HPCZ (2014) <i>Professional code of ethics and discipline: Fitness to Practice.</i> HPCZ Lusaka
	HPCZ (2016) <i>Patients’ rights and responsibilities.</i> HPCZ Bulletin, Lusaka
	Banda S.B. Healthcare Ethics and Professionalism Course. https://virtualityacademy.com/
SYSTEM-BASED PRACTICE	Cole A (2002) <i>Personnel and Human Resource Management.</i> London: Book Power.
	Handy CB (2000) <i>Understanding Organizations.</i> Oxford: Oxford University Press.