

CORE COMPETENCIES REFERENCE MANUAL FOR EMERGENCY MEDICAL TECHNICIAN IN ZAMBIA

CORE COMPETENCIES & MINIMUM STANDARDS

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QUALIFICATION AND RESPONSIBILITIES

Title of the programme: Certificate in Emergency Medical Care

Key accountability for the job: First line contact with patient in an emergency. Primary roles and responsibilities:

- Provision of rescue and basic emergency medical care
- Carry out ambulance administrative roles
- Transport 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 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 registered with the Health Professions Council of Zambia, this bulletin provides an outline of the core curriculum and minimum standards for registrants who have completed the Certificate in Emergency Medical Care seeking full registration as Emergency Medical Technicians in Zambia.

2.0 EXIT EXAMINATIONS AND AWARD OF THE CERTIFICATE OF EMERGENCY MEDICAL CARE 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 Certificate in Emergency Medical Care is also designated as a pre-service qualification for Emergency Medical Technicians. Accordingly, a holder of this qualification will be required take and pass the HPCZ licensing examination to qualify for registration with the Council as an Emergency Medical Technician.

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 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 "Core Competencies Reference Manual for Emergency Medical Technicians 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 examinations.

The HPCZ Licensure Examination assesses a health 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 Licensure Examination includes, but is not limited to, theoretical and clinical examinations which complement each and the other components as prescribed in the curriculum for which this programme was approved. No component is a stand-alone in the assessment of readiness for health 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) and a simulated patient test.

The five main **subject areas** (assessed under all three learning domains) for Emergency Medical Technician (EMT) in Zambia are:

- 1. Patient assessment
- 2. Pre-hospital Trauma care
- 3. Medical Emergencies
- 4. Paediatric Emergencies
- 5. Emergency Obstetric Care

Other subject areas prescribed by the curriculum such Public Health and health systems management will only be assessed as cognitive domain in the theory paper. The overall expected outcomes of the EMT 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.

4.0 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 health practitioners to be compassionate and empathetic in caring for patients and to be trustworthy and truthful in all their professional dealings. Health 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 are largely in six competencies:

OVERALL COMPTENCES

Medical & Rescue knowledge

- Basic and clinical sciences in the management of patients appropriate to their level of care.
- Ability to safely retrieve patients from light motor vehicle accidents and work with other emergency specialists at an incident.
- Initial scene management and Triage at a Multiple Casualty Incident (MCI).

Patient care

- Obtain a thorough medical history
- Develop and carry out 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.
- Professional hand-over of the patient to the receiving team.

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 and other caregivers.
- Maintain personal continuing medical education and professional audit
- 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 transport 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

5.0 CORE COMPETENCIES: EMERGENCY MEDICAL TECHNICIAN

	COMPETENCY	COMPETENCY STATEMENT	SUBCOMPETENCIES
KNOWLEDGE	MEDICAL KNOWLEDGE	Graduates should demonstrate understanding about established and evolving biomedical, clinical sciences and application of this knowledge to patient care	 Explains the biomedical basis of disease Applies biomedical knowledge to clinical practice Demonstrates understanding of clinical practice in Emergency Medicine &Public Health.
	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	 Utilizes best practices from routine patient care audits Applies recommendation of routine updates on patient care Utilizes information technology Works well with other professionals
SKILLS	INTERPERSONAL & COMMUNICATION SKILLS	Graduates must demonstrate interpersonal and communication skills that result in effective information exchange & teaming with patients, families & professional associates	 Demonstrates ability in creating a therapeutic relationship with patients Demonstrates listening skills in a patient encounter Demonstrates ability in educating patients and family Demonstrates skills in communicating patient related findings to colleagues
	PATIENT CARE	Graduates must be able to provide patient care that is compassionate, appropriate and effective for the treatment	 Demonstrates caring & respectful behaviours Conducts effective consultation(medical history) Develops & carries out patient management plans

		of health problems & the promotion of health	 Performs routine physical examinations Performs appropriate medical procedures Refers complicated cases to next level of care
ATTITUDES	PROFESSIONALISM SYSTEMS-BASED PRACTICE	Graduates must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, & sensitivity to a diverse patient population 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	 Demonstrates ethically sound practice Practices informed decision making Respects patients privacy in handling matters Practices confidentiality with patient information Demonstrates adherence to code of practice Demonstrates sensitivity to diverse patient groups Demonstrates knowledge of the interaction of their practice with other members of the multidisciplinary team Practices cost-effective care Demonstrates knowledge of management principles in health care management

6.0 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%

7.0 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)	Conduct a relevant history taking in all specific subject areas
	Conduct relevant Physical Examination in all specific subject areas
	Drug administration (dose, form and route)
	Perform bed side procedures (Vitals, IM Injection, RBS etc.)
	Conduct Cardiopulmonary resuscitation (CPR) and defibrillation in all ages
	Conduct Support ventilation (Ambu bag)
	Insertion of NPA, OPA and LMA
	Intra-osseous cannulation (> age 8)
	Intravenous cannulation (> age 8)
	Perform suction of the airway
	Patient packaging for transport
	Scene management and triage
Emergency Medicine	Perform Nebulization and other O2 delivery techniques
	Intravenous fluid administration
	Interpret basic 3-lead ECG rhythms
	Perform Heimlich manoeuvre (abdominal thrust)
Emergency Paediatrics	Perform Nebulization and other O2 delivery techniques
	Administration of IV/IO fluids under senior direction only under 8 years
	Use of the Incubator for neonatal transfers
	Perform ILS Paediatric choking protocol

Obstetrics & Newborn care	Perform NVD
	Perform APGAR score
	Neonatal resuscitation
	Deliver the placenta and assess its completeness
	External uterine massage and administration of Oxytocin
	Manage post-partum haemorrhage according to ILS protocol
Тиомина	Application of Conviced college for systication
Trauma	Application of Cervical collar for extrication
	Apply jaw-thrust to open the airway
	Spinal immobilization
	Perform Bandaging and fracture splinting
	Conduct wound cleaning & dressing
	Femoral traction splinting
	Performs Needle thoracostomy
	Apply burns dressings
	Extrication using a spine board or KED techniques
Public health	
t done noutin	Indentify, plan and implement health promotion activities
	Conduct community diagnosis

8.0 REFERENCES (TEXT BOOKS)

	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.
Biomedical basis of disease	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.
	Joseph J Mistovich, Pre-hospital Emergency Care , 10 th edition (2014), : Pearson
	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). Kumar and Clark's Clinical Medicine, 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) Essential Obstetrics and Gynaecology 4th edition. Edinburgh: Churchill Livingstone
Paediatrics and Child Health	Marcdante K, et al. (2011) Nelson Essentials of Paediatrics 6th ed. Philadelphia: Saunders Elsevier.
	Goldbloom R.B. (1992) Paediatric Clinical Skills, London: Churchill Livingstone

Public health	McKenzie J, Pinger R. (2011) <i>Introduction to Community Health</i> 7th ed. Burkington, 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) Guidelines for good practice in the Healthcare profession – Maintaining Patient Confidentiality. HPCZ Lusaka
	HPCZ (2016) Guidelines for good practice in the Healthcare profession – Generation and management of patient records. HPCZ Lusaka
	HPCZ (2014) Professional code of ethics and discipline: Fitness to Practice. HPCZ Lusaka
	HPCZ (2016) Patients rights and responsibilities. HPCZ Bulletin, Lusaka
	Banda S.B. Healthcare Ethics and Professionalism Course. https://virtualsityacademy.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.

REFERENCES (TEXT BOOKS)	
1. MEDICAL KNOWLEDGE	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.
	Baliga RR (2004) <i>250 Cases in Clinical Medicine</i> 3rd ed. London: Elsevier Saunders. Collier J, Longmore M, Scally P (2003) <i>Oxford Handbook of Clinical Specialties</i> 6th ed. Oxford: Oxford Press.
	Bennett PN, Brown MJ, Sharma P (2012) <i>Clinical Pharmacology</i> 11th Ed. London: Churchill Livingstone
	Epstein O, Perkin GD, Cookson J, Bono P (2003) <i>Clinical Examination</i> 3rd ed. London: Hamblen D, Simpson H (2007) <i>Adams's Outline of Fractures</i> 12th ed. London: Churchill Livingstone Elsevier.
	Mosby Ministry of Health (2013) <i>Antiretroviral Therapy: Reference Manual for Health Workers in Zambia.</i> Lusaka: Government Printers.
	Symonds EM, Symonds IM (2013) <i>Essential Obstetrics and Gynaecology.</i> 5th ed. Edinburgh: Churchill Livingstone.
	Monga A, Dobbs S (2006) <i>Gynaecology by Ten Teachers</i> 18th Edition. London: Hodder Arnold
	Hanretty KP (2010) <i>Obstetrics Illustrated</i> 7th ed. London: Churchill Livingstone. Behrman RE, Kliegman RM, Jenson HB (2013) <i>Nelson's Textbook of Pediatrics</i> 18th ed. Philadelphia: Sanders Publishers.

2. PATIENT CARE	Edwards C, Munro JF, Broucher I (2010) <i>Davidson's Principles and Practice of Medicine</i>
	21st Ed. Edinburgh: Churchill Livingstone.
	Epstein O, Perkin GD, Cookson J, Bono P (2003) <i>Clinical Examination</i> 3rd ed. London:
	Rains H, Richie D (2003) Bailey, Hamilton, Bailey & Love's Short Practice of Surgery 26th
	ed. London: H. K. Lewis.
	Hamblen D, Simpson H (2007) <i>Adams's Outline of Fractures</i> 12th ed. London: Churchill
	Livingstone Elsevier.
	Mosby Ministry of Health (2013) Antiretroviral Therapy: Reference Manual for Health
	Workers in Zambia. Lusaka: Government Printers.
	Symonds EM, Symonds IM (2013) <i>Essential Obstetrics and Gynaecology</i> . 5th ed.
	Edinburgh: Churchill Livingstone.
	Hanretty KP (2010) <i>Obstetrics Illustrated</i> 7th ed. London: Churchill Livingstone.
	Behrman RE, Kliegman RM, Jenson HB (2013) Nelson's Textbook of Pediatrics 18th ed.
	Philadelphia: Sanders Publishers.
	Marcdante K, et al. (2011) Nelson Essentials of Pediatrics 6th ed. Philadelphia: Saunders
	Elsevier.
	Gelder M, Mayou R, Harrison P, Cowen P (2005). Oxford Textbook of Psychiatry . Oxford:
	Oxford University
3. PRACTICE-BASED LEARNING &	Naidoo J (2010) <i>Developing Public Health and Health Promotion</i> . London: Elsevier.
IMPROVEMENT	Cowley S (2008). <i>Community Public Health in Policy and Practice</i> 2nd ed. London:
	Elsevier Ltd.
	McKenzie J, Pinger R. (2011) <i>Introduction to Community Health</i> 7th ed. Burkington, MA:
	Jones
	& Barlett Learning.
	Kothari CR (2004) Research Methodology Methods and Techniques. New Delhi: New
	Age
	International (P) Limited Publishers.
4 INTERPERSONAL &	Guffey ME (2007) Essentials of Business Communication 7th ed. Australia: South-Westers
4. INTERPERSONAL & COMMUNICATION SKILLS	Guffey ME (2007) <i>Essentials of Business Communication</i> 7th ed. Australia: South-Western College Publishing.

5. PROFESSIONALISM	Health Professions Council of Zambia, <i>Act of 2009 No. 24 of the Laws of Zambia</i> Banda SS (1999) <i>Medical Ethics for Medical and Health Professions</i> . London: Oxford Press.
6. 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.