



GOVERNMENT OF MALAWI

NATIONAL HEALTHCARE WASTE MANAGEMENT POLICY

**Ministry of Health
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MAY, 2024

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FOREWORD

Government has developed the Healthcare Waste Management (HCWM) Policy to provide direction and guidance in the implementation of health care waste management at all levels. The Policy is aimed at preventing the transmission of diseases and occurrence of injuries among healthcare workers, patients and clients, environment and communities especially children and scavengers that invade uncontrolled healthcare waste dumps.

The Policy is aligned to the national development blueprint, Malawi 2063 First 10 Year Implementation Plan (MIP 1) as it recognises that health of the population plays a pivotal role in the transformation of the economy, and that the country must build capacity in the prevention, early detection of and effective response to global health threats posed by infectious diseases. Further, the Policy is linked to a number of national instruments on health, sanitation, hygiene and environment. The Policy is also aligned to Sustainable Development Goals (SDGs) numbers 3 and 6.2 which advocate for Universal Health Coverage (UHC) and universal access to sanitation and hygiene respectively.

Government recognises that safe and sustainable management of healthcare waste is critical and a responsibility for all. In this respect, the successful implementation of this Policy requires support, commitment, and concerted efforts of all stakeholders that include Development Partners, Private Sector, the Civil Society, Faith Based Organisations and citizens of the country. Government is committed to the effective implementation of the Policy by ensuring establishment and maintenance of valuable healthcare waste management systems at all levels.



Hon. Khumbize-Kandodo Chiponda, MP

Minister of Health

PREFACE

Health care services inevitably generate wastes that may be hazardous to health or harmful to the environment. Wastes, such as sharps or infected blood carry a higher potential for infection and injury than others. Their improper management can cause direct health impacts on the personnel working in the health care facilities, users of the services, non-health care establishments and the surrounding communities.

The Government of Malawi is party to international protocols some of which include; the United Nations Framework on Climate Change (1994) which promotes sustainable development by limiting the emission of greenhouse gases, the Basel Convention on the Trans-Boundary Movements of Hazardous Wastes and their Disposal (1992) and the Stockholm Convention on Persistent Organic Pollutants (POPs) which aim at protecting human health and the environment.

The Policy contributes to the goal of the national health Policy that aims at improving the health status of all people of Malawi and is also in line with the Health Sector Strategic Plan (HSSP III) objective number 2 strategy number 2.3 of improving the overall health through addressing social determinant of health and burden of disease. The policy has been developed through a comprehensive consultative process that involved a wide range of stakeholders ranging from government Ministries, Departments and Agencies (MDAs), academia, international organizations, private sector, civil society organizations, and local councils among others. Government is also grateful for the financial support by the World Bank GAVI and ECSA Health Community.

I wish to call upon all stakeholders to effectively coordinate and collaborate in the implementation of the Policy in order to achieve the goal and objectives of healthcare waste management in Malawi



Dr. Samson Mndolo

Secretary for Health

LIST OF ACRONYMS AND ABBREVIATIONS

AD	Auto-Disable (type of syringe)
AIDS	Acquired Immuno Deficiency Syndrome
BCG	Bacilli Chalmette Guerin
BCI	Behaviour Change Intervention
CBO	Community Based Organization
CHAM	Christian Health Association of Malawi
EAD	Environmental Affairs Department
ECSA	East, Central and Southern African
DEHO	District Environmental Health Officer
DFID	Department for International Development
DHMT	District Health Management Team
DHIS 2	Demographic Health Information System 2
EHP	Essential Health Package
EPI	Expanded Programme on Immunisation
GAVI	Global Alliance for Vaccines and Immunisation
HBV	Hepatitis B Virus
HCF	Healthcare Facility
HCV	Hepatitis C Virus
HCWM	Health Care Waste Management
HCWMU	Health Care Waste Management Unit
HiB	Haemophilus Influenza type B
HIV	Human Immunodeficiency Virus
HSSP III	Health Sector Strategic Plan III
IEC	Information Education and Communication

ICC	Inter-agency Coordinating Committee
IMCI	Integrated Management of Childhood Illness
IPC	Infection Prevention and Control
IS	Injection Safety
KUHeS	Kamuzu University of Health Sciences
MBS	Malawi Bureau of Standards
MCH	Maternal and Child Health
MCHS	Malawi College of Health Sciences
MCM	Medical Council of Malawi
MDA	Ministries, Departments and Agencies
MEPA	Malawi Environmental Protection Authority
MoF	Ministry of Finance
MOFNR	Ministry of Forestry and Natural Resources
MOH	Ministry of Health
MoJ	Ministry of Justice
MoLG	Ministry of Local Government
MOU	Memorandum of Understanding
NEHP	National Environmental Health Plan
NGO	Non-Governmental Organization
NMCM	Nurses and Midwives Council of Malawi
PMRA	Pharmacies and Medicines Regulatory Authority
POP	Persistent Organic Pollutants
PPDA	Public Procurement and Disposal of Assets
RHU	Reproductive Health Unit
SBCC	Social and Behaviour Change Communication
STD	Sexually Transmitted Diseases

STI	Sexually Transmitted Infections
UHC	Universal Health Coverage
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

DEFINITIONS IN HEALTH CARE WASTE MANAGEMENT

- **Biomedical waste** or **hospital waste** is any kind of waste containing infectious (or potentially infectious) materials
- **Chemical waste:** Is any solid, liquid or gaseous waste material that, if improperly managed or disposed of, may pose substantial hazard to human health and the environment. For example, solvents and reagents used for laboratory preparations, disinfectants, sterilants and heavy metals contained in medical devices (e.g. mercury in broken thermometers) and batteries
- **Cytotoxic waste:** waste containing substances with genotoxic properties (i.e. highly hazardous substances that are, mutagenic, teratogenic or carcinogenic), such as cytotoxic drugs used in cancer treatment and their metabolites
- **Genotoxic waste** containing substances with genotoxic properties e.g. waste containing cytostatic drugs (often used in cancer therapy); genotoxic chemicals
- **Health care waste:** Health-care waste includes all the waste generated by health-care establishments, research facilities, and laboratories. In addition, it includes the waste originating from “minor” or “scattered” sources—such as that produced in the course of health care undertaken in the home (dialysis, insulin injections, etc.).
- **Infectious waste:** waste contaminated with blood and other bodily fluids (e.g. from discarded diagnostic samples), cultures and stocks of infectious agents from laboratory work (e.g. waste from autopsies and infected animals from laboratories), or waste from patients with infections (e.g. swabs, bandages and disposable medical devices);
- **Non-hazardous or general waste:** waste that does not pose any particular biological, chemical, radioactive or physical hazard
- **Pharmaceutical waste:** expired, unused and contaminated drugs and vaccines;
- **Pathological waste:** human tissues, organs or fluids, body parts and contaminated animal carcasses;
- **Radioactive waste:** Is a type of hazardous waste that contains radioactive material such as products contaminated by radionuclides including radioactive diagnostic material or radio therapeutic materials

- **Sharps waste:** Is a form of biomedical waste composed of used sharps which includes any device or object used to puncture or lacerate the skin. For example, syringes, needles, disposable scalpels and blades, etc.
- **Waste management:** the processes and actions required to manage waste from the point of generation to its final safe disposal.

1 CHAPTER 1: INTRODUCTION

The National Healthcare Waste Management (HCWM) Policy provides guidance and direction in the implementation of HCWM in Malawi in order to prevent the transmission of diseases and occurrence of injuries in health care settings and surrounding communities. According to World Health Organisation (WHO) Healthcare Waste include all the waste generated within health-care facilities, health research centres, and laboratories related to medical procedures. In addition, it includes similar types of waste from minor and scattered sources such as waste produced in the course of healthcare undertaken in the home for instance self-administration of insulin and recuperative care.

The Policy is designed as a guide in addressing key challenges being faced by the health sector in the management of health care waste. Current challenges include; weak legal and administrative frameworks; inadequate standardization of healthcare waste management practices; weak institutional capacities for HCWM; inadequate Social and Behaviour Change Communication (SBCC) interventions, and weak coordination and collaboration among stakeholders as well as inadequate evidence based information regarding healthcare waste management

In order to address these key challenges and achieve its goal and objectives, the Policy has identified seven key priority areas namely: Governance and Regulation of HCWM; HCWM Practices; Infrastructure and Equipment; SBCC; Human Capacity Development; Research, Monitoring and Evaluation; and Collaboration, Partnership and Coordination.

1.1 Health System Profile of Malawi

Malawi's health system is organized at four levels namely: community, primary, secondary and tertiary. These different levels are linked to each other through an established referral system. The services are provided by public, private for profit (PFP) and private not for profit (PNFP) sectors. The public sector includes all health facilities under the Ministry of Health (MOH), district, town and city councils, Ministries responsible for Defence, Homeland Security (Police and Prisons), Energy and Mining.

1.2 Background

Provision of healthcare services produces large amounts of diverse healthcare wastes, both medical and non-medical. WHO 2018 report estimates that 85% of healthcare waste is

nonhazardous and 15% is infectious though the estimates vary depending on low or high resource countries. Healthcare waste can cause serious harm if not managed properly and the WHO report estimates that injections with contaminated syringes caused 21 million hepatitis B virus (HBV) infections (32% of all new infections), two million hepatitis C virus (HCV) infections (40% of all new infections) and 260,000 HIV infections (5% of all new infections).

Over the past years, management of healthcare waste in Malawi has been guided by fragmented pieces of guidelines leading to uncoordinated efforts by various players. In addition, much emphasis has been placed on municipal waste management and not necessarily healthcare waste management. Acknowledging the fact that improper management of healthcare wastes poses direct health risk to health personnel in health facilities and communities, the MoH has tirelessly been making concerted efforts to ensure sound management of healthcare wastes.

In 2002, MoH with support from its partners embarked on an assessment of healthcare waste management in 29 health facilities (Public, CHAM and Private) where a number of challenges were identified. These challenges included: inadequate health care waste management institutional and legal framework; poor healthcare waste management practices among health care workers and waste handlers; inadequate equipment and infrastructure; limited financial resource allocation to health care waste management; lack of Policy on management of healthcare waste; and poor private sector involvement in healthcare waste management.

This assessment coincided with a change in injection safety policy to the recommended single use of syringe and needle with all injectable vaccines. Ministry of Health introduced the auto destruct syringes for immunization program in the country and this significantly contributed to an increase in health care waste from disposable syringes. In 2007, a follow up assessment was conducted in 115 institutions and the findings were similar to those of the 2002 assessment.

In 2008, a rapid assessment of healthcare waste management practices was conducted and revealed a number of gaps that were putting health workers and the public surrounding the health facilities at high risk of suffering from hazards related to poor healthcare waste management. The assessment found that only 30% of health facilities had their staff adequately aware of risks of poor healthcare waste management. About 80% of health facilities were not segregating radioactive waste from general waste. Despite having some

(33%) health facilities reporting needle stick injuries, almost half of the affected personnel indicated that they did not receive any first aid care, an indication of poor emergency services. The majority (84%) of the health facilities had no specific colour coding system of waste receptacles and more than half (67%) of the facilities do not have restrictions to the storage sites for healthcare wastes.

1.3 Current Status of Healthcare Waste Management in Malawi

Healthcare institutions in the country continue to produce high amounts of both medical and non-medical wastes as result of increasing demand for healthcare services from the growing population. Significant amounts of the produced healthcare waste constitute infectious wastes that require safe disposal; however, the current HCWM practices and disposal system do not comply with safe waste disposal practices. Emerging infectious diseases such COVID-19 has substantially increased the generation of waste even at non-health care institutions and community level through increased use of disposable gloves, face masks, aprons and the introduction of testing services for Covid 19, vaccination services as well as introduction of isolations units. Consequently, straining the limited healthcare waste management resources. These hazardous wastes are posing as a serious public health challenge as they have high potential of causing infections and injuries to patients, guardians, healthcare workers, persons handling them, the general public as well as being a hazard to the environment. As such, healthcare waste management remains one of the major problems in the delivery of healthcare services in both public and private sectors.

The Malawi Environmental Health report of June 2021 indicate that at least 80% of health care facilities either have incinerators that do not meet the minimum recommended international standards (ISO 14001) or literally do not have one. This has led to disposal of various healthcare waste, including destruction of expired drugs and related supplies, not being done to the required standard that would ensure prevention of potential infections and injuries to humans.

Although the country is experiencing increased production of infectious healthcare waste due to increasing demand for healthcare services, there are no corresponding up to date health care waste management guiding instruments such as legislations, policies and guidelines. As such, healthcare institutions lack proper direction on clear standards and procedures to follow in the management of health care waste. This situation has contributed to increasing poor healthcare waste management practices.

There is significant evidence of limited awareness on good healthcare waste management practices among healthcare workers and the public at large. Furthermore, reporting on implementation progress for healthcare waste management activities is not being adequately done by most health facilities.

In 2019 MoH conducted an assessment on healthcare waste management which revealed that the majority of health care institutions in the country do not practice safe waste handling, storage and disposal methods. The report indicated that 37.5% of the respondents showed that wastes are indiscriminately burned in open pits, 42.3% indicated no system is available for waste treatment whereas only 4% of the facilities indicated to use incinerators to burn the waste though not to the optimum temperatures. The burning of health care wastes in open spaces due to absence of properly function incinerators thereby posing serious threats to communities and the environment. In some health facilities, incinerators have been constructed at wrong locations with respect to other service delivery sections of the facilities. This compromises the quality of health care service due to the potential risk of infections arising from incinerators where poor healthcare waste management is practiced. In some urban areas the problem has been attributed to land scape challenges and inadequate land availability within the premises of the health facilities.

Despite recent evidence indicating an increasing trend in the production of healthcare waste by health facilities, health care waste management has not been given adequate corresponding attention required to mitigate the health and environmental threats posed by poor healthcare waste management.

1.4 Problem Statement

Healthcare waste management services have been delivered without proper frameworks and instruments such as pieces of legislations, policies, guidelines, standards and operating procedures to guide proper management of healthcare waste in the country. As a result, there is no proper monitoring system to check and guide on how the country is managing its healthcare waste across all levels of the healthcare system. There are uncoordinated efforts from various players, a situation that has been worsened by weak stakeholder collaboration and coordination. Further, there is inadequate healthcare waste treatment equipment and facilities, and limited awareness of proper healthcare waste management which negatively affect adherence to recommended healthcare waste management standards.

Government through the Ministry of Health has made some progress toward addressing the problem of HCWM including procurement of incinerators, development of IPC/HCWM plans, supporting supervision to waste handling sites. In spite of all these efforts there is still need for capacity building, development of M&E tools, procurement of waste treatment equipment, development standard operating procedures (SOPs) at all levels in health care service provision.

1.5 Purpose of the Policy

Healthcare waste management is critical in ensuring a safe environment for health workers, clients and the community at large. In a coordinated and collaborative manner, the Policy guides on addressing health risks associated with poor health care waste management.

1.6 Linkages with other relevant policies and legislation

The Policy is aligned to key national and international instruments and protocols as detailed below:

1.6.1 Legislations

1.6.1.1 The Constitution of Malawi

The Policy is aligned with the Constitution of Malawi under Chapters III and IV. In section 13, the Constitution provides that: The State shall actively promote the welfare and development of the people of Malawi by progressively adopting and implementing policies and legislation aimed at achieving the goal of the Policy; to provide adequate healthcare, commensurate with the health needs of Malawian society and international standards of health care. The management of healthcare wastes services advance in the HCWM Policy are part of health services provided for in the Constitution.

1.6.1.2 Public Health Act 1948

The Public Health Act CAP 34:01 consolidates the law regarding the preservation of public health in Malawi. It addresses issues regarding infectious diseases and creates institutions for responding to emerging public health challenges. The HCWM Policy will contribute towards improved infection preventions effort in health care institutions.

1.6.1.3 Environmental Management Act 2017

This Act CAP 60:02 concerns the conservation and management of the environment in Malawi and prescribes environmental standards. The Environmental Management Act establishes a legal framework for waste management and environmental protection.

1.6.1.4 Occupational Safety, Health and Welfare Act 1997

The Act CAP 55:07 provides for the regulations of conditions of employment with regard to safety, health and welfare of employees. It contains provisions regulating the control, use, handling and processing of chemicals in the workplace. As such, the Act places a duty on every employer to ensure the safety, health and welfare of all its employees.

1.6.1.5 Water Works Act of 1995

The Act CAP 72:01 stipulates the provision of safe water in the facilities and facilitates proper sanitation and hygiene including healthcare waste management.

1.6.1.6 Local Government Act 1998

The act CAP 22:01 provides for health service delivery to be decentralized to district and city councils and empowers communities to be responsible for their own health and healthcare services. It also mandates the Ministry of Health facilitate development and implementation of relevant policies to preserve and promote human health.

1.6.1.7 Biosafety Act 2007

The Act CAP 60:03 calls for management and disposing of the waste in such a manner that the waste shall not negatively impact on the environment and human health.

1.6.2 National Policies

1.6.2.1 Malawi 2063 (MW 2063)

In envisioning a healthy population of Malawians, provision of clean water, sanitation and hygienic services will be critical at both institutional and household and community levels. The Policy will contribute this agenda through promotion of health care waste management in all health facilities both public and private.

1.6.2.2 The Malawi 2063 First Ten Year Implementation Plan (MIP 1)

The Ten Year Implementation plan 1 aims at promoting sustainable development with clean, secure environment through adequate waste disposal, treatment and recycling to avoid

pollution and contamination. The Policy therefore contributes to this by ensure proper management of wastes generated in all health care facilities in the country.

1.6.2.3 Health Sector Strategic Plan III

The Health Sector Strategic Plan III (HSSP III) is the health sector's medium-term strategic plan. It outlines objectives, strategies and activities of the health sector. Outcome number three aims at reducing environmental health risks that pose serious threats to all people in Malawi. The HCWM contribute to this outcome since in envisions health care institutions and communities free from environmental risks and dangers arising from poor healthcare waste management.

1.6.2.4 National Health Policy

The HCWM policy is in line with the goal of the National Health Policy that aims at improving the health status of all people of Malawi by among other things reducing environmental health risks. The HCWM Policy will contribute to the NHP outcome of reduced number of deaths and illness from hazardous chemicals and air, water and soil pollution and contamination.

1.6.2.5 National Environmental Health Policy

The Policy aims to achieve the highest possible level of health and well-being for every Malawian by reducing morbidity and mortality resulting from environmental health risks. The goal of the HCWM Policy of improving the management of health care wastes in health care institutions will also contribute to the overall goal of the National Environmental Health Policy.

1.6.2.6 National Sanitation Policy

The overall policy goal is to promote improved sanitation and safe hygiene practices for improved health and socio-economic development for the people of Malawi.

1.6.3 International Instruments

1.6.3.1 Sustainable Development Goals (SDGs)

The SDG Goals number 3 and 6 aim at achieving universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all and universal access to sanitation and hygiene respectively. Further relevant goals are Goal 7 on climate change,

Goal 8 on decent work and economic growth (Need to recognise waste handlers as essential workers and improve their status) and Goal 12 on sustainable consumption and production. The implementation of the HCWM Policy will contribute to the SDGs through achievement of its expected outcomes, which are closely linked to the expected outcomes of the SDGs.

1.6.3.2 International Health Regulations (IHR) 2005

The International Health Regulations (IHR) provide an overarching legal framework that defines countries rights and obligations in handling public health events and emergencies that have the potential to cross borders including the requirement to report public health events. It guides individual countries on key actions needed to efficiently and effectively respond to public health events of national and international concern and assure adherence to international regulations. This HCWM Policy will be implemented in accordance with the IHR regulations in ensuring that events arising from wastes are reported and managed according to the IHR requirements.

1.6.3.3 International HCWM related Protocols

Malawi is party to international agreements and declarations that aim at addressing issues of climate change and the environment:

- i. United Nations Framework Convention on Climate Change (1994) (Kyoto Protocol). The parties in the convention agreed that countries should limit or reduce the emission of greenhouse gases in order to promote sustainable development.
- ii. Basel Convention: on the 'Control of Trans-Boundary Movements of Hazardous Wastes and their Disposal' (UNDP 1992). The convention agrees on the control of transboundary movement of hazardous wastes and their disposal.
- iii. The second Abuja Declaration signed April 2021, committed African Heads of State to allocate 15 percent of their national budgets to health as well as mobilise resources for improved access to HIV medication, vaccine research, and prevention programs. In line with the declaration the Ministry can lobby resources from this allocation towards funding HCWM activities.
- iv. Stockholm Convention on Persistent Organic Pollutants (POPs) (UNEP 2004). The Convention aims at protecting human health and the environment from persistent organic pollutants.
- v. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (UNEP 2004). The Convention is aimed

at promoting shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm.

- vi. Minamata Convention on Mercury (UNEP 2013). Aimed at protecting human health and environment from anthropogenic emissions and releases of mercury compounds.

2 CHAPTER 2: BROAD POLICY DIRECTIONS

2.1 Policy Goal

The goal of the Policy is to improve healthcare waste management in order to create and ensure a safe environment for health workers, clients and the surrounding community.

2.2 Policy Objectives

2.2.1 The objectives of the Policy are to:

- i. Strengthen the institutional, legal and regulatory frameworks for healthcare waste management.
- ii. Enhance adherence to standards for healthcare waste management practices.
- iii. Improve availability of adequate infrastructure and equipment for HCWM.
- iv. Raise awareness on healthcare waste management at all levels.
- v. Strengthen capabilities of stakeholders in healthcare waste management.
- vi. Strengthen research, monitoring and evaluation system at all levels.
- vii. Improve collaboration, coordination and partnership in the implementation of health care waste management programs.

2.3 Policy Outcomes

The policy is envisaged to achieve the following outcomes:

- i. Effective leadership and governance structures for HCWM at all levels.
- ii. Enhanced delivery of Quality HCWM services at all levels.
- iii. Improved infrastructure and equipment for healthcare waste management in all health care institutions.
- iv. Increased utilization of evidence based information in decision making.
- v. Increased capacity and awareness on HCWM practices by health care workers and the public.
- vi. Increased involvement and collaboration of HCWM stakeholders in the implementation of healthcare waste management programs.

2.4 Guiding Principles

The following are the principles or core values that guide the implementation process of the Policy: inter-sectoral and intra-ministerial collaboration, human rights based approach, gender mainstreaming, efficiency and effectiveness, community engagement, decentralisation and equity.

- i. **Inter-sectoral and Intra-Ministerial Collaboration:** Collaboration shall be strengthened between Ministries, Departments and Agencies (MDAs), the private sector and Civil Society Organizations in the development and implementation of HCWM services.
- ii. **Human Rights-Based Approach:** All the people in Malawi from all races, religion and those with disability shall be protected from risks and injuries arising from improper waste management.
- iii. **Gender mainstreaming:** Gender mainstreaming shall be central in the implementation of this Policy.
- iv. **Efficiency and Effectiveness:** All stakeholders shall be expected to maximally use the available resources to achieve the desired healthcare waste management standards.
- v. **Community engagement:** Community shall be central in implementation of health care waste management activities.
- vi. **Decentralization:** Health service provision and management shall be in line with the National Decentralisation Policy which promotes bottom up approach and use of local governance structures in promoting development agenda.
- vii. **Equity:** Ensures equitable distribution of resources in the management of HCW.

3 CHAPTER 3: POLICY PRIORITY AREAS

In order to achieve its goal and objectives, the Policy focuses on seven priority areas namely: Governance and Regulation of Health Care Waste Management; Health Care Waste Management Practices; Infrastructure and Equipment; Social and Behavior Change Communication; Human Capacity Development; Research, Monitoring and Evaluation of Health Care Waste Management systems; and Collaboration, Partnership and Coordination.

3.1 Policy Priority Area 1: Governance and Regulation of Health Care Waste Management

WHO understands Governance as the processes of interaction be it through the laws, norms, power or language of society over a system. Governance encompasses the system by which an organization is controlled or operates and the mechanism on which it and its people are held to account. It involves the processes for decision making, accountability, control and behavior at all levels. Laws and regulations are the back bone for regulating and enforcing proper healthcare management. The national laws, policies and the guidelines should be harmonized and be practical as well as directly applicable and include minimum obligatory procedures for proper healthcare waste management. The legal and regulatory framework on HCWM should specify all the steps in waste management from planning to disposal. This shall among other things include licensing healthcare waste management equipment, waste transportation vehicles and other related equipment.

The management of healthcare waste has been going on without adequate policy and legal frameworks to guide its implementation. As a result, the health sector has been facing various challenges in the management of HCWs, which includes inadequate administrative and institutional arrangements, poor oversight and limited regulation of the practice. There are insufficient and ineffective structures on the ground to effectively support provision of quality healthcare waste management at all levels. To provide proper leadership and regulation of HCW management, there is need to put in place adequate policy and legal frameworks to properly direct implementation of healthcare waste management activities by

all stakeholders.

3.1.1 Policy statement

The policy will ensure that appropriate policy, legal and regulatory frameworks are in place to support implementation of health care waste management at all levels. The following are list of the strategies to be implemented to address the problems

3.1.2 Strategies:

- i. Developing and updating relevant legislation for HCWM Public Health Act, Local Government Act and Environmental Management Act
- ii. Supporting effective implementation of regulations on healthcare waste management services;
- iii. Strengthening healthcare waste management structures at all levels of healthcare delivery system;
- iv. Strengthening resource mobilization for HCWM programs
- v. Developing healthcare waste management guidelines, protocols and standard operating procedures at all levels;
- vi. Enforcing healthcare waste management guidelines, standard operating procedures and protocols

3.2 Policy Priority Area 2: Health Care Waste Management Practices

Healthcare Waste Management Practices involves a system that involves safe handling and disposal of the Health Care Waste. It includes all the steps necessary for waste management namely, planning; minimization/generation; segregation; collection; storage; transport, treatment and disposal.

It is noted that in the country, the procedures and protocols for managing health care wastes are fragmented and some of them are outdated, as a result most healthcare institutions are not adequately guided on how to manage healthcare waste to the recommended standards. The collection and disposal methods for health care waste causes an extraordinary mixing of healthcare waste with other solid hazardous, less- hazardous and non-hazardous wastes which requires proper handling throughout the process. Treatment and disposal of Health Care Waste are conducted in an unsafe manner and are causing environmental pollution. Comprehensive and updated standards, procedures and protocols on HCWM are required to

ensure that clear guidance is adequately provided to health care institutions on management of healthcare waste.

3.2.1 Policy statement:

The Policy will ensure that all healthcare institutions adhere to healthcare waste management standards and safety requirements. The following are list of the strategies to be implemented to address the problems.

3.2.2 Strategies:

- i. Building capacity of the waste handlers in the health care institutions
- ii. Strengthening institutionalized HCWM plans for each healthcare setting.
- iii. Ensuring segregation, collection, storage, transportation, treatment and safe disposal of health care waste including damaged or obsolete medical equipment
- iv. Promoting best practices and new technologies in service provision on healthcare waste management.

3.3 Policy Priority Area 3: Infrastructure and Equipment

Infrastructure and Equipment refers to physical structures and equipment needed for HCWM, such as sterilizing units, waste containers or receptacles, sewage systems, ash pit, incinerators, landfills and proper road networks. HCWM infrastructure and equipment in most facilities are dilapidated and not functioning to the required standard. This is posing a big health concern as most healthcare waste are not being fully treated to ensure prevention of infections and occupational injuries to health care workers and the general public.

There are inadequacies and variations in terms of the designs, siting and construction of HCWM infrastructure in most health facilities in respect to the HCWM Standards. Furthermore, most health facilities do not have appropriate and adequate equipment to aid in the management of healthcare wastes. These infrastructure and equipment challenges need to be fully addressed in order to improve the quality of HCWM services in Malawi

3.3.1 Policy Statement:

The Policy will ensure the availability of appropriate and adequate healthcare waste management infrastructure and equipment at all levels of health care delivery system. The following are list of the strategies to be implemented to address the problems

3.3.2 Strategies:

- i. Promoting adherence to environmentally friendly procurement standards for infrastructure and equipment.
- ii. Promoting availability of appropriate infrastructure and equipment in health care facilities.
- iii. Promoting regular preventive and operational maintenance of HCWM infrastructure and equipment.

3.4 Policy Priority Area 4: Social and Behavior Change Communication

Social and Behavior Change Communication (SBCC) is defined as an interactive process with communities to develop tailored messages and approaches using a variety of communication channels to develop positive behaviors; promote and sustain individual, community and societal behavior change. It uses communication to promote positive health outcomes based on proven theories and models of behavior change. Furthermore, SBCC aims at changing knowledge, attitudes and practices among various groups of people and frequently informs the public of the services that exist and relays a series of messages about HCWM.

Social and Behavior Change Communication creates an environment through which affected healthcare facilities, groups or communities can discuss, debate, organize and communicate their own perspectives on HCWM.

The 2019 report on healthcare waste management assessment in immunisation delivery points indicate that 96.6% demonstrated knowledge about health care waste management while 3.4% had no knowledge about healthcare waste management. 16.7% of the respondents also had no knowledge on waste segregation. However, despite more respondents (83.3%) having knowledge on waste segregation, 84.6% clearly indicate that they were not using colour coding of generated wastes. Despite high knowledge levels on HCWM, there are still some barriers, motivators, attitudes and practices, need to be addressed for the various target

groups to participate in the recommended behaviours.

3.4.1 Policy Statement

The Policy will ensure promotion of HCWM Social and Behaviour Change Communication and information management among all relevant stakeholders. The following are list of the strategies to be implemented to address the problems

3.4.2 Strategies

- i. Strengthening use of evidence in SBCC programing for HCWM.
- ii. Strengthening use of SBCC theories and models for SBCC interventions.
- iii. Supporting implementation of quality SBCC programing on HCWM.
- iv. Strengthening data management for SBCC in health care institutions at all levels of healthcare service delivery.

3.5 Policy Priority Area 5: Human Capacity Development

Human ccapacity development refers to promoting an environment that increases the potential of individuals, organizations and communities to receive and possess knowledge and skills as well as to become qualified in planning, developing, implementing and sustaining health related activities according to changing or emerging issues. The World Health Organization defines capacity development as the development of knowledge, skills, commitment, structures, systems, and leadership to enable effective health promotion. There is generally low capacity for the management of health care waste among frontline health workers charged with handling health care wastes in various health facilities. These limited health care wastes handling skills are negatively impacting on the quality of HCWM services at all levels of care. There is need to sufficiently build capacity of health personnel at all level in the proper management of health care wastes.

3.5.1 Policy Statement

The Policy will ensure that relevant skills, competencies and knowledge on HCWM are developed in health care workers. The following are list of the strategies to be implemented to address the problems.

3.5.2 Strategies

- i. Developing standard training packages on HCWM.
- ii. Promoting regular trainings of all healthcare workers at all levels of the health system in both public and private sector.
- iii. Supporting health training institutions and Universities to integrate standardized HCWM modules in relevant training programs.
- iv. Strengthen on job trainings for healthcare workers.

3.6 Policy Priority Area 6: Research, Monitoring and Evaluation

Research is an important aspect in an institution as it involves to the collecting and analyzing of data that is processed into information that establishes new knowledge beneficial to the researcher and the organization at large to increase our understanding of a topic or issue.

The World Bank defines monitoring and evaluation as the regular tracking of inputs, activities, outputs, outcomes and impacts of development activities at the project problem sector and national levels. It is a combination of data collection and analysis (monitoring) and assessing to what extent a program or intervention has or has not, met its objectives (evaluation). It is used to assess the performance of projects, institutions and programs set by government and international organizations. Its goal is to improve current and future management of outputs, outcomes and impacts. However; the challenge is inadequate monitoring and evaluation both in the public and private sectors regarding HCWM. Monitoring is insufficiently enforced and the available monitoring data are not used and repossessed. Further to that, the data collection tools on HCWM are not harmonized and the personnel that use the data have inadequate competence.

3.6.1 Policy Statement

The Policy will ensure that an adequate monitoring and evaluation system on HCWM is developed and enforced. The following are list of the strategies to be implemented to address the problems.

3.6.2 Strategies

- i. Strengthening monitoring and evaluation mechanisms on HCWM for public, private health care facilities and communities using Demographic Health Information System 2(DHIS2).

- ii. Supporting healthcare waste management research studies for evidence generation
- iii. Strengthening capacity on data analysis on healthcare waste management.
- iv. Strengthening monitoring, evaluation and reporting systems for HCWM.

3.7 Policy Priority Area 7: Collaboration, Partnership and Coordination

Collaboration, Partnership and Coordination is a driving force for effective implementation of HCWM interventions to achieve a common benefit. The priority area responds to Policy misalignment among different players in HCWM, weak or non-existing implementation structures, disjointed coordination platforms, weak partnerships and poor monitoring and evaluation of HCWM. The priority area focuses on structures that facilitate coordination in the provision of HCWM services at all levels of care.

Collaboration of stakeholders in the management of healthcare waste is weak at all levels of service delivery. Disjointed efforts by various stakeholders in managing healthcare wastes is undermining the gains that would have been achieved through collective efforts. To ensure improved management of health care wastes, it is imperative to address prevailing challenges relating networking and collaboration.

3.7.1 Policy Statement

The Policy will ensure that there is a conducive environment for promotion of collaboration, partnerships, and coordination among HCWM stakeholders. The following are list of the strategies to be implemented to address the problems.

3.7.2 Strategies

- i. Establishing and strengthening collaboration and coordination mechanisms on HCWM among stakeholders.
- ii. Strengthening stakeholders involvement in HCWM decision making processes at all levels.
- iii. Strengthen Public Private Partnership for effective involvement of private sector in HCWM interventions.
- iv. Strengthening systems for joint planning, implementation, monitoring and evaluation of healthcare waste management.

4 CHAPTER 4: IMPLEMENTATION ARRANGEMENT

This chapter highlight the implementation arrangements, the activities that will be implemented, the various institutions and their roles in the implementation of the strategies and the activities in the policy and how the policy will be monitored and evaluated.

4.1 Institutional Arrangements

The implementation of the Policy will engage a multisector approach that involves key stakeholders such as: Government Ministries, Departments and Agencies (MDAs), private sector organizations, development partners, civil society organizations, and non-governmental organizations. It is envisaged that each of the key stakeholders will play the following roles and responsibility in the implementation of the Policy.

Ministry Responsible for Health as a policy holder, the Ministry will take lead in the overall coordination and implementation of HCWM activities at all levels of health care service delivery. The Ministry will provide the required strategic leadership and ensure a conducive environment and collaborative efforts with stakeholders in the implementation of the policy.

Ministry responsible for Water and Sanitation will ensure consistent supply of portable water in the facilities to promote proper implementation of HCWM services.

Ministry Responsible for Local Government will provide Policy direction in the implementation of healthcare waste management in the local authorities.

Local Authorities will facilitate formulation of by-laws on healthcare waste management services, lead the collaboration, coordination within the districts with other players to ensure healthcare waste management standards are adhered to. Mobilize resources for health care waste management programs. The Ministry is responsible to provide safe sanitary landfills for non-hazardous waste from health facilities.

Ministry responsible for Justice will facilitate formulation and review of pieces of legislation on healthcare waste management.

Ministry responsible for Natural Resources and Climate Change will provide policy direction on the certification of the pieces of equipment on healthcare waste management.

Ministry responsible for Information will responsible for raising awareness of national issues in collaboration with Health Education Services.

The Media will be responsible for dissemination of information around healthcare waste management.

Malawi Environmental Protection Authority will play the following roles and responsibilities:

- i. Facilitate the Environmental Impact Assessment (EIA) process on health facility development projects.
- ii. Integrating healthcare waste management services in the environmental waste management regulations and guidelines.
- iii. Safeguarding the environment from pollution by healthcare waste.
- iv. Monitoring compliance/enforcement of environmental laws and regulations in health facilities.
- v. Promotion of good environmental practices and waste recycling and reuse.

Malawi Bureau of Standards will be responsible for developing standards related to HCWM services in liaison with the Environmental Health Services.

Medical Council of Malawi shall be responsible for

- i. Enforcing law and regulation in HCWM practices in all health facilities.
- ii. Inspecting of health facilities and institutions to ensure compliance with HCWM guidelines and standards.
- iii. Providing input in curriculum development for HCWM services by health institutions in Malawi.
- iv. Mobilizing resources for routine inspection of health facilities.
- v. Advocating for good HCWM practices and implementation of standards.

Nurses and Midwives Council of Malawi shall be responsible for;

- i. Providing input in curriculum development for HCWM services by health institutions in Malawi.
- ii. Inspecting health facilities to ensure compliance with HCWM guidelines and standards.

- iii. Mobilizing resources for routine inspection of health facilities.

Pharmacy and Medicines Regulatory Authority shall be responsible for;

- i. Inspecting health facilities to ensure compliance with HCWM guidelines and standard.
- ii. Mobilizing resources for routine inspection of health facilities.
- iii. Coordinating disposal of pharmaceutical wastes.

Malawi Environmental Health Association shall be responsible for;

- i. Enforcing law and regulations in healthcare waste management practices in all health facilities.
- ii. Providing input in curriculum development for healthcare waste management services by health institutions in Malawi.
- iii. Inspecting health facilities to ensure compliance with HCWM guidelines and standard.
- iv. Mobilizing resources for routine inspection of health facilities.
- v. Advocating for good healthcare waste management services practices and implementation of regulation and standards.

The Academia and Research institutions shall be responsible for;

- i. Developing and incorporating HCWM services curriculum in collaboration with Environmental Health Department.
- ii. Conducting pre-service training for health workers in healthcare waste management services; and
- iii. Carrying out research in HCWM services.

Private Entrepreneurs shall be responsible for;

- i. Investing in HCWM services through public private partnerships.
- ii. Operating as contractors to City Councils / District Councils / Health Facilities in HCWM services.
- iii. Manufacturing, procuring, distributing and marketing of HCW supplies.
- iv. Recycling of non-hazardous healthcare waste.
- v. Complying with the set health care waste management standards and regulations.

Health Facilities (Public, CHAM, Islamic Health Association and Private) shall be responsible for;

- i. Ensuring participation of healthcare workers in HCWM in-services training activities.
- ii. Provision of Personal Protective Equipment to staff and other related healthcare waste management supplies.
- iii. Implementation of HCWM services guidelines and regulations.
- iv. Allocating financial resources for HCWM services.
- v. Producing and Implementing HCWM services management plan.
- vi. Monitoring and reporting of healthcare waste management plan implementation.
- vii. Complying with the set healthcare waste management standards and regulations.

4.2 Implementation Plan

The implementation of the HCWM Policy will be guided by implementation plan as detailed in Annex 1, which contains the summary of objectives, strategies, timelines, and institutions responsible.

4.3 Monitoring and Evaluation Plan

The implementation of the Policy will be tracked by a Monitoring and Evaluation Plan as contained in Annex 2 which has columns for objective, output, performance indicator, target, and baseline, source of verification and assumptions / risks.

4.4 Review of the Policy

The review of the Policy will be initiated where necessary or towards the end of the five years implementation period to ensure that there will be a successor Policy once the current implementation period expires. The successor Policy will be informed by the lessons drawn from the monitoring and evaluation of this Policy.

5 ANNEXES

5.1 ANNEX 1: Implementation Plan

PRIORITY AREA 1: GOVERNANCE AND REGULATION OF HEALTH CARE WASTE MANAGEMENT			
Policy statement: The policy will ensure that appropriate policy, legal and regulatory frameworks are in place to support implementation of Health Care Waste Management at all levels.			
Objective	Strategy	Responsibility/ Stakeholders	Timeframe
To strengthen the institutional, legal and regulatory frameworks for HCWM	Developing and updating relevant legislations for HCWM ;	MoH, MoJ , MBS, EAD, MCM, NMCM, PMRA, CSOs, Development Partners.	2024-2029
	Supporting effective implementation of regulations on Health Care Waste Management services;	MoH, CHAM , MBS, EAD,MCM, NMCM, PMRA, CSOs, Development Partners	2024-2029
	Strengthening Health Care Waste Management structures at all levels of healthcare delivery system;	MoH,MoLG, CHAM, CSOs, Development Partners	2024-2029
	Strengthening resource mobilization for Health Care Waste Management programs	MoH, MoF, MoLG, CSOs Development Partners	2024-2029
	Developing health care waste management guidelines, protocols and	MoH, MoF, MoLG, CSOs Development Partners	2024-2029

	standard operating procedures at all levels		
	Enforcing health care waste management guidelines, standards operating procedures and protocols	MoH, MoF, MoLG, CSOs Development Partners	2024-2029
PRIORITY AREA 2: HEALTH CARE WASTE MANAGEMENT PRACTICES			
Policy statement: The policy shall ensure all health care institutions adhere to health care waste management standards and safety requirements			
Objective	Strategy	Responsibility/ Stakeholders	Timeframe
To enhance adherence to standards for healthcare waste management practices	Building capacity of the waste handlers in the health care institutions	MoH, MoLG, MEPA , Central Hospitals, CHAM, private for-profit health organizations, Development Partners	2024-2025
	Strengthening individualised health care waste management plans for each health care setting	MoH MoLG, MEPA, Central Hospitals, CHAM, private for-profit health organizations, Development Partners	2024-2029
	Ensuring segregation collection, storage ,transportation, treatment and disposal of health care wastes including damage or obsolete medical equipment	MoH, MoLG , Central Hospitals, CHAM, private for-profit health organizations, Development Partners	2024-2028

	Promoting best practices and new technologies in service provision on healthcare waste management	MoH, MoLG , Central Hospitals, CHAM, private for-profit health organizations, Development Partners	2024-2029
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PRIORITY AREA 3: INFRASTRUCTURE AND EQUIPMENT			
Policy statement: The policy will ensure the availability of appropriate and adequate healthcare waste management infrastructure and equipment of health care delivery system.			
Objective	Strategy	Responsibility/ Stakeholders	Timeframe
To improve availability of adequate infrastructure and equipment for HCWM at all levels	Promoting adherence to environmental friendly procurement standards.	MoH, PPDA, MEPA , MoLG, Development Partners	2024-2029
	Promoting availability of appropriate infrastructure and equipment in health care Facilities ;	MoH, MoLG, Development Partners, CHAM	2024-2029
	Promoting regular preventive maintenance of Health Care Waste Management infrastructure and equipment;	MoH, MoLG, Development Partners, CHAM MCM	2024-2029

PRIORITY ARE 4: SOCIAL AND BEHAVIOUR CHANGE COMMUNICATION			
Policy statement: The Policy will ensure promotion of Health Care Waste Management Social and Behaviour Change Communication and information management among all relevant stakeholders.			
Objective	Strategy	Responsibility/ Stakeholders	Timeframe
To raise awareness on health care waste management at all levels	Strengthening use of evidence in SBCC programing for HCWM;	MoH, Ministry of Local Government, Development Partners, NGOs	2024-2029
	Strengthening use of SBCC theories and models for SBCC interventions.	MoH, Ministry of Local Government, Development Partners, NGOs	2024-2029
	Supporting implementation of quality SBCC programing on HCWM;	MoH, Ministry of Local Government, Development Partners, NGOs	2024-2029
	Strengthening data management for SBCC in health care institutions at all levels of healthcare service delivery;	MoH, Ministry of Local Government, Development Partners, NGOs	2024-2029

PRIORITY AREA 5: HUMAN CAPACITY DEVELOPMENT			
Policy Statement: The Policy will ensure that relevant skills, competencies and knowledge on Health Care Waste Management are developed in health care workers.			
Objective	Strategy	Responsibility/ Stakeholders	Timeframe
To strengthen capabilities of stakeholders in health care waste management	Developing standard training packages materials on HCWM;	Ministry of Local Government, Central Hospitals, CHAM, private for-profit health organizations, NGOs	2024-2029
	Promoting regular trainings of all healthcare workers at all levels of the health system in both public and private sector.	MoH, Ministry of Local Government, Central Hospitals, CHAM, private for-profit health organizations, NGOs	2024-2029
	Supporting health training institutions and Universities to integrate standardized HCWM modules in relevant training programs;	MoH, Ministry of Local Government, Central Hospitals, CHAM, private for-profit health organizations, Development Partners	2024-2029
	Strengthening on job training initiatives for healthcare workers	MoH, Ministry of Local Government, Central Hospitals, CHAM, private for-profit health organizations, Development Partners	2024-2029

PRIORITY AREA 6: Research, Monitoring and Evaluation			
Policy Statement: The Policy will ensure that an adequate monitoring and evaluation system on HCWM is developed and enforced.			
Objective	Strategy	Responsibility/ Stakeholders	Time-frame
To strengthen research, monitoring and evaluation systems at all levels	Strengthening monitoring and evaluation mechanisms on health care waste management for public, private health care facilities and communities.	MoH, Ministry of Local Government, Central Hospitals, CHAM, private for-profit health organizations, Development Partners, NGOs	2024-2029
	Supporting health care waste management research studies for evidence generation	MoH, Ministry of Local Government, Development Partners, NGOs	2024-2029
	Strengthen capacity on data analysis on health care waste management	MoH, Ministry of Local Government, Central Hospitals, CHAM, private for-profit health organizations, NGOs	2024-2029
	Strengthening monitoring, evaluation and reporting systems for health care waste management	MoH, Ministry of Local Government, Central Hospitals, CHAM, private for-profit health organizations, NGOs	2024-2029

PRIORITY AREA 7: Collaboration, Partnership and Coordination			
Policy statement: The Policy will ensure that there is a conducive environment for promotion of collaboration, partnerships, and coordination among Health Care Waste Management stakeholders.			
Objective	Strategy	Responsibility/ Stakeholders	Timeframe
To improve collaboration, coordination and partnership in the implementation of health care waste management	Establishing and strengthening collaboration and coordination mechanisms on HCWM among stakeholders.	MoH, MoE, Ministry of Local Government, Medical Council of Malawi, Nurses and Midwives Council of Malawi (NMCM) and Pharmacy, Medicines and regulatory Authority, and Private health sector umbrella bodies and MEPA	2024-2029
	Strengthening stakeholders' involvement in HCWM decision making processes at all levels;	MoH, DHOs, MoE, Ministry of Local Government, Medical Council of Malawi, Nurses and Midwives Council of Malawi (NMCM) and Pharmacy, Medicines and regulatory Authority, and Private health sector umbrella bodies, Ministry of Local Government and MEPA	2024-2029
	Developing Public Private Partnership strategy for effective involvement of private sector in HCWM interventions ;	MoH, DHOs, Development Partners, PPPC	2024-2029
	Strengthening systems for joint	MoH, Local government, Development Partners,	2024-2029

	planning, implementation, monitoring, evaluation of HCWM	CSOs/NGOs	
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5.2 ANNEX 2: Monitoring and Evaluation Plan

PRIORITY AREA 1: GOVERNANCE AND REGULATION OF HEALTH CARE WASTE MANAGEMENT						
Outcome: Effective leadership and governance structures for HCWM at all levels						
Objective	Output (s)	Performance indicator (s)	Baseline	Target	Means of verification	Assumption/ Risks
To strengthen the institutional, legal and regulatory frameworks for HCWM	Relevant legislation for HCWM reviewed	Number of legislations reviewed	0	3	Reviewed Legislations	Availability of adequate expertise -Availability of financial resources - Good stakeholder collaboration Development Partners support
	Implementation of regulations on health care wastes management services improved	Proportion of health facilities adhering to HCWM regulations	10%	75%	Assessment reports	-Availability of adequate and qualified HCWM personnel -Availability of

						financial resources -Good stakeholder collaboration
	Healthcare waste management structures at all levels established	-Proportion of health facilities with Preventive Health Personnel dedicated to HCWM	15%	100 %	HR Reports	-Availability of adequate human expertise
		- Proportion of health facilities with established IPC WASH Committees	60%	100%	District IPC-WASH Reports	-Commitment of management -Availability of financial resources
		-Proportion of health facilities with functional Infection Prevention and Control (IPC) -WASH committees	25%	100%	Assessment reports	

		-Proportion of IPC-WASH committees including HCWM issues on their monthly meetings			IPC meeting minutes	
	Resource mobilization for HCWM programs strengthened	-Resource mobilization strategy for HCWM interventions developed by 2025	0	1	Approved strategy	-Commitment of management -Availability of financial resources
		-Proportional increase in budget allocation to HCWM interventions per annum	0.03	15%	Financial reports	-Development partners support -Good stakeholders collaboration
	HCWM Guidelines, protocols and standards procedures developed	-Number of Guidelines developed	0	1	Approved Guidelines	-Commitment of management
		-Number of protocols developed	0	1	Approved protocols	-Availability of financial resources

		-Number of standards procedures developed	0	1	Approved standards procedures	-Development partners support -Good stakeholders collaboration
	Comprehensive HCWM Guidelines, protocols and standards procedures enforced	-Proportion of health facilities that are aware of comprehensive HCWM guidelines, protocols and standards procedures	0	100%	Supervision reports	-Commitment of management -Availability of financial resources -Development partners support
		-Proportion of health facilities adhering to comprehensive HCWM guidelines, protocols and standards procedures	0	50%		-Good stakeholders collaboration

PRIORITY AREA 2: HEALTH CARE WASTE MANAGEMENT PRACTICES						
Outcome: Enhanced delivery of Quality HCW management services at all levels						
Objective	Output (s)	Performance	Baseline	Target	Means of	Assumption/ Risks

		indicator (s)			verification	
To enhance adherence to standards for healthcare waste management practices	Capacity of waste handlers in healthcare institutions improved	Proportion of health facilities with trained staff in healthcare waste management	20%	100%	Training reports	-Availability of adequate financial resources -Development partners support,
	Individualised HCWM plans for each health setting are developed and regularly updated	Number of health facilities with updated HCWM plans	15%	700	Updated HCWM plans	Availability of financial resources -Good stakeholder collaboration
	Health Care waste is safely collected, segregated, stored and transported.	% of HFs adhering to comprehensive HCWM Guidelines	0%	60%	Assessment reports and supervision reports	-Stakeholder commitment -Availability of human and financial resources -Availability of equipment
	Best practices and new technologies in service provision on healthcare waste management	% of HF with licenced transporter of health care waste offsite disposal.	0%	50%	District Environmental Health reports	Availability of financial resources. Commitment of management teams.

	promoted	% of HCF with proper records on waste generated, treatment and disposal.	0%	100%	District Environmental Health reports	Commitment of management teams.
		% of HCF with capacity for safe and environmentally friendly treatment and disposal in accordance with international conventions.	0%	25%	District Environmental Health reports	Availability of financial and human resources. Commitment of management teams.

PRIORITY AREA 3: INFRASTRUCTURE AND EQUIPMENT						
Outcome: Improved infrastructure and equipment standards for HCW management at all health care institutions						
Objective	Output (s)	Performance indicator (s)	Baseline	Target	Source(s) of verification	Assumption/ Risks
To improve availability of infrastructure and equipment for HCW management	Environmental friendly procurement standards promoted.	% of HF adhering to environmental friendly procurement standards.	0%	50 %	Assessment reports Audit reports.	Management commitment Competent procurement personnel.
	Availability of appropriate infrastructure and equipment in health care facilities enhanced.	% of facilities with infrastructure and equipment that meet the minimum standards.	3%	50%	Assessment reports	Management commitment Availability of financial resources
	Preventive maintenance of HCWM infrastructure and equipment enforced.	% of HF with infrastructure and equipment preventive plans.	0%	100 %	Supervision and assessment reports	Availability of skilled maintenance personnel Commitment.

		% of HF that are adhering to their preventive maintenance plans.	0%	100%	Maintenance reports	Availability of financial resources. Management
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PRIORITY AREA 4: SOCIAL AND BEHAVIOUR CHANGE COMMUNICATION						
Outcome: Increased capacities and awareness on HCWM practices by healthcare workers and public.						
Objective	Output (s)	Performance indicator (s)	Baseline	Target	Means of verification	Assumption/ Risks
To raise awareness on healthcare waste management at all levels	Use of updated evidence on SBCC programming strengthened	Number of departments and partners using evidence based SBCC programming	3%	50%	Implementation Reports	Availability of resources Emerging competing priorities
	Use of Theories and Models for SBCC programming strengthened	Number of departments and partners using Theories and Models in SBCC programming	3%	50%	Implementation Reports	Availability of resources, Emerging competing priorities
	Implementation of quality SBCC programming on HCWM supported	Number implementers supported on quality SBCC programming	3%	50%	Implementation reports	Availability of resources, Emerging competing priorities

	Data management for SBCC in Healthcare institutions strengthened	Number of data management reviews conducted on SBCC at all levels.	0%	20%	Activity reports	Availability of financial resources
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PRIORITY 5: HUMAN CAPACITY DEVELOPMENT						
Outcome: Increased capacities and awareness on Health Care Waste management practices by health care workers and the general public						
Objective	Output (s)	Performance indicator (s)	Baseline	Target	Means of verification	Assumption/ Risks
To strengthen capabilities of stakeholders in healthcare waste management	Standard training packages on HCWM developed	number of training packages developed and approved	0	1	Availability of training packages on HCWM at directorate of preventive health	Availability of adequate human
	Regular Staff training on HCWM supported	Number of staff trained on HCWM	0	3120	District reports	Availability of financial resources
	Integration of standardized HCWM	Number of medical schools, universities,	4	30	Institutional Reports and curriculum	-Availability of Financial resources

	modules in health training institutions relevant training programmes promoted	institutions with HCWM in their curriculum				-Stakeholder collaboration
	On job training initiative strengthened	<ul style="list-style-type: none"> - Proportion of HF receiving mentorship and coaching - Proportion of HF supervised 	5%	100%	Reports	Availability of Resources
			5%	100%	Reports	

PRIORITY AREA 6: RESEARCH ,MONITORING AND EVALUATION OF HEALTH CARE WASTE MANAGEMENT PROGRAMS						
Outcome: Increased utilization of evidence based information in decision making.						
Objective	Output (s)	Performance indicator (s)	Baseline	Target	Means of verification	Assumption/ Risks
To strengthen research, monitoring and evaluation systems at all levels.	Monitoring and evaluation mechanisms for public and private health care facilities enforced.	% of Districts submitted M&E reports	0%	100%	District reports	-Availability of harmonised/aligned M&E tools -Good stakeholder collaboration -Development partners support
	Research agenda on HCWM supported	-Number of research studies on HCWM conducted	0	20	Reports	-Availability of financial resources
		-Number of MoU with academic and research	0	5	Approved MoUs	-Good stakeholder collaboration

		institutions				
		-Number of areas of collaboration with academic and research institutions per year	0	5	Collaboration reports	-Development partners support
	Training of M and E personnel on analysing the usage of data on HCWM promoted.	Number of trained M and E personnel.	0	624	Training reports	-Availability of financial resources -Good stakeholder collaboration
	Monitoring of HCWM system in HF supported.	Number of HCFs supported in M&E.	0	624	Activity reports	-Availability of resources -Good stakeholder collaboration

PRIORITY AREA 7: STAKEHOLDER COLLABORATION ,COORDINATION AND PARTNERSHIP						
Outcome: Increased involvement and collaboration of HCWM stakeholders in the implementation of Health Care Waste Management Programmes						
Objective	Output (s)	Performance indicator (s)	Baseline	Target	Means(s) of verification	Assumption/ Risks
To improve collaboration, coordination and partnership in the implementation of health care waste management programmes	Stakeholders involvement in HCWM decision making processes increased	Number of stakeholders involved in decision making	7	30	Reports	-Good stakeholders' collaboration
	Effective collaboration and coordination among stakeholders enhanced	Number of local councils conducting quarterly HCWM stakeholder meeting	0	35	Stakeholder meetings minutes	-Effective Stakeholder commitment Availability of financial resources
	Public Private Partnership strategy for effective stakeholder involvement in HCWM developed.	HCWM PPP strategy in place by 2023	0	1	approved HCWM PPP strategy	-Availability of financial resources -Development partners support
	Joint planning Platforms	Number of local	0	35	Local councils	-Availability of

	for implementation, monitoring and evaluation of HCWM programmes among stakeholders strengthened	councils developing annual joint implementation and monitoring plans			annual joint plans	financial resources -Stakeholder collaboration
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