Turkana County Health Sector

MONITORING AND EVALUATION PLAN 2018-2022

Department of Health and Sanitation Services

Turkana County Health Sector

MONITORING AND EVALUATION PLAN 2018-2022


Turkana Sub Counties
Loima
Turkana Central
Turkana East
Turkana North
Turkana South
Turkana West

Table of Contents

Table of Contents iii
Foreword v
Acknowledgements vi
Abbreviations vii

1.Introduction and Background 1
1.1 Turkana County 1
1.2 County Health Sector 1
1.3 County Health Sector M&E Situation 2
1.4 Purpose of County Health M&E Plan 2
1.5 Process of Development 3

2.Monitoring and Evaluation Framework 4
2.1 Strategic Framework for County Health Monitoring and Evaluation 4
2.2. Logical Framework for County Health M & E 5
2.3 County Health Sector Strategic Plan Targets 13
2.4 Key Responsibilities for Turkana Health Sector M & E 16

3.Data Management 19
3.1Towards a common data architecture 19
3.2 Data Collection 19
3.3 Data sources 19
3.3.1 Routine data sources 19
3.3.2 Non – Routine Data sources 20
3.3.3 Other complimentary methods 21
3.4 Data Flow 21
3.5 Data Quality 23
3.6 Data Analysis 24
3.7 Reporting, Data Dissemination and Data Sharing 24
3.8 Performance Reporting and Review process 24
3.9 Evaluation Plan 25

4.Implementation Arrangements 27
4.1 Implementation Arrangements 27
4.1.1 Coordination of County Health Monitoring and Evaluation 27
4.1.2 Linkage with stakeholders 29
4.2 Operational Guidelines and Tools for County Health M&E 29
4.3 Dissemination of Information and Information Products 30

5.Monitoring and Evaluation Implementation Framework 31
5.1Components of the County Health M & E system 31
5.2 County Health M&E System Implementation Framework 32

Appendices 36
Appendix 1: Performance Framework 36
Appendix 2: Reporting Tools And Responsible Persons 47
Appendix 3 : List of Contributors 49

List of Tables

Table 1: Logical Framework for Turkana County Health Services M&E 5
Table 4: Performance Reviews Schedule 25
Table 5: Evaluation Plan Guide 26
Table 4.1: Roles and Responsibilities of Health Department's M&E Unit 28
Table 4.2 outlines the functions of the county M&E TWG for health services. 29
Table 6: Components of the M&E System 31
Table 7: M&E System Strengthening Implementation Framework 33

List of Figures

Figure 1: M&E Logical Framework 4
Figure 2: Turkana County Data Flow and Use map 22
Figure 3: Organization structure for the Turkana Health Services Department M&E Unit 28

Foreword

The development of this M&E plan reflects the Turkana County Government's commitment to promote accountability in the county health sector. The M&E plan provides for an elaborate process of tracking progress of implementation of key health sector interventions. It links the outcomes sought with the inputs and processes that the county government and stakeholders are investing in towards improving health services in the county. The plan will ensure that the indicators, their definitions, means of data collection and measurement are comparable over time. Additionally, it seeks to enhance coordination of stakeholders in monitoring and evaluation of the county health sector strategic plan for the period 2018-2022, by outlining structures and responsibilities for the various stakeholder.

This M&E plan builds on the situational analysis undertaken during the development of County Integrated Development Plan (CIDP), County Health Sector Strategic Plan (CHSSP) and various past assessments in the domains of performance management and monitoring and evaluation. Evidently, these assessments have acknowledged the need for strengthening the county's capacity in monitoring and evaluation and this plan includes interventions in that direction.

I wish to call upon all county health stakeholders to support the county government's efforts in fulfilling the aspiration of a healthy and productive county that makes evidence-based decisions, through full implementation of this plan.

Hon. Jane Ajele
County Executive Committee Member for Health and Sanitation Services

Acknowledgements

The County Government appreciates the efforts made by various stakeholders in the development of the County Health Monitoring and Evaluation Plan. Their contribution has made this process participative and consultative, and one that will support the implementation of the recently developed County Health Sector Strategic Plan for the period 2018-2022.

We acknowledge the leadership offered by our County Executive Committee Member for Health Services. Further, we applaud the commitment of the technical team from the department of health under the leadership of the County Director of Health Services, and the Deputy Directors for Planning, and Medical Services.

We appreciate the financial and technical support from our implementation partners including USAID funded CMLAP II and Afya Timiza. Their technical guidance has truly enriched the document and We look forward to the ongoing partnerships as we implement the interventions proposed in this plan.

Dr Robert Abok
Chief Officer for Health and Sanitation
Turkana County

Abbreviations

ANC	Antenatal Care
ART	Anti Retroviral Treatment
AWP	Annual Work Plan
BEmONC	Basic Emergency Obstetrics and Newborn Care
CEmONC	Comprehensive Emergency Obstetrics and Newborn Care
CECM	County Executive Committee member
CASCO	County AIDS, STIs/STDs Coordinator
CCC	Comprehensive Care Centre
CDC	Centre for Disease Control and Prevention
CDSC	County Disease Surveillance Coordinator
CECM	County Executive Committee Member
CIDP	County Integrated Development Plan
CDOH	County Department of Health
CHEW	Community Health Extension Worker
CHMT	County Health Management Team
CHRIO	County Health Records Information officer
CHSSP	County Health Sector Strategic Plan
CHW	Community Health Worker
CHV	Community Health Volunteer
CMLAP	County Measurements Learning and Accountability
COH	Chief Officer of Health
CRHC	County Reproductive Health Coordinator
CTLC	County TB Lung and Leprosy Diseases Coordinator
CTLS	Community Led Total Sanitation
CWC	Child Welfare Clinic
CU	Community Units
DDIU	Data Demand and Information Use
KHIS	Kenya Health Information System
DQA	Data Quality Assurance
EMMS	Essential Medicines and Medical Supplies
FANC	Focused Ante Natal Care
FBO	District Health Information System
FY	Financial Year
GBV	Gender Based Violence
GOK	Government of Kenya
HCW	Health Care Worker
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
HRH	Human Resources for Health
HRIS	Human Resources Information Systems

ICD-10	International Classification of Diseases, 10th revision
ICU	Intensive care Unit
IDSR	Integrated Disease Surveillance and Response
IEBC	Independent Electoral and Boundaries Commission
IEC	Information, Education and Communication
IFMIS	Integrated Financial Management Information System
IMCI	Integrated management of childhood illness
IT	Information Technology
KDHS	Kenya Demographic Health Survey
KEMSA	Kenya Medical Supplies Authority
KNPHC	Kenya National Population and Household Census
KNBS	Kenya National Bureau of Statistics
LAN	Local Area Network
LLITN	Long Lasting Insecticide Treated Nets
LMIS	Logistical Management Information System
MDA	Mass Drug Administration
M&E	Monitoring and Evaluation
MEDS	Mission for Essential Drugs Supply
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
MTEF	Medium Term Expenditure Framework
NCDs	Non-Communicable Diseases
NHIF	National Hospital Insurance Fund
PHO	Public Health Officer
PMTCT	Prevention from Mother to Child Transmission
QI	Quality Improvement
RDQA	Rapid Data Quality Assurance
RMNCAH	Reproductive, Maternal Neonatal Child and Adolescent Health
SCHMT	Sub-County Health Management Team
SCHRIO	Sub-County Health Records and Information Officer
SCMOH	Sub-County Medical Officer of Health
SCPHO	Sub- County Public Health Officer
SDGs	Sustainable Development Goals
SOP	Standard Operating Procedure
SWOT	Strengths Weaknesses Opportunities and Threats
TB	Tuberculosis
TWG	Technical Working Group
UHC	Universal Health Coverage
USAID	United States Agency for International Development
WASH	Water Sanitation and Hygiene
WHO	World Health Organization

1.Introduction and Background

1.1 Turkana County

Turkana County is situated in North Western Kenya bordering Uganda to the West; South Sudan and Ethiopia to the North; and Lake Turkana to the East. It's neighbouring counties in Kenya are West Pokot, Baringo and Samburu. The county is the largest county in Kenya by land size with a total geographical area of 77,000 Km^2. Turkana had an estimated population of 1,256,152 persons in year 2017. The county has 7 administrative sub counties (Turkana East, Turkana South, Turkana Central, Loima, Turkana North, Turkana West and Kibish),six constituencies and thirty wards. In addition the county hosts Kakuma Refugee Camp which has an estimated population of 151,000.

The main economic activity is nomadic pastoralism. This has accompanying challenges of insecurity, including conflicts with neighbouring nomadic pastoralist tribes over pasture and water. Cattle, camels, donkeys, sheep and goats are a major source of income for the residents of Turkana County. Fishing is practiced in Lake Turkana with Nile Perch and Tilapia being the main fish species found in the lake. Basket weaving is also a major income generating activity in the county, especially among women in Lodwar and other urban centers. The agricultural activities practiced in the county, which include; livestock farming, fishing and food crop farming through irrigation are mainly for subsistence.

Turkana County is also a source of electric power in Kenya. Kengen's Turkwel Hydro Power Plant, situated on the South West of Turkana County, produces hydroelectric power, which is connected to the national power grid at Lessos. The county is currently subject of crude oil exploration in Block 10BB and Block 13T and has potential for geothermal, solar and wind energy.

1.2 County Health Sector

Turkana County Government established its Department of Health and Sanitation for the purposes of coordinating delivery of the mandate granted under Schedule IV of the Constitution of Kenya regarding devolved health services. This department is mandated with the following key functions: promoting access to health services; addressing decimation of low potential areas and vulnerable groups; ccounty health facilities and pharmacies; ambulance services and referral system; ppromotion of primary health care; llicensing and control of undertakings that sell food to the public; cemeteries, funeral parlors and crematoria; medical waste removal and disposal; regulation of solid waste/refuse collection and disposal.

Since its establishment at the commencement of devolved governments in Kenya in 2013, the department has been coordinating the county health sector to deliver the constitutional mandate guided by the principles of joint planning, monitoring and implementation. A raft of achievements have been made by the county government especially in infrastructural and human resources for health pillars, for which the county had a dismal ranking nationally.

The percentage of fully immunized children increased from 36% to75%; deliveries conducted under skilled attendants increased from 18% to 45%; HIV prevalence reduced from 7.9% to 3.6%; TB treatment success rate increased to 69%. 159 new facilities have been constructed and rehabilitated, 10 sub-county hospitals were renovated, a satellite blood bank was established, an oxygen plant was installed at the county referral hospital, a central drugs warehouse constructed amongst other infrastructural projects. On the human resources front, over 800 health workers and 2268 Community Health Volunteers were engaged to support service delivery across the county. The county department of health and sanitation is also embracing technology with 18 health facilities

already undertaking digitization of medical records. Notably, the flow of funds to county health facilities has also improved. Despite these significant achievements, the health indicators for the county are still below the national averages, and health challenges abound.

1.3 County Health Sector M&E Situation

Monitoring and Evaluation together with operational research, measures the overall performance of a programme or project and continuously evaluates achievements.Monitoring refers to the routine tracking of key elements selected to determine programme performance through record keeping, regular reporting, supportive supervision, surveillance systems and periodic surveys. It also entails assessing whether the implementation of the planned activities is consistent with the programme design through generating data on inputs, processes and outputs of an on-going programme over time.

On the other hand, evaluation refers to the periodic assessment of the change in targeted results that can be attributed to an intervention. It links outcome or impact directly to an intervention over time. Evaluation entails systematic use of quantitative and qualitative research methods to investigate the programme's effectiveness, efficiency, relevance, sustainability and impact to determine the extent to which investments made yield expected results.

The need to have systems that support accountability to the citizens is entrenched in the Constitution of Kenya, 2010 and various legislations such as the County Government Act, 2012; the Public Financial Management Act, 2012, Intergovernmental Relations Act, 2012 and sector specific legislation like the Health Act, 2017. As such, the establishment of robust monitoring and evaluation system to support the county health sector is a critical ingredient for achievement of the desired level of accountability.

County governments are required to have elaborate plans laying out their agenda for the medium term and sectoral plans that articulate the sectoral agenda. Turkana County Government has put in place a County Integrated Development Plan for the period 2018-2022 and has a draft County Health Strategic Plan (SCHSSP) 2018–2022. To ensure close monitoring of the progress of implementation of health sector strategic plan, and thus drive the path to attainment of overall health goal, the county government has put in place this M&E plan. The M&E plan outlines data needs, indicators, sources of data, data collection methods and data flow, analysis, use and reporting, feedback as well as the responsibilities of the various health stakeholders. This is in response to critical gaps identified in the County Health M&E systems that include: ineffective coordination, sub-optimal utilization of data in decision making, inadequate physical infrastructure; inadequate personnel, inadequate supply of data collection and reporting tools and equipment, knowledge gaps in data management, research and evaluation; insufficient funding and limited use of information technology.

1.4 Purpose of County Health M&E Plan

The overall purpose of this M&E plan is to facilitate the tracking of the progress of implementation of the County Health Sector Strategic Plan for the period 2018-2022. This plan will also facilitate the institutionalization of the M&E principles and practices in support of decision-making and adaptive learning, planning and management across all the programs implemented by the County Health Sector. It is expected to serve as a vital tool for timely and systematic data collection, analysis and reporting with the overall goal of improving performance and accountability to stakeholders.

Specifically, the Monitoring and Evaluation plan will:

a) Build coherence in the approach to systematically track performance across county health programs and ensure they contribute to the overall goal reflected in the County Health Sector Strategic Plan 2018-2022.
b) Define the data requirements (collection, sources, tools, collation, and analysis) and assign responsibilities for effective tracking of interventions implemented at all levels.
c) Document progress and enhance performance through continuous learning, sharing and improvement.
d) Provide reporting requirements including reporting formats needed to promote timely reporting both within the county and externally to national government, partners and donors.
e) Define data feedback mechanisms and utilization for decision making internally and among stakeholders.

1.5 Process of Development

This M&E plan was developed through a participatory and consultative process that enabled obtaining and synthesis of inputs from the county health department, county department of economic planning, implementation partners and other stakeholders. Specifically, the approach applied included the following:

a) Desk review of relevant national and county documents
b) Consultative meetings with senior management of the County Department of Health Services, program managers and M&E focal persons, sub county teams, representatives of implementation partners
c) Consultations with the County Health M&E Technical Working Group and partners
d) Technical workshop to review the status of county health M&E and formulate this plan
e) Final draft review and validation meeting

2.Monitoring and Evaluation Framework

This section outlines the framework for coordinated, systematic and holistic tracking of progress in the county health sector. The framework is informed by the need to comprehensively monitor, and review programs within the county health sector. The framework for analysis is based on the M&E Logical Framework that depicts how inputs lead to outcomes and eventually desirable impact. It is intended to ensure that all indicator areas -inputs, processes, output, and outcome -are considered, and pathways of influence clarified in the analysis.

2.1 Strategic Framework for County Health Monitoring and Evaluation

The logical framework also anchors the key objectives of the M&E plan in a snapshot. It attempts to describe briefly types of data and data sources, and how data will flow from the source to the central repository and to all relevant stakeholders; provides standard indicators, targets, frequency of reporting in a standard format for all county health implementers and stakeholders; provides guidance on the routine and periodic documentation of planned activities and measures expected outputs and outcomes when due; identifies implementation arrangements with clear responsibility centres; identifies and costs key actions that will enable smooth implementation of this plan.

<table>
<tr><td></td><td colspan="4">Inputs and Processes</td><td>Outputs</td><td>Outcomes</td><td>Impact</td></tr>
<tr><td>Indicators domains</td><td>Health Workforce
Health Information
Financing
Leadership & governance</td><td>Health Infrastructure & Equipment</td><td>Essential Health Products & Technologies</td><td></td><td>Intervention access & services readiness Intervention quality, safety and efficiency</td><td>Coverage of interventions Prevalence risk behaviours and factors</td><td>Improved health outcomes and equity Social and financial risk protection Responsiveness</td></tr>
<tr><td rowspan="3">Data Sources</td><td colspan="4" rowspan="2">Administrative Sources
iHRIS, IPPD, IFMIS, budget Implementation reports, Infrastructure reports, supply chain reports, policy tracking reports</td><td>Facility Assessments
Service Availability and Readiness</td><td colspan="2">Population-based surveys
Coverage, health status, equity, risk protection, responsiveness</td></tr>
<tr><td colspan="3">Clinical Reporting Systems
Service readiness, quality, coverage, health status</td></tr>
<tr><td colspan="5"></td><td>Vital registration</td></tr>
<tr><td>Analysis & Synthesis</td><td colspan="6">Data Quality Assessment Estimates and Projections, In depth studies and surveys, Assessments for progress and performance of health systems</td></tr>
<tr><td>Data dissemination & Information use</td><td colspan="6">Targeted and comprehensive reporting, regular county review processes, national reporting, county learning forum, stakeholders' forums for health</td></tr>
</table>

Figure 1: M&E Logical Framework

The county health sector will apply this framework to strategically focus on an integrated M&E approach that allows for continuous effective, efficient and economic use of resources; continuous learning through sharing of information for decision-making.

2.2. Logical Framework for County Health M & E

The following indicators will be applied in monitoring performance of the county health sector. Detailed table of indicators with definitions, data source, reporting frequency, level of measurement, responsibility, baseline year and values, and targets and specific comments is included in Appendix 1.

Table 1: Logical Framework for Turkana County Health Services M&E

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Objective 1: To Reduce Non-Communicable Diseases					
ncrease immunization coverage from 84.2% to 97% by 2022	• Vaccine doses acquired • Immunization equipment (cold chain) • Immunization information, education and communication (IEC) materials • Training and capacity building for health care providers plans • Outreach services	• Updating/training of health care workers on immunization policies and guidelines • Availing vaccines • Conducting outreaches on immunization (reach every child) • Sensitization of community units on immunization policies and guidelines • Conduct defaulters tracing • Conducting stakeholders' forums on immunization • Conducting quarterly data review meetings on immunization	• Number of children fully immunized • Number of facilities providing immunization • Number of community units sensitized • Number of health workers updated on immunization guidelines • Number of immunization defaulters traced	• Proportion of children below the age of one year who are fully immunized • % of health facilities offering immunization services	Reduction in mortality
Increase the percentage of TB patients completing treatment from 86% to 92% in 2022	• Partnerships supporting the TB program • Updates on TB policies and guidelines • TB drugs	• Updating/training of health care workers and community health volunteers on current TB policies and guidelines • Sensitization of community units on TB policies and guidelines • Conducting quarterly data review meetings • Conducting TB stakeholders' forum • Defaulter tracing	• Number of health care workers and community health volunteers trained / updated on TB policies and guidelines • Number of community dialogue/action days conducted • Number of TB patients completing treatment • Number of newly diagnosed TB cases	• TB treatment success rate • TB cure rate	Reduction in mortality

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Increase the % of HIV+ pregnant mothers receiving preventive antiretroviral (ARVs) from 92% to 100%	• HIV program partnerships • HAART availability • Skilled workforce • Infrastructure and equipment	• Conduct awareness on PMTCT • Conduct supervision, procure supplies and conduct training • Tracing of ART defaulters • Tracking of ART stocks availability	• Number of outreaches conducted • Number of supplies procured and distributed • Number of supervisions conducted	• Reduced MTCT of HIV • Proportion of health facilities with stock outs • Proportion of ART defaulters traced • Proportion of pregnant mothers receiving ART • % of reduction of MTCT	Reduction in mortality
Increase the % of HIV+ clients on ARVs from 84% to 95%	• Partners supporting the HIV/ AIDS program • Supplies and equipment • IEC materials on HIV/ AIDS	• Tracing of ART defaulters • Tracking of stock outs • Updating/training of HIV testing and counseling (HTC) providers on treatment guidelines • Sensitization of community units on HIV/AIDS policies and guidelines • Conducting quarterly HIV/AIDS meetings • Conducting HIV/AIDS stakeholder forum	• Number of HTC providers trained / updated on HIV management guidelines • Number of community units sensitized on HIV/ AIDS policies and guidelines • Number of ART defaulters traced • Number of eligible HIV clients on ARVs	• Reduced HIV morbidity and mortality rate • Proportion of ARV defaulters traced • Proportion of HIV clients eligible and initiated on ARVs	Reduction in Mortality
Increase testing for malaria suspected cases from 85% to 100%	• Partnerships for malaria • Availability of diagnostic kits	• Sensitization of health care workers and community health volunteers • Availability of diagnostic reagents and kits	• Number of malaria cases testing positive	• Reduced Malaria related mortality and morbidity • Malaria Positivity Rate	Reduction in mortality due to malaria
Reduce the proportion of under-5s treated for diarrhea from 14% to 5% in 2022	• Skilled human resources • IEC materials • available funds	• Conduct outreaches • Conduct training, • procure supplies, • community sensitization • conduct supportive supervision.	• Number of community outreaches conducted • Number of supervisions conducted • Number of health care workers (HCWs) and CHVs trained	• Reduced cases of under-five diarrhea related morbidity and mortality	Reduction in under 5 mortality
Increase the proportion of school age children (6-14 yrs.) de-wormed from 15% to 65% in 2022	• Skilled human resources • IEC materials • available funds for school health program • drugs availability	• Conduct school health outreaches • Conduct training, • procure supplies, • community sensitization • conduct supportive supervision	• Number of outreaches conducted • Number of supervisions conducted • Number of health care workers (HCWs) trained • Number of schools implementing school health program	• Reduced worms related morbidity cases • Proportion of school going children dewormed	Reduction in morbidity and mortality from childhood illness

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Objective 2: To Halt, and Reverse Burden of Non-Communicable Conditions					
Reduce the proportion of adult population with Body Mass Index (BMI) over 25 from 0.21% to 0.12%	• Human resources, equipment, • documentation tools, • logistics	• Develop health promotion package on healthy lifestyle, • conduct mass screening, • regulate/ enact/ enforce laws that govern food markets, • establish recreation centers • outreaches • supportive supervision • Data review meetings focusing on NCDs	• Number of mass screenings conducted • Number of adult OPD clients with BMI of more than 25	• Reduced malnutrition among adults • % reduction in adult population with BMI over 25	Reduction in mortality associated with lifestyle diseases
Increase proportion of women of reproductive age screened for cervical cancers from 0.02% to 20%	• partners supporting the cervical cancer screening program • Updates on cervical cancer screening, management and referral policies and guidelines • Availability of health commodities	• Updating/training of health care workers on cervical cancer screening, management and referral • Updating community health volunteers on cervical cancer advocacy and referral • Procurement and distribution of cervical cancer diagnostic equipment and commodities • Conducting stakeholders' forum • Conducting quarterly cervical cancer data review meetings	• Number of health care workers (HCWs)trained / updated on cervical cancer screening, management and referral • Number of community health volunteers sensitized on cervical cancer screening and referral procedures • Number of women of reproductive age (WRA) screened for cervical cancer	• Reduced cancer prevalence • % of women of reproductive age screened for cervical cancers	Reduction in mortality
Reduce proportion of new outpatients with mental health conditions from 0.04% to 0.02%	• Skilled human resources, • documentation tools • IEC materials • Mental health infrastructure	• Establish mental health units in high volume sub-county hospitals	• Number of mental health centers providing outpatient services • Number of new outpatients with mental health conditions	• Managed mental health conditions • Proportion of new outpatients with mental health conditions	Reduction in mortality
Reduce proportion of new outpatient cases with high blood pressure from 0.07% to 0.035%	• Skilled human resources, • documentation tools, • logistics (Blood Pressure kits availability)	• Create awareness of the risk of hypertension and the importance of regular checkups; • conduct mass screening	• Number of outreaches • Number of new outpatients found with high blood pressure	• Proportion of new outpatients with high blood pressure • Managed cases of hypertension	Reduced high blood pressure cases
Reduce proportion of patients admitted with cancer from 0.017% to 0.010%	• Skilled human resources, • documentation tools, • Equipment for cancer screening	• Procure the medical equipment for screening • supply of drugs • Outreaches	• Number of patients admitted with cancer • Number of eligible facilities offering cancer screening • Number of facilities reporting stock-out of cancer drugs	• Managed cancer cases • % of patients admitted with cancer	Improvement of wellbeing and life expectancy Reduction in mortality

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Objective 3 : To Reduce the Burden of Violence and Injuries					
Reduce the proportion of outpatient cases attributed to gender-based violence from 0.05% to 0.025%	• Partnerships • Skilled workforce • Sensitization on sexual and gender-based violence management and referral policies and guidelines	• Updating/training of health care workers on the sexual and gender-based violence program • Updating community health volunteers on SGBV advocacy and referrals • Upgrading health facilities so offer SGBV related services • Data review and improvement	• Number of health care workers sensitised on SGBV management and referrals • Number of community health volunteers sensitised on SGBV advocacy and referrals • Number of health facilities offering services related to GBV • Number of new outpatient cases attributed to gender-based violence	• Reduced GBV related morbidity and mortality cases • Proportion of new outpatient cases attributed to gender-based violence	Reduction in mortality and morbidity associated with GBV
Reduce the proportion of outpatient cases attributed to road traffic injuries from 0.08% to 0.04%	• Skilled human resources, • advocacy and enforcement of traffic rules, infrastructure and medical supplies • intersectoral collaboration/ partnerships	• Engagement of road traffic partners through health stakeholder forum • Continuous advocacy through IEC/ BCC materials • Training of staff on accidents and emergencies care	• Number of staff trained on emergencies care • Number of facilities offering accident and emergency services • Number of new outpatient cases attributed to road traffic accidents	• Reduction in the number of deaths and disabilities due to road traffic accidents • Proportion of outpatient cases attributed to road traffic injuries	Reduce mortality and morbidity related to RTA
Reduce the proportion of new outpatient cases attributed to other injuries from 1.18% to 0.5% in 2022	• Skilled human resources • advocacy • enforcement of rules • intersectoral collaboration	• Community sensitization • Law enforcement • Stakeholder forum • Peer learning forum • Data review meeting	• Number of community sensitization meetings held • Number of new outpatient cases attributed to other injuries	• Reduced morbidity and mortality from other injuries • Proportion of new outpatient cases attributed to other injuries	Reduce mortality and morbidity related to other injuries
Reduce deaths due to injuries from 0.08% to 0.05%	• Ambulance services • Emergency Rescue Services • Skilled workforce • Equipment maintenance	• Upgrade county referral hospital to have ICU facilities • equip county ambulances • Conduct training on emergency care	• Number of county health facilities with capacity to handle emergencies • Number of functional and fully equipped ambulances • Number of patients with injury related conditions dying in the county health facilities	Reduced mortality due to injuries	Reduce mortality and morbidity related to other injuries

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Objective 4: To Provide Quality Essential Health Service					
Increase the proportion of deliveries conducted by skilled attendants from 47.1% to 70% by 2022	• Guidelines and standard operating procedures (SOPs) • Emergency obstetric and newborn care (EmONC) checklist • Comprehensive emergency obstetric and newborn care (CEmONC) checklist • IEC materials • Skilled workforce • Financing	• Training of health workers • Assessment of health facilities' EmONC readiness • Expansion of facilities infrastructure and equipment • Supportive supervision • Community mobilization • Distribution of IEC materials	• Number of health care workers trained on EmONC • Number of facilities offering EmONC • Number of facilities offering CEmONC • Number of community units that are sensitized • Number of deliveries conducted by skilled attendants in health facilities	• Proportion of deliveries conducted by skilled attendants • Reduced maternal and perinatal deaths	Reduce infant and maternal mortalities related to deliveries
Increased the proportion of pregnant women attending at least four antenatal care visits from 38.9% to 77.4%	• Skilled human resource, • equipment • Infrastructure • IEC Materials	• Capacity building of health workers in focused antenatal care (FANC) • Community advocacy and mobilization on FANC • Procurement of health commodities • Strengthening referral system • Distribution of IEC materials	• Number of HCWs whose capacity in FANC has been built • Number of community units mobilized and sensitized on FANC • Number of pregnant women attending at least four ANC visits	• Increased uptake of ANC visits • proportion of pregnant women attending at least four antenatal care visits	Reduce maternal &child mortality,
Increase the % of women of reproductive age receiving family planning from 18.3% to 40% by 2022	• Training curriculum • Family planning commodities and equipment • Guidelines and SOPs • IEC materials	• Training of health workers on current FP methods • Supportive supervision • Community awareness • Distribution of IEC materials	• Number of health care workers (HCWs) trained in current FP methods • Number of community units that are sensitized • Number of WRA receiving family planning commodity	• Increased uptake of family planning services • proportion of women of reproductive age receiving FP commodities	Reduce Maternal mortality,
Reduce % of facility based maternal deaths from 0.017% to 0% by 2022	• Partnerships for reproductive health • Skilled workforce • Documentation • MPDSR Committees	• Capacity building of health workers • Maternal death audits at all levels • Community mobilization • Strengthen referral system • Distribution of IEC materials • Data reviews	• Number of HCWs whose capacity has been built • Number of maternal deaths • Number of maternal death audits conducted • Number of verbal autopsies conducted at the community level • Number of community units sensitized • % of maternal deaths reviewed and uploaded on DHIS	• Reduced facility based maternal mortality • Maternal case fatality rate	Reduce Maternal mortality

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Reduce the % of facility-based under-five deaths to 0% by 2022	• Partnerships child health • Skilled workforce • IMCI curriculum • Drugs supply	• Building the capacity of health care workers (HCWs) in child health • Community advocacy and mobilization on child health • Procurement of health commodities • Strengthen referral system • Distribution of IEC materials	• Number of HCWs whose capacity in child health has been built • Number of community units mobilized and sensitized on child health • Number of health facilities reporting stock out of essential health commodities	• Reduced facility based under five mortality • proportion of facility-based under-five deaths occurring in county health facilities	Reduce infant mortality
Reduce the % of newborns with low birth weight from 5.3% to 3% by 2022	• IEC materials • Heath commodities supply	• Capacity building of health care workers in newborn health • Community advocacy and mobilization on newborn health • Procurement of health commodities • Strengthen referral system • Distribution of IEC materials	• Number of HCWs trained on newborn health • Number of community units mobilized and sensitized on newborn health • Number of health facilities with stock out of essential heath commodities	• Reduced newborns with low birth weight • % of newborns with low birth weight	Reduce infant mortality
Reduce the % of facility-based fresh still births from 1.5% to 0.5% by 2022	• IEC materials • Heath commodities supply	• Capacity building of health workers in management of labour and delivery • Community advocacy and mobilization on at least 4 antenatal care (ANC) visits • Procurement of health commodities • Strengthen referral system • Distribution of IEC materials	• Number of HCWs whose capacity in management of labour and delivery has been built • Number of community units mobilized and sensitized on 4 ANC visits • Number of health facilities supplied with commodities • % of perinatal deaths reviewed and uploaded into DHIS	• Improved perinatal deaths reviews and reporting • Reduced fresh still births • % of facility-based fresh still births	Reduced perinatal deaths

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Objective 5: To Minimize Exposure to Health Risk Factors					
Reduce the % population who smoke by half 2022	• Regulatory framework • IEC materials	• Community sensitization on regulatory framework • Conduct sensitization through outreaches	• Number of community sensitizations • Number of households provided with health promotion messages	• Reduced population who smoke • Proportion of population who smoke	• Reduce cases / deaths related to smoking
Increase the % infants under six months on exclusive breastfeeding from 85% to 95%	IEC materials	• Training health care workers to promote exclusive breastfeeding • Community advocacy and mobilization on exclusive breastfeeding • Distribution of IEC materials	• Number of HCWs who have been trained to promote exclusive breastfeeding • Number of community units mobilized and sensitized on exclusive breastfeeding • Number of health facilities supplied with commodities • Number of households provided with health promotion messages	• Increased proportion of infants under the age of 6 months who are exclusively breastfed • % infants under six months on exclusive breastfeeding	Reduce infant mortality
Increase the population aware of risk factors to health by 10%	IEC materials	• Training health care workers on health promotion • Community advocacy and mobilization • Distribution of IEC materials	• Number of households provided with health promotion messages	• Reduced health risk behaviors • Proportion of population aware of health risks	
Objective 6: To Strengthen Collaboration with Health-Related Sectors					
Reduce the % children under five stunted from 2.9% to 2.0%	• IEC materials • Partnerships • Commodities	• Capacity building of health workers in nutritional requirements of under-fives • Community advocacy and mobilization on nutrition in under-fives • Distribution of IEC materials	• Number of HCWs whose capacity in nutrition for under-fives has been built • Number of community units mobilized and sensitized on nutrition for under-fives • Number of health facilities supplied with nutrition commodities • Number of children under five years of age attending child welfare clinics who are under weight • Number of children under five years of age attending child welfare clinics who are stunted	• Reduce malnutrition in under-fives, • proportion of children under the age of 5 years who have stunted growth	Reduced under five mortality

Strategic target	Inputs	Processes	Outputs	Outcome	Impact
Reduce the % children under five underweight from 16.2% to 10%	• IEC materials • Partnerships • Commodities	• Capacity building of health workers in nutritional requirements of under-fives • Community advocacy and mobilization on nutrition in under-fives • Distribution of IEC materials	• Number of HCWs whose capacity in nutrition for under-fives has been built • Number of community units mobilized and sensitized on nutrition for under-fives • Number of children identified, referred and rehabilitated for malnutrition at community level • Number of children under five years of age attending child welfare clinics who are under weight • Number of children under five years of age attending child welfare clinics who are stunted	• Reduced proportion of children under the age of 5 years who are underweight • Proportion of under 5 who are underweight	Reduce under-fives mortality
Increase the % population with access to safe water from 54% to 73%	• Intersectoral collaboration/ partnerships • IEC • Infrastructure • Commodities	• Training of HCWs and CHVs • Community sensitization • Outreaches	• Number of households reached with water treatment messages by the trained HCWs and CHVs	• Increased access to safe water • proportion of households with access to safe water	Reduced burden of diarrheal diseases
Increase the % of households with latrines from 43% to 66%	• IEC materials • Guidelines • infrastructure	• Community advocacy and mobilization on latrine use • Capacity building of community health volunteers on community led total sanitation (CLTS) • Distribution of IEC materials	• Number of community units whose capacity in CTLS has been built • Number of open defecation free (ODF) villages • Number of villages triggered • Number of households with functional toilets	• Increased proportion of households with latrines	Reduced burden of diarrheal diseases
Increase proportion of households with adequate ventilation by 10% 2022	• IEC materials • Guidelines • infrastructure	• Community advocacy and mobilisation • Distribution of IEC materials	• Number of households inspected • Number of households with adequate ventilation based on inspection	• Increased houses with adequate ventilation • proportion of households with adequate ventilation	Reduced burden from respiratory illnesses
Increase the % of schools providing complete school health package by 25%	• IEC materials • Partnerships	• School health program • Outreaches	• Number of schools providing complete school health package	• Proportion of schools providing complete school health package • Increased coverage of schools providing complete school health package	Reduced morbidity and mortality

2.3 County Health Sector Strategic Plan Targets

The County Government, guided by this logical framework, has developed targets for the five year period to track the progress of health outcomes and equity, social and financial risk protection and responsiveness at the impact level; coverage of interventions, prevalence of risk behaviour and factors at outcome level (mapped to the national health policy objectives) and various intervention access, service readiness, and quality at the output level ; and also inputs and processes guided by the health system investment areas. The baseline, mid-term and end-term targets for the County Health Sector Strategic Plan are presented in the table 4 that follows:

Table 2: County Health Sector Strategic Plan Targets

Objective	Indicator	Targets (where applicable)					
		Baseline	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
		2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Eliminate Communicable Conditions	% Fully immunized children	84.2	88	90	93	95	97
	% of target population receiving MDA for trachoma	86	88	90	90	90	90
	% of TB patients completing treatment	86	88	90	90	92	92
	% HIV + pregnant mothers receiving preventive ARV's(HAART)	92	100	100	100	100	100
	% of eligible HIV clients on ARV's	84	90	90	90	95	95
	% of targeted under 1's provided with LLITN's	16.9	30	50	70	80	100
	% of targeted pregnant women provided with LLITN's	30	40	50	70	80	90
	% of under 5's treated for diarrhea	14	12	10	8	6	5
	% School age children dewormed	15	25	35	50	60	65
Halt, and reverse the rising burden of non-communicable conditions	% of adult population with BMI over 25	0.21	0.2	0.17	0.16	0.13	0.12
	% Women of Reproductive age screened for Cervical cancers	0.02	0.1	0.5	2	5	20
	% of new outpatients with mental health conditions	0.04	0.035	0.03	0.025	0.02	0.02
	% of new outpatient cases with high blood pressure	0.07	0.1	0.06	0.05	0.05	0.05
	% of patients admitted with cancer	397/23022 0.017	0.02	0.015	0.014	0.01	0.01

Objective	Indicator	Targets (where applicable)					
		Baseline	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
		2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Reduce the burden of violence and injuries	% new outpatient cases attributed to gender-based violence	0.05	0.045	0.04	0.35	0.03	0.025
	% new outpatient cases attributed to Road traffic Injuries	0.08	0.1	0.08	0.07	0.06	0.05
	% new outpatient cases attributed to other injuries	(11956/1010019) 1.18	1.1	0.9	0.8	0.7	0.5
	% of deaths due to injuries	(154/4501)= 0.0342146189735614	0.031	0.025	0.023	0.02	0.01
Provide essential health services	% deliveries conducted by skilled attendant	52	55	58	60	65	70
	% of women of Reproductive age receiving family planning	17	20	24	28	30	40
	% of facility based maternal deaths	(6/3924) 0.02	0	0	0	0	0
	% of facility based under five deaths	No data	0	0	0	0	0
	% of newborns with low birth weight	5.3	3.8	3.5	3.4	3.2	3
	% of facility based fresh still births	1.5	1	1	0.5	0.5	0.5
	Surgical rate for cold cases	No data	TBD	TBD	TBD	TBD	TBD
	% of pregnant women attending 4 ANC visits	38.9	50	54	60	67.4	77.4
Minimize exposure to health risk factors	% population who smoke	No data	TBD	TBD	TBD		TBD
	% population consuming alcohol regularly	No data	TBD	TBD	TBD		TBD
	% infants under 6 months on exclusive breastfeeding	85	88	90	91	93	95
	% of population aware of risk factors to health	No data	TBD	TBD	TBD	TBD	TBD
	% of salt brands adequately iodized	100 (Survey)	100	100	100	100	100
	Couple year protection due to condom use	No data	TBD	TBD	TBD	TBD	TBD

Objective	Indicator	Targets (where applicable)					
		Baseline	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
		2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Strengthen collaboration with health-related sectors	% population with access to safe water	54	56	60	65	70	73
	% of villages which are open defecation Free	(2/1969) 0.1	5	7	5	0	0
	% under 5's stunted	2.9	2.6	2.5	2.2	2.1	2
	% under 5 underweight	16.2	14	13.5	12.8	11.5	10
	School enrolment rate	60.1	70	75	78	80.1	85.1
	% of households with latrines	29%	32	35	38	40.5	42
	% of houses with adequate ventilation	No data (Survey)	TBD	TBD	TBD	TBD	TBD
	% of classified road network in good condition	No data	TBD	TBD	TBD	TBD	TBD
	% Schools providing complete school health package	No data	TBD	TBD	TBD	TBD	TBD
Investment Output							
Improving access to services	Per capita outpatient utilization rate (M/F)	1.2	1.15	1.1	1	0.95	0.9
	% of population living within 5km of a facility	21.4	25	32	35	40	50
	% of facilities providing BEmONC	(102/195) 52	63	65	74	78.8	88.8
	% of facilities providing CEmONC	(5/11) 36	50	60	68	100	100
	Bed Occupancy Rate	60	59	58	57	56	55
	% of facilities providing Immunization	(194/201) 85	90	93	94	95	98
Improving quality of care	TB Cure rate	83	80	90	92	92	92
	% of fevers tested positive for malaria	No data					
	% maternal death audits	(22/27) 84	100	100	100	100	100
	Malaria inpatient case fatality	No data	TBD	TBD	TBD	TBD	TBD
	Average length of stay (ALOS)	4	3	2.5	2.5	2	2

2.4 Key Responsibilities for Turkana Health Sector M & E

To be fully successful, M&E functions need to be carried out by the respective programmes and at all levels of health care delivery, from the national to the community level. Overall, the stewardship of the M&E agenda will be guided by three broad principles

a) Supporting the establishment of a common data architecture
b) Enhancing sharing of data and promoting information use for evidence-based decision making
c) Strengthening performance monitoring and review processes

The following section outlines the key responsibilities of various units under which M&E functions fall at the national and county level.

Table 3: Key responsibilities and functions of the M&E unit

Stewardship Goal	National level	County Level: CHMT	Sub-County Level: SCHMT	County Level: Partners	Facility level	Community level
Establishment of a common data architecture	Define standards for data sharing between aggregate and patient-level data. Coordinate development of minimum data sets and data requirements of the health sector. Create and maintain a data repository of health and health related information. Carry out oversight functions to manage all health and health-related data from service providers at all levels to inform policy formulation.	Conduct oversight to manage all monitoring, evaluation and research data from all programmes within their area of jurisdiction. Create and maintain a monitoring system and data repository. Collaborate and work in partnership with other statistical constituencies at the county level to build one county-wide M&E system based on the principles outlined in this document. Compile all reports from the Sub counties into a single County Health report.	Conduct oversight to manage all monitoring, evaluation and research data from all programmes within their area of jurisdiction. Compile all reports from the Sub county health facilities into a single sub-County Health report.	Support the counties in establishing data collection structures. Work collaboratively with the MoH M&E Unit to provide data, as appropriate, on population-based statistics, and vital events (births and deaths), and health related research data for comparative analysis and warehousing.	Maintain and update the Health Information System, including records, filing system(s) and registry for primary data collection tools (such as registers, cards, file folders), and summary forms (such as reporting forms, CDs, electronic backups). Safeguard data and information system from any risks, e.g., fire, floods, access by unauthorized persons. Compile all reports from the Technical Officers into a single health facility report.	Community Units: Maintain and update its M&E, which shall be shared regularly with household members in a forum as stated in the relevant community strategy. Community health workers: Maintain registers to document daily activities and report regularly to supervising health facility. Compile all reports from the CHW

Stewardship Goal	National level	County Level: CHMT	Sub-County Level: SCHMT	County Level: Partners	Facility level	Community level
Improve performance and review processes	Aggregate, analyses, disseminate and use health and health-related data on the performance of the health sector priorities outlined in the KHSSP from all MoH departments, SAGAs, national hospitals, CHMTs and others, and provide feedback to all. Compile all reports at the national level on performance tracking of the strategic plan. Analyze the quality of all reports received and ensure follow-up in case of incompleteness, problems with validity, and delays. Provide technical support to all national-level operational units, SAGAs, and national referral hospitals in monitoring and evaluation.	Produce a health sector performance report that includes service delivery metrics. Analyze the quality of all reports received and ensure appropriate follow-up in case of incompleteness or problems with validity, as well as delays from the Sub county levels. Provide technical, material and financial support for M&E to all sub counties. Collate, analyze, disseminate and use health and health-related data from all Sub county offices and give feedback	Produce a health sector performance report that includes service delivery metrics. Analyze the quality of all reports received and ensure appropriate follow-up in case of incompleteness or problems with validity, as well as delays from the facilities Collate, analyze, disseminate and use health and health-related data from all Sub county facilities and give feedback	Work within the health sector M&E framework and guidelines, and meet the reporting requirements as defined by minimum datasets.	Ensure compilation and processing of minutes, inventory, supervision and other activity reports. Analyze the quality of all reports received from various health facility units and ensure follow-up in case of incompleteness, problems with validity, or delays	Develop quarterly and annual community health reports for integration into facility reports.

Stewardship Goal	National level	County Level: CHMT	Sub-County Level: SCHMT	County Level: Partners	Facility level	Community level
Enhancing sharing of data and promoting use of information for decision-making	Develop M&E-related guidelines and policies. Prepare and disseminate national annual and quarterly performance review reports. Ensure proper information flow from various levels in accordance with national and international data and reporting obligations. (This includes, specifically, forwarding Country Health information as required to the Director for Health for forwarding to international actors.) Provide capacity building in M&E. Prepare and share the Annual State of Health reports during the Health Congress.	Ensure proper information flow from various levels to inform policy formulation, guidelines, and development of protocols, and to address country's international obligations. (This specifically includes forwarding the County Health report to the National MoH.) Prepare data analyses for discussion during the CECM and directorate meetings and forum for decision-making. Develop County Health report and share with the CECM Develop quarterly feedback to the CECM and County Director for Health and share with them. Disseminate quarterly reports to Sub county health teams and Health Committee.	Ensure proper information flow from health facilities and community health units to inform policy formulation, guidelines, and development of protocols in the sub counties. Prepare data analyses for discussion during the directorate meetings, the County M&E congress and other forum for decision making forwarding the Sub-County Health report to the County Director for Health.	Provide support to strengthen the MoH M&E Unit in their areas of operation (e.g., through provision of technical support and capacity building).	Ensure that every health facility summarizes health and health-related data from the community and health facility; analyses it; disseminates it and uses the information for decision-making; provides feedback; and transmits summaries to the next level. Prepare an analysis of the data for discussion during staff and board meetings for decision-making. Forward health and health-related reports to the Sub county level. Provide quarterly feedback to the health providers and the community unit committee. Disseminate quarterly reports to the health facility committee. Disseminate annual report to the health facility committee and Sub county forum	Forward the committee report to the facility In-Charge. Provide quarterly feedback to the community unit. Disseminate quarterly reports to the community unit. Disseminate annual report to the community unit.

3.Data Management

3.1Towards a common data architecture

In support of the establishment of a common data architecture, the county government appreciates that the county health sector needs to apply a commonly understandable classification for services, medicines and medical supplies, and cadres for staff. Further, it also needs to apply a standard coding system for all databases. As such, the use of defined standards for exchange of patient and aggregate level data across the health information system is crucial. In the implementation of this plan, the county government will underline the importance of a common data architecture and will seek the necessary support from the national ministry of health and partners to build capacity in this regard.

3.2 Data Collection

Towards enhancing data sharing and information use for decision-making, the county government appreciates the need to enhance the capacities for data sharing, statistical management through data sharing and information use to support evidence-based decisions.

Data collection for M&E indicators will utilize both qualitative and quantitative methods and, as much as possible, employ standardized data collection tools and analysis techniques. Most data will be collected routinely, and any survey-based indicators will be collected at baseline, midterm and at the end of implementation of the strategic plan. Data collection is appreciably carried out at all the levels of the county health system. The following activities are undertaken at all levels – collection of data on inputs, processes and outputs; processing or aggregation of data collected from the various service delivery points; and review of data for quality purposes. Data collection tools applied include EMR, eHealth tools, KHHIS, LMIS, HRIS, Commodity Management Systems and Financial Systems. These tools as well as the reporting forms and responsible county personnel are listed in Appendix 2.

This plan anticipates that the relevant reporting tools will be made available at all levels of the county health system; and shared accordingly with the faith based and private for-profit facilities to ensure there is harmonised and complete reporting. Sufficient resources will be allocated, and the M&E unit will monitor the reporting tools in terms of stock levels to ensure availability and CMHT/SCHMT will ensure proper utilisation of tools through regular supportive supervision.

3.3 Data sources

Turkana County Department of Health will rely on both routine and non-routine data sources.

3.3.1 Routine data sources

Routine data will be collected daily using MOH registers at the community and facility. At the community, data will be collected by the CHVs at the household level. At the facility, the healthcare worker providing the specific health service will input data into the daily service register. This data will be aggregated by the CHEW (community data) and facility-in-charge (facility-based data) at the end of every month using summary tools and filled in the KHIS by the SCHRIO. In addition, disease surveillance data; vital registration of births, deaths and marriages; and information on human resources will be updated regularly.

KHIS - The KHIS serves as the primary health services monitoring system for the health sector. The County government will work with national ministry of health to ensure that the existing system for KHIS is effectively utilised to support reporting on all the agreed indicators (outlined in the Annex 1). The county government will focus on improving timeliness and completeness in KHIS data reporting, strengthen regular data analysis and review at health facility, sub-county and county levels, support the mechanism for data collection and reporting from private sector health care facilities, support quarterly data review meetings of at sub county level and timely analysis and dissemination of data at all levels.

Integrated Disease Surveillance (IDSR) - The weekly epidemiological surveillance reporting system that reports on diseases of epidemic potential will be utilised to capture necessary data.

Logistic Management Information System (LMIS) -The web-based platform for ordering EMMS will be used to track quarterly orders made and orders filled and order fill rate.

Electronic Medical Records (EMR) - The county government currently has 13 facilities that are already using EMR for recording the daily activities at the facilities. Utilisation of this system will continue and challenges regarding inadequate budget for maintenance of system will be addressed.

Tibu TB Care System - Tracking TB patients in support of DOT and follow ups

Electronic ART dispensing tool - At central ART sites the system is used for dispensing ARTs and provides data on the numbers of persons accessing ARTs.

Human Resources Information System (HRIS) - employees' information regarding gaps in staffing and employment, training /capacity needs, training database and development and attrition rate. Applies staff return forms.

Vital Registration - births registration (B1), deaths registration (D1), marriages and divorces.

Integrated Financial Management Information System (IFMIS) - Financial returns, ledgers, vote books

3.3.2 Non – Routine Data sources

Non-routine data collection will be undertaken through surveys and census. Targeted surveys for the period include the following:

Health community surveys- Surveys undertaken by the Kenya National Bureau of Statistics (KNBS) with support from partners as well as by the county itself will be targeted to provide information on measures of household-based coverage indicators for determining the impact of interventions. Community surveys for the period will include the following:

a) Kenya Population and Household Survey – popularly known as the National Census was last undertaken in 2009 and is scheduled to be undertaken in 2019. The county government will utilise the data from this census for its key decisions.

b) Kenya Demographic and Health Survey: The last Kenya Demographic and Health Survey (KDHS) was conducted in 2014 and included standardized questions on coverage of key health interventions. The next one is anticipated in 2019/2020.

c) Malaria Indicator Survey: The last Malaria Indicator Survey was undertaken in 2015 and will be undertaken again in 2019.

d) Kenya HIV/AIDS indicator Survey - The last Kenya HIV/AIDS indicator Survey was undertaken in 2012. The survey on HIV/AIDS indicators was carried out in 2018 but results are due in early 2019.

e) Kenya Mortality Trends (first one covered 2012 to 2016)

f) Small Scale Studies: Smaller scale household surveys are conducted periodically when there is a specific question requiring an answer. Such surveys have in the past included the following SMART survey – Annual Nutrition Survey - Conducted in July /August and targeting under 5 and Nutrition KAP – Knowledge Attitude and Practices Survey – targets Maternal Infants and Young Child Nutrition

Health Facility Surveys

g) Service Provision Assessment: These assessments are normally nationwide and designed to collect information on the availability and quality of specific services – such as RMNCAH, infectious disease (malaria, TB and HIV/AIDS) services provided in health facilities.

h) Service Readiness Assessments

i) Commodities Availability Assessment

3.3.3 Other complimentary methods

Other complimentary methods to be applied in data collection include the following:

j) Pharmacovigilance -The Pharmacy and Poisons Board (PPB) has designed a generic form to collect reporting of adverse drug reactions (ADR) as part of the pharmacovigilance system.

k) Health facility- based surveillance via sentinel sites and disease surveillance system

l) Activity monitoring systems/activity reports at both county and sub-county level. Sub-county

m) level - routine implementation reports are compiled to understand progress of sub-county-level implementation of selected interventions. Examples of such reports include routine and activity-specific supervision and project implementation reports.

n) County level: At county level, compilation of activity reports by programs and the stakeholders will be coordinated by program managers and shared with M&E unit for further analysis and synthesis of level of achievement of relevant indicators and compilation of performance reports.

o) Periodically, several reports (sometimes with specified formats) are required from the county by the national ministry of health, and development partners.

p) Other studies -Periodically, specific studies will be undertaken to respond to significant questions in county health service delivery. These studies are intended to improve current interventions and provide opportunities for improvement.

3.4 Data Flow

The data communication for the county health sector shall follow the existing county health and national health ministerial coordination structures. The HMIS, IDSR, activity reports and services utilization data (including supervision/mentoring, logistics and supplies) are institutionalized mechanisms of data collection from the national level to the health facilities through the counties and sub county health coordination structures. From the lowest level, reports flow to the higher levels and in return, feedback is expected on the outputs of the reported data and any new information that could be available from other sources.

The county department for health services will use various communication channels to ensure public access to data and reports. Quantitative and qualitative data will be made publicly accessible through the relevant county government databases (The databases include but are not limited to DHIS, HRIS, IFMIS, and LMIS). The Local Area Network (LAN) installed at the county health services department will facilitate inter-departmental communication. Email accounts will be created for all county and sub county teams and hospitals and will be used for communication with the department of health services including the M&E unit. The public will also be able to access health information on the county government website, www.turkana.go.ke.

In addition to the Information and Communication Technology facilities at the department of health services, the M&E Unit and the M&E TWG will collaborate with the persons responsible for Health Promotion at the department to translate data and information according to the target audience and utilize various communication channels including radio, television, teleconferencing, newsletters, and booklets. Figure 3 shows the data flow hierarchy for the county health data.

DATA MANAGEMENT HIERARCHY

UPWARD DATA FLOW

	Data Collection	Compilation	Storage	Analysis	Reporting	Use
National	Indicator definition; Tools development	Data aggregation	Data warehousing	National level	National reports; Donor reports	Policy formulation; Resource management
Person(s) responsible	M&E TWG	HMIS department; Divisional heads	HMIS department; Divisional heads	HMIS department; Divisional heads; National TWGs	HMIS department; Divisional heads	Policy makers
County	Indicator definition; Customization; Tools development	Data aggregation	Data archiving	County level	County level	Policy formulation; Resource allocation
Person(s) responsible	CHMT, TWGs	CHRIO and M&E Coordinator	CHRIO and M&E Coordinator	CHRIO and M&E Coordinator	CHRIO and M&E Coordinator	County government
Sub County	Data verification and audit	Data entry and tabulation	Data archiving	Sub county and facility level	Sub county level	Indicator monitoring
Person(s) responsible	SCHRIO, SCHMT	SCHRIO, SCHMT	SCHRIO	SCHRIO	SCHRIO	SCHMT
Facility (public and non public)	Data Capture	Collation and transmission	Data archiving	Facility + Community	Departmental and facility data	Resource Management; Health talks
Person(s) responsible	HRIO, facility managers	HRIO, facility managers	HRIO, facility managers	HRIO, facility managers	HRIO, facility managers	HRIO, facility managers
Community	Data Capture	Collation and transmission	Data archiving	Community Unit	CHEW	Community mobilization, planning
Person(s) responsible	CHW, CHV	CHEW	CHEW	CHEW	CHEW	CHEW

FEEDBACK FLOW

Figure 2: Turkana County Data Flow and Use map

3.5 Data Quality

The county government will ensure that all levels of the county health system generate and disseminate quality data to support decision-making. A data quality improvement team will be created at county, sub-county and facility levels to oversee data quality assurance processes in the county. Data quality assurance processes will include periodic Data Quality Audits (DQA) of recorded data by supervisors from county health services department and (supported by implementation partners); regular training of staff, and provision of routine feedback to staff at all levels on completeness, reliability and validity of data; and data quality assessment and adjustment which will be carried out periodically. The County Health Records and information officer, which will be an account of the program areas, will maintain a database of RDQAs conducted in the county quality and action points from the DQA exercises.

The objective of data validation is to ensure that the data used by the county health sector to make decisions is sound and accurate. Specific efforts will be made to undertake data validity including; application of the computed validation/data accuracy index into county, sub county and facility annual reports; specific support for outliers; routine (quarterly) data reviews on a sample of facilities.

Regular data quality assurance for facility-based data including regular review and verification for accuracy and completeness will be carried out monthly by the health facility in-charges at all levels. All periodic reports will be reviewed and endorsed before submission to the relevant stakeholders. DQA will be carried out at points of data collection, collation and analysis by the county health services department technical staff and by the HRIOs within the sub county.

The Standardized DQA tools developed by the national ministry of health and its programs will be applied at all levels. DQA for county health evaluation studies will be carried out using agreed formats by the county health services department M&E unit, which will have responsibility of coordinating the county health sector evaluation studies. County health facility (Hospitals Review Boards) will have the responsibility of data validation for health systems research carried out in the respective institutions as guided by the national MOH regulations.

In addition to the above data checks and validation, the county health services department M&E unit will carry out annual Rapid Data Quality Assessment (RDQA) in which a selected number of health facilities will be drawn from the master facility list for this assessment. RDQA will be undertaken together with other facility-based assessments where possible in the spirit of joint assessments. The RDQA will be carried out as a quality assessment of the entire process of data collection, analysis and synthesis for the county health sector.

The county health services department has an institutionalized mechanism for verification and validation of health data from both routine HMIS and activity reports. The department will also carry out verification of reported data for key county health indicators to check if service delivery and intermediate aggregation sites are collecting and reporting data to measure the county health outcome indicators accurately and on time and to cross-check the reported results with other data sources. This DQA will determine if a sample of Service Delivery Sites accurately record the activity related to the selected indicators on source documents. It will then trace that data to see if it has been correctly aggregated and/or otherwise manipulated as it is submitted from the initial Service Delivery Sites through intermediary levels to the county health services department. This data verification exercise will take place in two stages:

- In-depth verifications at the Service Delivery Sites; and
- Follow-up verifications at the Intermediate Aggregation Levels and at County Health Services Department M&E Unit.

The county health department will liaise with all stakeholders through the M&E TWG to standardize and harmonize county health sector DQA tools and instruments.

3.6 Data Analysis

The county government will undertake analysis and synthesis of data at county, sub-county and facility levels to make the data meaningful for planning and decision-making. By applying various tools of analysis including content analysis, statistical analysis and GIS mapping, actual results will be compared against planned and agreed target; variations will be explained, and comparisons undertaken at different levels and across interventions. Analyzed and synthesized data will be packaged and shared through various reporting mechanism including monthly, quarterly and Annual Progress Reports, mid- and end-term evaluations, thematic studies and surveys. The department of health services in collaboration with partners will strengthen the capacity of the county health sector to undertake data analysis and synthesis at all levels -CHMT, SCHMTs, health facilities and civil society organizations, to enhance bottom-up planning and decision-making.

3.7 Reporting, Data Dissemination and Data Sharing

Data needs to be translated into information that is relevant for decision-making. Data will be packaged and disseminated in formats that are determined by management. The department of health services will ensure that service delivery data is packaged and displayed at the various health facilities using formats such as the KHIS dashboard reports, scorecards and service charter boards. The timing of information dissemination should fit in with the planning cycles and needs of the users. Further, the department will promote sharing of information across all the levels of care. Data and information generated at all levels of the sector and from different sources will be shared, translated and applied for decision-making during routine monitoring, periodic sector performance review, planning, resource mobilization and allocation, accountability, designing disease-specific interventions, policy dialogue, review and development.

3.8 Performance Reporting and Review process

The county health sector monitoring and review process is interlinked across the various planning levels. Service delivery information that is utilized for monitoring and review process will be obtained through a bottom-up approach based on the county platform that uses the decentralized structures (sub-counties, wards and county entities) as the units for design and analysis; based on continuous monitoring of different levels of indicators; gathering of additional data before, during and after review period for assessment applying a variety of methods and including interim and summative evaluation. Information at each level will be provided while management support (governance and partnership information) will be analyzed at the level the planning unit below it provides it.

The M&E unit in collaboration with stakeholders will coordinate the gathering of performance data to enable tracking of progress made against the agreed targets and objectives. Performance reports will be entrenched as a standing agenda in the meetings of the CHMT, M&E unit and even the M&E TWG. Performance monitoring and review will be carried out at all levels on a regular basis, the frequency being driven by the sector's need for information, as follows:

- At the community level, performance monitoring and review will be done on a monthly, quarterly and annual basis.
- At the facility level, it will be done on a daily, weekly, monthly, quarterly, biannual, annual and need-by-need basis.
- At the sub county level, it will be done on a weekly, monthly, quarterly, biannual, annual and need-by-need basis.
- At the county level, monitoring and review will be done on a weekly, monthly, quarterly, biannual, annual, midterm, end term and need-by-need basis.

Table 4: Performance Reviews Schedule

Methodology	Output	Frequency	Prepared by	Responsible person
Monthly progress report	Monthly progress reports	Monthly	CHEWs, Facility In charges, SCHMT	SCHRIO
Quarterly bulletin	Quarterly bulletin reports	Quarterly	County M&E Unit	M&E unit Coordinator/CHRIO
Quarterly report	Quarterly reports	Quarterly	County M&E Unit/ SCHRIO	M & E unit Coordinator/CHRIO
Quarterly performance review	Quarterly performance review report	Quarterly	County M&E Unit/ SCHRIO	M&E Unit Coordinator/CHRIO
Bi-annual DQA reports	Bi-annual DQA report	Bi-annual	County M&E Unit/ SCHRIO	M&E unit Coordinator/CHRIO
Annual performance report	Annual performance report	Annual	County M&E Unit/ SCHRIO	M & E unit Coordinator/CHRIO

The M&E Unit will ensure performance reports generated are distributed to the data generating points, and are also reviewed, amended and, if need be, new priorities for implementation for the subsequent years identified. In addition to the periodic performance report, there will be special surveys, such as patient exit surveys and data quality audits, that shall be coordinated by the M&E Unit.

This M&E plan will also inform the target setting and evaluations undertaken through the County Performance Contracting and Staff Performance Appraisal Process. Quarterly review of the performance contracts signed by the CECM, COH, Directors and Hospital Heads will be based on targets cascaded from the Annual Work Plan and aligned to this M&E Plan. The mid-year and end year review of staff performance will also be informed by this plan.

In terms of review of the strategic plan, this plan will inform the mid-term review to be conducted in the third year of the strategic plan's implementation, as well as at end term review to be carried out at the end of the strategic plan period to ascertain the county's performance in achieving health objectives.

3.9 Evaluation Plan

The evaluation plan describes what will be evaluated, how and when. The evaluation endeavors to look at the overall project/ interventions in terms of the operations, governance, deliverables, and hence assist the County Health Management Team and partners to learn and make improvements. The information obtained helps in planning, designing/redesigning and developing health sector interventions that are relevant, effective, efficient, sustainable and impactful.

The County Government will develop a detailed evaluation plan in the form of Outcome Measurement Framework that will facilitate the evaluation of outcome indicators included in this M&E Plan. The outcome measurement framework will elaborate amongst others – priority questions based on policy and strategic objectives, outcome indicators, linkage between outcome indicators, immediate outputs and the resources and processes applied method of analysis, data sources and presentation. For purposes of tracking the outcomes, an outcomes measurements database will be established and made accessible to support community participation in monitoring and evaluation.

Table 5: Evaluation Plan Guide

What to Measure	Evaluation Questions	Method to answer the Questions	Frequency	Responsible Person
Relevance	• How well was the health programme planned out, and how well was that plan put into practice? • To what extent are the objectives of the health programme still valid? • Are the activities and outputs of the health programme consistent with the overall goal and the attainment of its objectives? • Are the activities and outputs of the programme consistent with the intended impacts and effects?	• Monitoring system that tracks actions and accomplishments related to bringing about the mission of the initiative (activity) • Survey on satisfaction with goals (Client satisfaction survey) • Survey on satisfaction with outcomes (Provider satisfaction survey)	• Baseline (2018) • Annual • Midterm (2021) • End term (2023)	County M&E Coordinator/CHRIO
Effectiveness	• To what extent were the objectives achieved / are likely to be achieved? • What were the major factors influencing the achievement or non-achievement of the objectives?	• Monitoring system that tracks actions and accomplishments related to bringing about the mission of the interventions (activities) • Behavioural surveys (primary and secondary data sources) • Interviews with key informants	• Baseline (2018) • Annual • Midterm (2021) • End term (2023)	County M&E Coordinator/CHRIO
Efficiency	• Were activities cost-efficient? • Were objectives achieved on time? • Was the health programme implemented in the most efficient way compared to alternatives?	• Cost-effectiveness analysis	• Baseline (2018) • Annual • Midterm (2021) • End term (2023)	County M&E Coordinator/CHRIO
Impact	• What resulted from the health programme? • How has behaviour changed because of participation in the program? • Are participants satisfied with the experience? • Were there any negative results from participation in the program? • Were there any negative results from the program? • How many people have been affected? • Do the benefits of the program outweigh the costs?	• Behavioural surveys (primary and secondary data sources) • Interviews with key informants	• Baseline (2018) • End term (2023)	County M&E Coordinator/CHRIO
Sustainability	• To what extent did the benefits of the programme or project continue after donor funding ceased? • What were the major factors, which influenced the achievement or non-achievement of sustainability of the programme or project?	• Monitoring system that tracks actions and accomplishments related to bringing about the mission of the initiative (activity) • Behavioural surveys (primary and secondary data sources) • Interviews with key informants	• Baseline (2018) • Midterm (2021) • End term (2023)	County M&E Coordinator/CHRIO

4.Implementation Arrangements

Under the County Health Sector Strategic Plan for 2018-2022, streamlining the organization of collection and utilization of data for evidence-based decision making at all levels of the county health care system is identified as a priority. The strategy appreciates that addressing the capacity issues across the health strengthening systems is critical to improving the county health M&E system. Various initiatives, including those supported by development and implementation partners, are currently under implementation towards this end.

This plan seeks to ensure that county M&E system for the health sector is linked to the County Integrated Monitoring and Evaluation (CIMES) spearheaded by the Department of Economic Planning; as well as the national government's health monitoring and evaluation system coordinated by the Monitoring and Evaluation unit of the national Ministry of Health and the National Integrated Monitoring and Evaluation Systems (NIMES) under the national Ministry responsible for Planning. In the sections that follow, the proposed coordination structures for monitoring and evaluation; proposed key activities and the attendant cost estimates are outlined.

4.1 Implementation Arrangements

The coordination arrangements proposed in this plan are geared towards ensuring that the key M&E functions that focus on information generation, validation, analysis, dissemination and use towards delivery of the sector priorities identified in the strategic plan and the CIDP are effectively and efficiently delivered.

4.1.1 Coordination of County Health Monitoring and Evaluation

The county department of health services together with partners have agreed to work together in the spirit of three-ones (one implementation plan, one coordination mechanism and one M&E framework). The contribution of the partners to county health M&E will be effected by ensuring partners' efforts are in line with and coordinated by the county department of Health and, where appropriate, sharing and developing capacity for county health M&E. Data collected by partners has to be coordinated in order for the county health department to be able to monitor, evaluate and report holistically on progress of health interventions in Turkana County. This will enable the county department of health services to track progress made on national and international commitments too.

To enable the county government effectively co-ordinate M&E activities, the department of health services has identified and sensitized staff and stakeholders on the institutional and individual capacities required to support the M&E functions. At the institutional level, the county government has set up a directorate for health administration and planning that is responsible for amongst other functions, planning, monitoring and evaluation, under which the unit responsible for coordinating M&E functions for the health services department is anchored. The directorate is expected to accord the necessary linkages with the key programs for health services (curative, preventive, and rehabilitative) as well as the economic planning department for the county government. The department of health services has also established Research Monitoring and Evaluation as a key subprogram under the Program on Health Administration and Planning in its Program Based Budget for purposes of ensuring that resource allocation for this agenda is elevated.

The roles and responsibilities for the M&E unit are summarized in Table 4.1

Table 4.1: Roles and Responsibilities of Health Department's M&E Unit

- Coordinating the setting up the monitoring and evaluation system for health with focus on developing work plan and budget for monitoring and evaluation activities
- Collect, compile relevant M&E information
- Establish and maintain a database of health outcome measures
- Establish and maintain functional linkages with other relevant partners involved in county health M&E, including the national Ministry of Health, other County departments and sectors
- Analyze and interpret programmatic as well as outcome and impact data
- Prepare and regularly update the county health profile
- Provide feedback; prepare quarterly monitoring reports and annual health reports and reviews
- Develop capacity at the sub county level in M&E
- Serve as the Secretariat of the M&E Technical Working Group (TWG) that coordinates M&E within the County Health Sector.
- reviewing and providing feedback to programmes on the quality of methodologies established to collect monitoring data
- preparing consolidated progress reports for the County Health Stakeholders Forum

The County Department for Health Services will strengthen the current M&E unit within the department to enable it support coordination of the county health M&E functions. In proposing a suitable structure for the M&E unit, the county government has considered the need to ensure close linkages with the highest decision making organs, need to build a blend of skills necessary for delivery of the functions and build-up of a functional M&E system as well as providing opportunities for career development; and close collaboration with the County planning unit with a bid to feed appropriately into the County Integrated Monitoring and Evaluation System (CIMES). The structure is presented below:

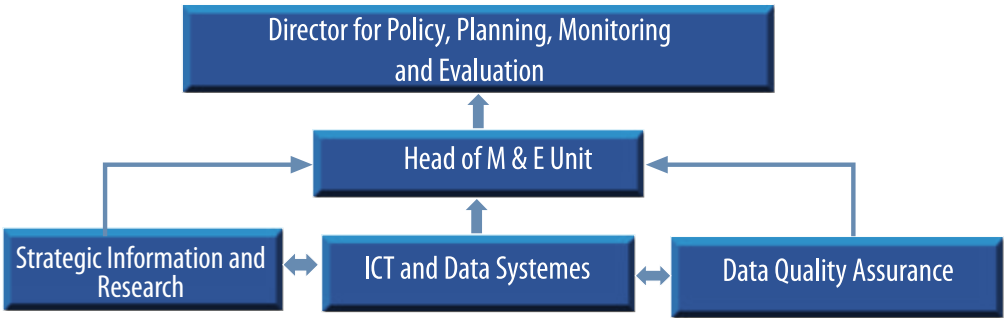

Figure 3: Organization structure for the Turkana Health Services Department M&E Unit

4.1.2 Linkage with stakeholders

To accord effective participating of stakeholders and partners in the delivery of health M&E functions, the county health sector will strengthen and utilize the Monitoring and Evaluation Technical Working Group. The M&E TWG will be reconstituted and its capacity needs identified, and support sought to fill in gaps from the partners closely working with the county health services department. The M&E TWG shall share its reports with the County Health Stakeholder Forum through its Steering /Coordination Committee.

Table 4.2 outlines the functions of the county M&E TWG for health services.

Key functions of M&E TWG
• Supporting coordination/harmonization of M&E activities (data collection, analysis, dissemination) among the MOH and the partners.
• Identifying and prioritizing critical action steps for county, sub-county and facility M&E work to assure that action is taken by the relevant group(s) to achieve quality M&E in a timely fashion.
• Promote operational research to support evidence-based, efficient programme implementation and the use of M&E tools.
• Identifying and recommending strategies for addressing the needs for capacity building in M&E at all levels.
• Developing and maintaining consensus around M&E strategies across county department of health and partners.
• Developing and providing technical guidance on selection and definition of indicators for county health reporting.
• Providing technical guidance on appropriate data collection methods, analytic strategies, and dissemination of recommendations.
• Monitoring changing needs in health M&E arena.
• Advocate for M&E investments through county government and partners (human resources, finance, M&E agenda
• Coordinate and work with county health department to guide data review meetings, Data Quality Audits (DQAs), Annual Work Plans (AWPs), Annual Performance Reviews (APRs) and other M&E processes that will help inform intervention and programming.

4.2 Operational Guidelines and Tools for County Health M&E

Implementation of this M&E Plan requires the county department of health to put in place various guidelines, standard operating procedures and protocols for data management, data quality assurance, data analysis and synthesis, and data dissemination. During the implementation of the CHSSP 2018-2022, the county government will formulate guidelines (or adopt the national ones where they are in existence) and follow up on implementation. This plan acknowledges the role of national government in setting policies, standards and regulation; and therefore, the existence of various standards. The county government will disseminate the standards and guidelines to the decentralized structures and support their implementation. These guidelines include amongst others: National M&E Framework, Monitoring and Evaluation Institutionalization Guidelines, Health Information System Policy, Indicators Manual and SOP, Data Quality Assurance Protocol and the Kenya Health Enterprise Architecture.

This plan envisages that the county health department will need to develop SOPs for data collection, data collation and reporting; data cleaning and validation, evaluations, survey and research, performance review, data review, and data dissemination. With regards to the tools supporting the implementation of the above SOPs, the county will continue support the application of both manual and electronic tools at the appropriate levels of the healthcare system.

4.3 Dissemination of Information and Information Products

Data need to be translated into information that is relevant for decision-making. Data will be packaged and disseminated in formats that are determined by management at the various levels. Service delivery data shall be packaged and displayed at the various health facilities using the HMIS formats and designed non-HMIS formats. The timing of information dissemination will be scheduled to fit in the planning cycles and needs of the users.

County health information will be disseminated through reports (electronic and print) to stakeholders, presentations and workshops, annual health review meetings, media briefs international health days, publications, websites and other documentation. Information products will be disseminated through:

- Quarterly and Annual Health Statistical Reports and Bulletins
- Quarterly Performance Review meetings and Reports
- Annual Performance Review
- Dissemination of Survey Findings: Feedback on survey findings will be in form of workshops and dissemination of reports, which will be circulated to relevant stakeholders in hard copy as well as through the county website.

5.Monitoring and Evaluation Implementation Framework

5.1Components of the County Health M & E system

In developing, the M&E system strengthening implementation matrix, the County Department of Health Services has considered the 12 main components of an M&E system that are essential for effective and efficient delivery of M&E functions. These components will be strengthened progressively.

Table 6: Components of the M&E System

Component	Description
Organisation Structures for M&E functions	The county health services M&E Unit will coordinate health M&E functions in the county. Its roles are defined in section 4.1.
Human Capacity for M&E	The county will seek to hire or deploy where necessary, staff with necessary technical expertise and experience to support M&E functions in the department of health services. Further, the staff will be provided with continuous training and other capacity building initiatives to ensure that they keep abreast with current and emerging trends in the field.
Partnerships for planning, coordinating and managing the M&E system	The county government will collaborate with other organizations on M&E systems; to complement it's M&E efforts during the M&E process and act as a source of verification of whether M&E functions align with intended objectives. Such partnerships will extend to other government agencies, as well as private sector providers.
M&E framework/Logical Framework	The M&E framework outlined in Chapter 2 is crucial for the department of health services in that it outlines the objectives, inputs, outputs and outcomes of the intended programs and the indicators that will be used to measure them.
M&E work plan and costs	The costed M&E implementation work plan outlined in this chapter and which will be aligned to the Annual Work Plan shows how the resources that have been allocated for M&E functions will be used to achieve the goals of the M&E.
Communication, advocacy and culture for M&E	The county government shall implement policies and strategies to promote communication and advocacy initiatives for M&E functions, without which it will be difficult to entrench an M&E culture within the county department of health services. Information products will be utilised towards this end.
Routine programme monitoring	The county department of health services will ensure that data is collected, collated, analyzed and reported and that performance reviews are carried out on a continuous basis to track the implementation of the County Health Sector Strategic Plan
Surveys and surveillance	The county will undertake surveys, surveillance frequently, and use the information to evaluate progress of the health programs.
County and Sub-County databases	This plan has developed strategies of submitting relevant, reliable and valid data to national, county and sub-county databases

Component	Description
Supportive supervision and data auditing	The county health services department will ensure regular supportive supervision and data auditing for purposes of strengthening the M&E system. Data auditing is carried out for data reliability and validity while supportive supervision will be carried out to ensure the M&E process are operating efficiently.
Evaluation and research	The health services department will undertake baseline mid- and end-term evaluations of health programs at specific times to establish whether health programs have met the desired objectives. The evaluations will also provide further health information and learning experiences to be shared with county health stakeholders.
Data dissemination and use	The information dissemination plan in this plan will provide for effective sharing of information gathered during implementation. This will support decisions geared towards reinforce the implemented strategy or to change it. Further, it will also cement accountability to stakeholders and enable community participation in health M&E.

5.2 County Health M&E System Implementation Framework

The county will implement the following interventions towards strengthening the County Health M&E system. These activities will be factored in the Annual Work Plan for the department of health services under the sub -program of M&E in the planning and administration program, for the purposes of resource allocation.

Table 7: M&E System Strengthening Implementation Framework

Activity	Timeline (Yrs)					Responsibility	Collaborating agencies	Budget (KShs)	Source of funding	Expected outcome	Key Assumptions
	1	2	3	4	5						
Present the M&E draft plan to County Health M&E TWG and CHSF	X					CDH	CMLAP II and AFYIA Timiza		Turkana County / USAID	Consensus gained about the plan	
Print and Disseminate the M&E plan	X					CDH	CMLAP II and AFYIA Timiza	1,000,000	Turkana County / USAID	M&E plan disseminated	
Recruit/ Deploy staff to the M&E Unit as per proposed structure	X	X				COH	None		Turkana County	Improved M&E planning and implementation	Advocacy with the CPSB to be undertaken
Conduct Quarterly M&E TWG Meetings	X	X	X	X	X	COH	Turkana County and Implementing Partners	4,000,000	Turkana County, USAID, CDC	Improved M&E planning and implementation	
Procurement of 10 Computers & accessories for M&E Unit	X	X				CDH	None	1,500,000	Turkana County	Computers & accessories procured	
Establish LAN at county, subcounty and health facilities (hospitals and high volume health centres)	X	X	X	X	X	ICT Head	None	15,000,000	Turkana County, USAID, CDC,	Improved access to data and timely reporting	
Print data collection and reporting tools	X	X	X	X	X	CHRIO	None	15,000,000	Turkana County, USAID, CDC,	Improved data collection & management	
Establishment of a training database	X	X				HR	HRH Kenya	500,000	Turkana County, USAID	Improved coordination	
Training the CHMT, sCHMT, M&E and HIS focal persons on M&E & Reporting	X	X				CHRIO	CMLAP II, Afya Timiza, Afya Nyota,	2,500,000	Turkana County, USAID, CDC	Improved data collection, management (including missing data), quality improvement and dissemination	
Training of M&E Staff of the County HIS/M&E unit in data analysis and reporting		X	X			CDH	CMLAP II	300,000	Turkana County, USAID, CDC	Improved data collection & management	Turkana County recruits Health M&E staff
Production/Compilation and dissemination of Quarterly & Annual reports	X	X	X	X	X	CDH	CMLAP II, Afya timiza, Afya Nyota	12,500,000	Turkana County, USAID, CDC	Quarterly and annual M&E reports disseminated	Stakeholders attend meetings
Quarterly data review meetings with stakeholders	X	X	X	X	X	CDH	Turkana County and Implementing Partners	11,200,000	Turkana County, USAID, CDC	Improved coordination	Stakeholders attend meetings

Activity	Timeline (Yrs)					Responsibility	Collaborating agencies	Budget (KShs)	Source of funding	Expected outcome	Key Assumptions
Disseminate HIS and M&E Policies and Standards(SOPs and guidelines) at all levels	X	X				M&E Coordinator/ CHRIO	Turkana County and Implementing Partners	3,000,000	Turkana County, USAID, CDC	Policies, SOPs and Guidelines disseminated and understood	
Undertake quarterly supportive supervision	X	X	X	X	X	CDH	Turkana County and Implementing Partners	11,000,000	Turkana County, USAID, CDC	Improved M&E planning and implementation	
Monthly supervision to facilities by sCHMT	X	X	X	X	X	sub-County Health Coordinators / MoHs	Turkana County and Implementing Partners	11,000,000	Turkana County, USAID, CDC	Improved M&E planning and implementation	
Hold Quarterly Stakeholder Meetings/Forum	X	X	X	X	X	COH	Turkana County and Implementing Partners	18,000,000	Turkana County, USAID, CDC	Improved coordination of M&E interventions	
Developing data collection tools for non-HMIS data	X	X				M&E Coordinator/ CHRIO	Turkana County and Implementing Partners	3,500,000	Turkana County, USAID, CDC	Non HMIS data collection tools utilized	
Conducting mid-term evaluation of the County Health Sector Strategic Plan			X			CECM	Turkana County and Implementing Partners	2,500,000	Turkana County, USAID, CDC, World Bank	Improved implementation of M&E plan	Support of Research and Training Institutions to be sought. A Protocol shall be developed and shared
Conducting end-term evaluation of the County Health Sector Strategic Plan					X	CECM	Turkana County and Implementing Partners	2,000,000	Turkana County, USAID, CDC, World Bank	Improved implementation of M&E plan	
Develop a Data Quality Audits (DQA) Scheduling and tracking tool for DQIs	X					M&E Coordinator/ CHRIO	Turkana County and Implementing Partners	300,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved Data quality	
Conducting data quality audits (DQA) and verifications	X	X	X	X	X	M&E Coordinator/ CHRIO	Turkana County and Implementing Partners	17,000,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved Data quality	
Develop and implement a County Health Outcomes Measurement Framework	X					M&E Coordinator/ CHRIO	Turkana County and Implementing Partners	1,500,000	Turkana County, USAID, CDC, World Bank, Global Fund	up to date County Health indicators status	
Conduct evidence-based surveys and research	X	X	X	X	X	M&E Coordinator/ CHRIO	Turkana County and Implementing Partners	3,400,000	Turkana County, USAID, CDC, World Bank, Global Fund	up to date County Health indicators status	

Activity	Timeline (Yrs)					Responsibility	Collaborating agencies	Budget (KShs)	Source of funding	Expected outcome	Key Assumptions
Train county health staff at all levels on data management (ICD 10, Analytical data packages, iHRIS, DHIS)		X	X	X		COH	Turkana County and Implementing Partners	1,800,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved data collection & management	
Develop a County Health Enterprise Architecture with linkages to existing subsystems	X					Head Health ICT	Turkana County and Implementing Partners	6,000,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved data collection & management	
Compilation of County Health Bulletin on a Quarterly basis	X	X	X	X	X	M&E Coordinator	Turkana County and Implementing Partners	4,800,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved information dissemination and use of information for decisions	An electronic version to be considered
Produce Annual County health profile and fact sheet	X	X	X	X	X	M&E Coordinator	Turkana County and Implementing Partners	2,000,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved information dissemination and use of information for decisions	
Monthly update of Health Portal in the County Website	X	X	X	X	X	M&E Coordinator	Turkana County and Implementing Partners	120,000	Turkana County Government	Improved information dissemination and use of information for decisions, Improved Public Participation	
Produce quarterly profiles for programs performance (Community Health, HIV, Malaria, TB, RMNCAH)	X	X	X	X	X	M&E Coordinator	Turkana County and Implementing Partners	4,800,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved information dissemination and use of information for decisions	An electronic version to be considered
Support quarterly communication dialogue meetings at Community level	X	X	X	X	X	Director Public Health	Turkana County and Implementing Partners	35,000,000	Turkana County, USAID, CDC, World Bank, Global Fund	Improved Community health system	
								191,220,000			

Appendices

Appendix 1: Performance Framework

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
1	Maternal mortality ratio (Maternal deaths per 100,000 live births)	The maternal mortality ratio (MMR) is the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births, for a specified year.	Reproductive Health	Number of maternal deaths per 100 000 live births during a specified time, usually one year.	Number of live births	Impact	Vital registration; KDHS; census; health service records	Five years	HF	DHIS			0.02	0.01	0	0	0	0
2	% fully immunized children	Children under 1 year receiving measles-1 vaccine	Immunization	N: Number of children under the age of 1 receiving measles 1 vaccine	D: Estimated number of children younger than one year	Outcome	DHIS-MOH 710; MOH 510; MOH 702; Surveys; KNBS	Monthly/ Quarterly/ Annually	HF	DHIS			84.2	88	90	93	95	97
3	% of TB patients completing treatment	Patients who have either completed treatment or got cured	TB	Number of patients who have completed treatment + cured	Total number of TB patients notified	Outcome	Facility TB Register; TIBU	Monthly, Quarterly, annual	HF	Facility register (TB4)	Sub county TB Coordinator	2017	86	88	90	90	92	92
4	% HIV+ pregnant, Breast-feeding women receiving preventive ARVs	Pregnant & Breast-feeding women who are confirmed positive and are receiving ARVs	HIV	Number of pregnant women enrolled on care and are receiving ARVs	Total number of pregnant & Breast-feeding women confirmed HIV positive	Outcome	ANC, Maternity, PNC Register	Monthly, Quarterly, annually	HF	ANC, maternity, PNC Register; ART Register	Sub county AIDS/STI Coordinator	2017	92	100	100	100	100	100

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
5	% of eligible HIV clients on ARVs	Clients tested positive for HIV and initiated on ARVs	HIV	Number of clients tested positive for HIV and started on ARVs	Total number of clients tested positive for HIV	Outcome	HTS Register	monthly, Quarterly, annually	HF	ART Register; HTS Register	Sub county AIDS/STI Coordinator	2017	84	90	90	90	95	95
6	% of children under one provided with LLITNs	Children under one year provided with LLITNs at the facility	Malaria	Number of children under 1 year who received LLITNs at the facility	Estimated children under 1 at the facility	Output	CWC Register; Immunization Register	Monthly, Quarterly, annually	HF	MOH 710; MOH 711	Sub county Malaria Coordinator	2017	16.9	30	50	70	80	100
7	% of targeted pregnant women provided with LLITNs	Pregnant women who received LLITNs at the facility	Malaria	Number of pregnant women who received LLITNs at the facility	Estimated number of pregnant women at the facility	Output	ANC Register	Monthly	HF	MOH 711	Sub county Malaria Coordinator	2017	30	40	50	70	80	90
8	% of children under five treated for diarrhoea	Children <5year treated for diarrhoea	Child Health	N: Number of under-5s treated for diarrhoea	D: Total number of children under five presenting at the facility	Output	MOH 204 A; DHIS - MOH 705 A	Monthly	HF, Community	DHIS	Facility in charge		14	12	10	8	6	5
9	% of adult population with BMI over 25	Proportion of adults with >25 BMI Screened	Nutrition	Proportion of adults with >25 BMI screened	Total adult population screened	Outcome	MOH 711	Monthly, Quarterly, Annually	HF	Primary	Facility I/C	2018	0.21	0.2	0.2	0.16	0.13	0.1
10	% women of reproductive age screened for Cervical cancers	Proportion of women in reproductive age screened	RMNCAH	Number of women screened	Total number of women in reproductive age	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	0.02	0.1	0.5	2	5	20
11	% of new out-patients with mental health conditions	Proportion of out patients attended with mental illness	Medical services	Number of out patients attended with mental illness	Total number of out patients attended	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	0.04	0.04	0.03	0.025	0.0225	0.02

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
12	% of new outpatients cases with high blood pressure	Proportion of out patients attended with high blood pressure	Medical services	Number of outpatient cases with high BP	Total Number of out patients attended to	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	0.07	0.1	0.1	0.05	0.05	0.1
13	% of patients admitted with cancer	Proportion of patients admitted with cancer	Medical services	Number of patients admitted with cancer	Total number of admissions	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	0.17	0.02	0	0.014	0.01	0
14	% new out-patient cases attributed to gender based violence	Proportion of outpa-tient cases attributed to gender based violence	Medical services	Number of new outpa-tient cases attributed to gender based violence	Total Number of out patients attended to	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	0.05	0.05	0.04	0.035	0.03	0.03
15	% new out-patient cases attributed to road traffic Injuries	Proportion of outpa-tient cases attributed to road traffic injuries	Medical services	Number of new outpa-tient cases attributed to road traffic accidents	Total Number of out patients attended to	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	0.08	0.1	0.1	0.07	0.06	0.1
16	% new out-patient cases attributed to other injuries	Proportion of outpa-tient cases attributed to other injuries	Medical services	Number of new outpa-tient cases attributed to other injuries	Total Number of out patients attended to	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	1.18	1.1	0.1	0.08	0.07	0.1
17	% of deaths due to injuries	Proportion of deaths due to injuries	Medical services	Number of deaths due to injuries	Total number of deaths	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	(154/4501)= 0.034214618973561 4	0.03	0.03	0.023	0.02	0.01
18	% of new out-patient cases attributed to high blood sugar	Proportion of outpa-tient cases attributed to high blood sugar	Medical services	Number of outpatient with high blood sugar	Total number of new outpatient cases	Outcome	MOH 705 AB	Monthly, Quarterly, Annually		Primary	Facility I/C	2018	0.075	0.07	0.1	0.05	0.05	0.1

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
20	% deliveries conducted by skilled attendant	Deliveris conducted by a skilled brth attendant	Reproductive Health	N:Number of deliveries conducted by skilled personnel	D: Total estimated population of deliveries of expected	Output	MOH 333; DHIS – MOH 711, MOH 717,	Monthly	HF	DHIS	Facility in charge	2017	47.1	55	58	60	65	70
21	% of women of reproductive age receiving family planning	Number of women aged 15-49 receiving family planning methods.	Reproductive Health	N: Number of women receiving family planning services	D: Total number of women of reproductive age	Output	MOH 512; DHIS – MOH 711, MOH 717	Monthly	HF	DHIS	Facility in charge	2017	18.3	20	24	28	30	40
22	% of facility based maternal deaths	Death of woman resulting from pregnancy related conditions in a health facility	Reproductive Health	N: Number of maternal deaths occurring at the facility	D: Total number of expected deliveries	Outcome	MOH 333; DHIS – MOH 711;	Monthly	HF	DHIS	Facility in charge		0.017	0.01	0	0	0	0
23	% of facility based under five deaths	<5 deaths occuring at the health facilities	Child Health	N: Number of under-five deaths occurring at the facility	D: Total number of children under the age of 5	Outcome	MOH 511, MOH 301, MOH 204A; DHIS – Inpatient Morbidity and Mortality Report; KNBS projection	Monthly	HF	DHIS	Facility in charge		No data	0.01	0	0	0	0
24	% of newborns with low birth weight	Newborns with low birth weight less than 2.5kg.	Nutrition	N: Number of newborns with less than 2.5kg body weight	D: Actual number of live births whose birth weights were measured	Outcome	MOH 333; DHIS – MOH 105	Monthly	HF	DHIS	Facility in charge	2017	5.3	3.8	3.5	3.4	3.2	3
25	% of facility based fresh stillbirths	Babies born dead in the facilities	Reproductive Health	N: Number of facility based fresh still births	D: Total number of deliveries conducted	Outcome	MOH 333; DHIS – MOH 717	Monthly	HF	DHIS	Facility in charge	2017	1.5	1	1	0.5	0.5	0.5

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
26	% of pregnant women attending four antenatal care visits	Pregnant women accessing ante natal care in facilities	Reproductive Health	N: Number of women making 4th ANC visit	D: Total number of pregnant women	Outcome	MOH 406; MOH 105; DHIS – MOH 711; KNBS projection	Monthly	HF	DHIS	Facility in charge	2017	38.9	50	54	60	67.4	77
27	% infants under six months on exclusive breastfeeding	Children less than 6 months old being exclusively breastfed	Nutrition	N: Number of infants who are exclusively breastfed up to the age of 6 months	D: Number of infants aged less than 6 months attending a child welfare clinic in a month	Outcome	MOH 704; MOH 713; MOH 511; MOH 216	Monthly	HF	DHIS	Facility in charge	2018	85	88	90	91	93	95
28	% population with access to safe water	Safe water is treated/ piped water	WASH	Total homes with access to treated/ piped water	Total county population	Outcome	MOH 515	Monthly	Community	DHIS	CHVs	2018	54	56	60	65	70	73
29	% children under five stunted	Children under 5 years attending CWC who fall below minus 2 SD from the median height for age of WHO child growth standards	Nutrition	Children under five with stunted growth	D: Total number of children under 5 years measured	Outcome	MOH 713	Monthly	HF	DHIS	Facility in charge	2017	2.9	2.6	2.5	2.2	2.1	2
30	% children under five underweight	Number of children under 5 years attending CWC who fall below minus 2 SD from the median weight	Nutrition	children under five who are underweight	Total number of <5children attending CWC children	Outcome	MOH 711	Monthly	HF	DHIS	Facility in charge	2019	16.2	14	14	12.8	11.5	10
31	% of households with latrines	Households that use an improved sanitation facility	WASH	Number of households that use an improved sanitation facility, urban/rural	Estimated households in urban and rural areas	Outcome	MOH 515	Annually	Community	DHIS	CHVs, SCPHOs, CPHO	2018	29%	32	35	38	40.5	42

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
33	Per capita outpatient utilization rate (M/F)	The rate at which specific outpatient patient is being utilized	All	Total number of patients attending outpatient seen at outpatient department	Expected number of outpatient clients	Output	Daily Activity Report/MOH 204AB, MOH 705	Quarterly, Semi Annual & Annual	County & Sub County	DHIS2	CHRIO/ SCHRIOs	2018	1.2	1.15	1.1	1	1	0.9
34	Proportion of children 6-59 months supplemented with vitamin A	Children receiving Vit. A	Nutrition	N:number of children supplemented with vitamin A	Total Pop < 6-59 Months	Output	MOH 710	Monthly	HF	DHIS	Facility in charge	2017	72.2	78	80	83	85	90
35	% of children <15 yrs detected with AFP	No of children<15 yrs	VPD Surveillance	Total No. of cases detected	Total Pop < 15yrs	Outcome	MOH 502	monthly	HF	DHIS	SCDSC	2018	0	0	0	0	0	0
36	Proportion of health facilities implementing IMAM	Integrated management of acute malnutrition	Nutrition	N: Number of facilities offering IMAM	Total number of facilities in the county	Output	MOH 713	Annually	Sub county	DHIS	SCN	2018	0.92	0.95	1	1	1	1
37	% of facilities providing BEmONC	Facilities providing basic essential obstetric care services	reproductive health	N: Total number of level 2-6 facilities providing BEmONC	D: Total number of level 2-6 facilities in the area	Output	Rapid health facility surveys; Updated Master Facility List	Annually	Sub county		Head, planning and policy	2019	52	63	65	74	78.8	89
38	% of facilities providing CEmONC	Facilities providing comprehensive essential obstetric care services	reproductive health	N: Number of level 4-6 health facilities providing CEmONC	D: Total number of level 4-6 health facilities in the catchment area surveyed	Output	Rapid health facility surveys; Updated Master Facility List (MFL)	Annually	Sub county		Head, planning and policy	2018	32	50	60	68	100	100

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
40	% of facilities providing immunization	Facilities providing immunization services	Immunization	N: Number of health facilities providing immunization services	D: Total health facilities level in the county	Output	Rapid health facility surveys; Updated Master Facility List	Annually	county		Head, planning and policy	2018	85	90	93	94	95	98
41	TB cure rate	Sputum smear-positive patients accessing 6th-month smear-negative microscopy result	TB	Number of sputum smear-positive patients having negative 6th-month result	Total number of bacteriologically confirmed TB cases	Outcome	Facility TB Register	monthly, Quarterly, annually	HF	TB4; TIBU	Sub county TB Coordinator	2017	83	80	90	92	92	92
42	% confirmed malaria cases	Patients tested positive for malaria using RDT or microscopy	Malaria	Number of patients who have tested positive for malaria	Total number of cases suspected for malaria	Output	Morbidity Register	Monthly, Quarterly, annually	HF	OPD Register (MOH 705A/B)	Sub county Malaria Coordinator	2017	45.8	100	100	100	100	100
43	Proportion of maternal deaths reviewed	maternal death Review is an in-depth systematic analysis of maternal deaths to delineate their underlying health social and other contributory factors; the lessons learned from such a review are used in making recommendations to prevent similar future deaths.	Reproductive Health	Number of maternal deaths reviewed	Total number of maternal deaths reported	Output	Maternal review form	Daily, Monthly, Quarterly, annually	HF	MOH 711, MOH 333,	RH coordinator	2018	81.5	100	100	100	100	100
44	Malaria case fatality	malaria confirmed cases who died while undergoing treatment	Malaria	Number of malaria confirmed who died while undergoing treatment	Total number of malaria confirmed	Outcome	outpatient & Inpatient Register	Monthly, Quarterly, annually	HF	OPD Register (MOH 705A/B)	Sub county Malaria Coordinator	2017	0.14	0	0	0	0	0

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
45	Average length of stay	Length of Stay – The duration a patient spends in a health facility from admission to discharge	Medical services	Grand sum of In-patient days	Total No. of Discharges	Output	Inpatient register	Daily, Monthly, Quarterly, annually	HF	Inpatient register	Facility in charge	2018	4	3	2.5	2	2	2
46	% of functional community units	Functional community units	Community Health Services	N: Number of Community Units reporting to DHIS	D: Total number of Community Units established	Output	MOH 515	Monthly	Community	DHIS	CHVs, Community health focal persons	2018	59	72	74	85	100	100
47	HIV prevalence	Proportion of new HIV infections and already existing cases in the population	HIV	Estimated new infections + current infections	Total population	Outcome	HIV Surveillance; Program reports	Annual	HF, Surveys	HTS Register (MOH 362); ART Register (MOH 361A, MOH 361B); DAR (MOH 366)	Program Coordinator (County & Sub county); Service providers	2017	3.6	3.2	3	2.7	2.5	1
48	% HIV new infections	New HIV incidences	HIV	New cases of HIV reported	Total population	Outcome	HIV Surveillance; Program reports	Annual	HF, Surveys	HTS Register (MOH 362); ART Register (MOH 361A, MOH 361B); DAR (MOH 366)	Program Coordinator (County & Sub county); Service providers	2017	0.3	0.25	0.2	0.15	0.1	0.1
49	% of pregnant women presenting with malaria	Pregnant women presenting with malaria at the facility	Malaria	Number of confirmed malaria cases among pregnant women	Total number of pregnant women	Outcome	Morbidity Register	Monthly	HF	OPD Register (MOH 705A/B)	Sub county Malaria Coordinator	2018	7.50%	####	####	5.50%	4.00%	####
50	TB cases notified (per 100,000 population)	Newly diagnosed TB cases notified	TB	Number of TB patients reported	Total population	Outcome	TB4	Quarterly	HF	TIBU	Sub county TB Coordinator	2018	(1215/1250000* 100000) 97 per 100,00	70 per 100,000	60 per 100000	50 per 100000	30per 100000	25 per 100000

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
51	Proportion of facilities with functional quality improvement teams	A functional QI team should hold monthly meetings to discuss quality of services offered, areas of improvement ,develop, implement and monitor a joint action plan with respective health facilities	QI/QA	Number of facilities with a QI team	Total number of facilities with more than one staff	Outcome	Assessent tool	Biannual	HF		Facility in charges	2018	35	50	65	75	100	100
52	Number of community units with functional WITs	A functional Community WIT should hold monthly meetings to discuss quality of services offered by CHVs at community, identify areas of improvement,develop,implement and monitor a joint action plan with respective CUs	QI/QA	Number of community units with a functional WIT	Total number of community units	Outcome	QI file	Biannual	Community	DHIS	CHEW	2017	0	50	60	70	80	90

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
53	Monthly reporting rates for essential medicines and program commodities	All facilities should submit a monthly report of essential medicines and program commodities	Supply chain	Number of facilities submitting monthly report	Total number of facilities expected to submit reports	Output	EMMS template,FCDRR for FP,Malaria and HIV	Monthly	HF	DHIS,EMMS tracker	pharmacists and facility in charges		No data	100	100	100	100	100
54	Percentage of facilities stocked according to plan	All facilities should be stocked according to plan	Supply chain	Number of facilities reporting to be stocked for all commodities	Total number of facilities expected to be stocked with essential tracer medicines and program commodities	Output	FCDRR reports,EMMS template	Monthly	HF	DHIS,EMMS tracker	pharmacists and facility in charges		No data	100	100	100	100	100
55	Percentage of facilities that submit accurate commodity report	All facilities should submit an accurate commodity report	Supply chain	Number of facilities whose beginning balance tallies with ending balance	Total number of facilities reports	Output	FCDRR reports,EMMS template	Monthly	HF	DHIS,EMMS tracker	pharmacists and facility in charges	2018	50	100	100	100	100	100
63	% of HFs provided with quarterly Support supervision	A Health facility should receive support supervision from the Sub County team at least once in a quarter	All	Number of health facilities visited for purposes of support supervision	Total number of health facilities	Output	Supervision checklist	Quarterly	Sub County	Activity report	SCHMT		No data	100	100	100	100	100
65	% of population living within 5km of a facility	Eligible population are households living with 5km of a facility	All	Number of Households living within 5KM of a facility	Total catchment population of a facility	Outcome	GIS mapping devices	Annual	County & Sub County	Yearly GIS Mapping report	CDMS	2018	21.4	25	32	35	40	50
66	% of quarters for which analyzed health information is shared with the sector	Health information can be shared on for a such as CMEs,Review meetings, support supervisions, stakeholders forums etc.	All	Number of health information sharing for a held	Expected number of health information sharing for a	Output	Activity report	Quarterly	County & Sub County	Activity report/DHIS2	CM&E Officer	2018	80%	100	100	100	100	100

No	Indicator	Indicator Definition	Program Area	Numerator	Denominator	Indicator Type: (output, outcome, impact)	Data collection Tools	Frequency of collection/ reporting	Data Collection Level (Community, HF, Other)	Data Source	Responsible entity	Baseline Year	Baseline Value	Target				
														Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
72	# of medical health workers per 10,000 population	Medical Health workers here refers to nurses, clinical officers, medical doctors working in GOK Health facilities	HRH	Number of health workers	Total population	outcome	iHRIS Report	Quarterly	County & Sub County	iHRS	iHRIS focal persons	2018	10	11	11.4	11.5	11.75	12
73	% eligible staff who have undergone CPD	Eligible health workers from all the cadres who have completed CDP training	HRH	Number of staff trained	Number of eligible health workers	output	iHRIS Report	Quarterly	County & Sub County	Activity report	iHRIS focal persons	2018	No data	100	100	100	100	100
74	% of eligible health workers who have undergone leadership and management courses	Eligible health workers from all the cadres who have completed leadership& management training	HRH	Number of staff undergone Leadership and management trainings	Total number of eligible staff	output	iHRIS Report	Quarterly	County & Sub County	Activity report	iHRIS focal persons	2018	No data	100	100	100	100	100
75	Staff attrition rate	Number of staff exiting the health workforce	HRH	Number of staff exiting the health workforce	Total number of staff	outcome	iHRIS Report	Quarterly	County & Sub County	iHRS	iHRIS focal persons	2018	0.25%	0	0	0	0	0
76	% of health workers completing annual appraisal forms	Eligible health workers from all the cadres participating in annual staff appraisal	HRH	Number of health workers completing annual appraisal form	Total number of eligible health workers	output	iHRIS Report	Quarterly	County & Sub County	Appraisal report	iHRIS focal persons	2018		100	100	100	100	100
77	% of health workers with up to date data in IHRIS, staff returns and IPPD	Health workers with up to date data in IHRIS, staff returns and IPPD	HRH	Number of health workers with up to date data on iHRIS IPPD and staff returns	Total Number of Health workers	outcome	iHRIS Report	Quarterly	County & Sub County	iHRS	iHRIS focal persons	2018		100	100	100	100	100

Appendix 2: Reporting Tools And Responsible Persons

#	Available Reporting Forms	Responsible Person	Overall responsibility at Sub-county	Hospitals	Primary Health Facility/ Community Unit.	Overall Responsibility at Health Facility	HF Reporting Channel (Where Applicable)
1	CHEW Summary	Community Unit Focal person	SCHRIO/ SCMOH	CHEW	CHEW	Med Sup/ In-Charge	Hardcopy/DHIS
2	MoH 711 Integrated	Reproductive Coordinator/ District Public Health Nurse (DPHN)	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
3	MoH 731-1 HIV CT	County AID and STI Coordinator	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
	MoH 731-2 PMTCT	County AID and STI Coordinator	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
	MoH 731-3 C&T	County AID and STI Coordinator	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
	MoH 731-4 VMC	County AID and STI Coordinator	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
	MoH 731-5 PEP	County AID and STI Coordinator	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
	MoH 731-6 Blood Safety	County AID and STI Coordinator	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
4	HCBC	County AID and STI Coordinator	SCHRIO/ SCMOH	Sectional in charge/ HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
5	IDSR Weekly	District Disease Surveillance Coordinator(DDSC)	SCHRIO/ SCMOH	Facility surveillance focal person	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
6	Hospital Administrative Statistics (HAA).	County HRIO	SCHRIO/ SCMOH	HRIO		Med Sup/ In-Charge	Hardcopy/DHIS
7	MoH 75 A OPD <5 years	County HRIO	SCHRIO/ SCMOH	HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
8	MoH 75 B OPD >5 years	County HRIO	SCHRIO/ SCMOH	HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
9	MoH 717 Service Workload	County HRIO	SCHRIO/ SCMOH	HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
10	MoH 718 Inpatient M and M	County HRIO	SCHRIO/ SCMOH	HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
11	MoH 710 Immunization	CHMT Member respon-sible for Immunization	SCHRIO/ SCMOH	HRIO	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
12	MoH 706 Laboratory Report	County Laboratory Coordinator	SCHRIO/ SCMOH	Lab In-Charge	Lab In-Charge.	Med Sup/ In-Charge	Hardcopy/DHIS
13	Support Supervision	Chair CHMT	SCHRIO/ SCMOH	Sectional In-Charge/HRIO			Hardcopy/DHIS
14	IMAM	County Nutrition Coordinator	SCHRIO/ SCMOH	Nutritionist	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS

#	Available Reporting Forms	Responsible Person	Overall responsibility at Sub-county	Hospitals	Primary Health Facility/ Community Unit.	Overall Responsibility at Health Facility	HF Reporting Channel (Where Applicable)
15	MoH 713 Nutrition Monthly Reporting.	County Nutritionist	SCHRIO/ SCMOH	Nutritionist	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
16	MoH 708 Environmental Health	County Public Health Officer.	SCHRIO/ SCMOH	PHT	Public Health Officer/Public Health Technician	Med Sup/ In-Charge	Hardcopy/DHIS
17	Quarterly report on Tuberculosis and Multiple Drug Resistant TB case-finding	County TB and Leprosy Coordinator.	SCHRIO/ SCMOH	CO Tuberculosis and Lung	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
18	Cohort Report for TB	County TB and Leprosy Coordinator.	SCHRIO/ SCMOH	CO Tuberculosis and Lung	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
19	HSSF Monthly Expenditure	County Health Department Accountant	SCHRIO/ SCMOH	Facility accountant	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
20	HSSF summary	County Health Department Accountant	SCHRIO/ SCMOH	Facility accountant	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
21	Malaria Commodities Form	County Malaria Coordinator.	SCHRIO/ SCMOH	Pharmacist	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
22	Non-Pharmaceutical	County Pharmacist.	SCHRIO/ SCMOH	Nursing Officer In charge	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
23	Division of Occupational	County Occupational Therapist	SCHRIO/ SCMOH	Occupational Therapist	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
24	Logistic Management Information	Reproductive Health Coordinator/Sub county PHN	SCHRIO/ SCMOH	Pharmacist	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
25	FP Contraceptives	County Reproductive Health.	SCHRIO/ SCMOH	MCH In-Charge	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
26	Maternal Death Review Form	County HRIO	SCHRIO/ SCMOH	Maternity In-Charge – Maternal Death review team.	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
27	Ophthalmology Services	County Ophthalmologist	SCHRIO/ SCMOH	Ophthalmologist.	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS
28	Orthopedic Plaster	County Plaster technologist	SCHRIO/ SCMOH	Plaster Technologies.	Facility In-Charge	Med Sup/ In-Charge	Hardcopy/DHIS

Appendix 3 : List of Contributors

	NAME	Designation	Organization
1	Sarah Esinyen	Ag DPPME	Department of Health and Sanitation
2	Afred Emaniman	DPPH	Department of Health and Sanitation
3	Dr. Nelson Lolos	D/DMS	Department of Health and Sanitation
4	Peter E. Etee	CHRIO	Department of Health and Sanitation
5	Gogong' Julius	SCHRIO-T. Central	Department of Health and Sanitation
6	Collins Odegi	SCHRIO-T.West	Department of Health and Sanitation
7	Jackson Seneti	SCHRIO-Kibish	Department of Health and Sanitation
8	Irene Olum	SCHRIO-T.South	Department of Health and Sanitation
9	Joyce Maina	SCHRIO-T.North	Department of Health and Sanitation
10	Magdaline Kataboi	SCHRIO-Loima	Department of Health and Sanitation
11	Senah Yego	SCHRIO-T.East	Department of Health and Sanitation
12	Shawal Nyaroya	HRIO	Department of Health and Sanitation
13	Eliud Eyangan	ICT officer	Department of Health and Sanitation
14	Stephen Ekungu Kangiro	D/D ADA	Department of Health and Sanitation
15	Lokuwam Gabriel	NO	Department of Health and Sanitation
16	Innocent .M. Sifuna	CPHO	Department of Health and Sanitation
17	Peter Lomurukai	QA/UHC/FP	Department of Health and Sanitation
18	Dr. Shamwama Henry	C.P	Department of Health and Sanitation
19	Lucas Edete	CCSFP	Department of Health and Sanitation
20	Livingstone Eyanae	H. Accountant	Department of Health and Sanitation
21	Ronnie Odongo	Economist	Department of Health and Sanitation
22	Ngasike John Kiyonga	SGBV	Department of Health and Sanitation
23	Samuel Lokemer	CMCC	Department of Health and Sanitation
24	Maragia James	CMLC	Department of Health and Sanitation
25	Julius Shichenje	CFQC/CE	Department of Health and Sanitation
26	Daniel Esimit Echakan	DDPPH	Department of Health and Sanitation
27	Samwel Pulkol	CASCO	Department of Health and Sanitation
28	Joel Lochor	DPHN -T.Central	Department of Health and Sanitation
29	Dr. Ochieng' Caleb	Pharmacist	Department of Health and Sanitation
30	Absalom O. Kuya	CDSC	Department of Health and Sanitation
31	Dr. Salim Otieno	County Referral Coordinator	Department of Health and Sanitation

32	Dr. Getrude Nasike	MOH Loima	Department of Health and Sanitation
33	Jacob Nakuleu	MOH T.North	Department of Health and Sanitation
34	Dr. Job Okemwa	CTLC	Department of Health and Sanitation
35	Robert Rapando	Health Systems Strengthening specialist	Afya Timiza
36	Isaac Ntwiga Munene	Health Systems Strengthening Advisor	Afya Timiza
37	Edwin Mutevane Ambuzi	HMIS & Data use Officer	Afya Timiza
38	Christine Kiecha	Associate Director, Governance	CMLAP II
39	Dr. Samuel Nyingi	Senior Governance Specialist	CMLAP II
40	Linah Atieno Okoth	Senior Monitoring and Evaluation Advisor	CMLAP II
41	John Amadi Ndesi	County planning and learning specialist	CMLAP II
42	Osman Abullai	M&E Officer	Afya Timiza
43	Dennis Akwiri	HRH Officer	Afya Timiza
44	Lazaras Momanyi	Program Manager	EGPAF
45	Shadrack Chumba	Program coordinator	AHF
46	Bernard Mwaura	County Manager	NACC
47	Alfayo Mwamburi	Program coordinator	FHI 360

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