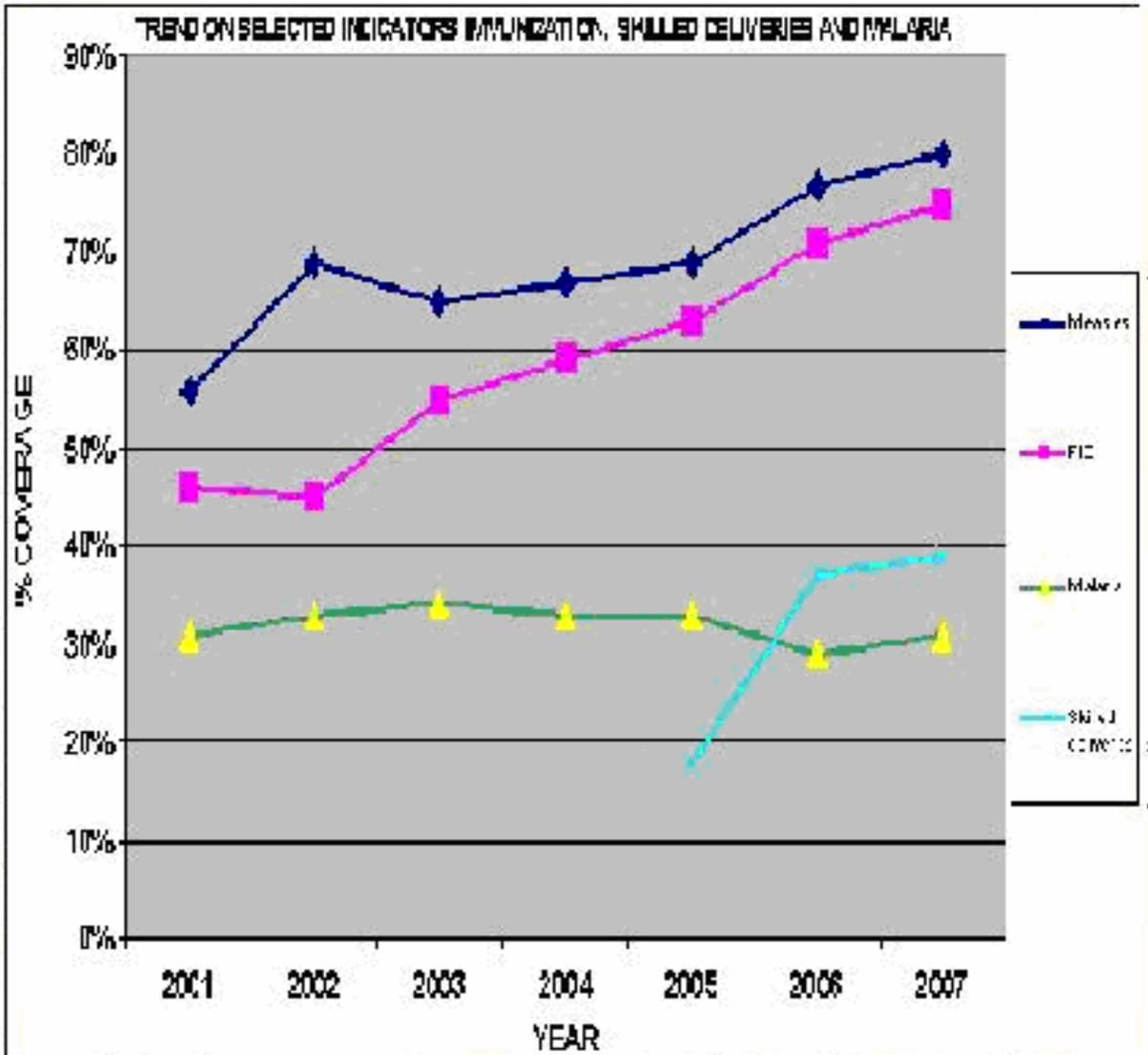


REPUBLIC OF KENYA



HEALTH SECTOR

INDICATOR AND STANDARD OPERATING PROCEDURE MANUAL



FOR
HEALTH WORKERS

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LIST OF ABBREVIATIONS/ ACRONYMS

ADRA	- Adventist Development Relief Agency
ALOS	- Average Length of Stay
ANC	- Antenatal Clinic
ART	- Anti Retroviral Therapy
B/P	- Blood Pressure
BCG	- Bacillus Calmette Guerin
BEOC	- Basic Emergency Obstetric Care
BF	- Breast Feeding
C/S	- Caesarean Section
CBHIS	- Community Based Health Information System
CEOC	- Comprehensive Emergency Obstetric Care
CHAK	- Christian Health Association of Kenya
CHEWs	- Community Health Extension Workers
CHWs	- Community Health Workers
CME	- Continuous Medical Education
CYP	- Couple Year Protection
DBR	- Daily Bed Return
DHMT	- District Health Management Team
DHSF	- District Health Stakeholders Forum
DMOH	- District Medical Officer of Health
DOMC	- Division of Malaria Control
DOT	- Direct Observed Treatment
DQA	- Data Quality Audit
EDD	- Expected Date of Delivery
EPI	- Expanded Programme on Immunisation
ERS	- Economic Recovery Strategy
FBO	- Faith Based Organisation
FCHUs	- Functional Community Health Units
FHI	- Family Health International
FP	- Family Planning
FTP	- File Transfer Protocol
GAVI	- Global Alliance for Vaccines and Immunisations
GFATM	- Global Fund for AIDS, Tuberculosis and Malaria
GOK	- Government of Kenya
GPS	- Geographical Positioning System
HB	- Haemoglobin
HENNET	- Health NGO Network
HF	- Health Facility
HIS	- Health Information System
HIV	- Human Immunodeficiency Virus
HMIS	- Health Management Information System
HMN	- Health Metric Network
HMT	- Hospital Management Team
HSCC	- Health Sector Coordinating Committee

HSPS	- Health Sector Programme Support
IMCI	- Integrated Management of Childhood Illness
IMR	- Infant Mortality Rate
IPT	- intermittent Presumptive Therapy
IRS	- Indoor Residual Spray
JPOWF	- Joint Programme of Work and Funding
KEC	- Kenya Episcopal Conference
KEMSA	- Kenya Medical Supplies Agency
KEPH	- Kenya Essential Package of Health
KNBS	- Kenya National Bureau of Statistics
LBW	- Low Birth Weight
LLITN	- Long Lasting Insecticide Treated Nets
LMP	- Last Monthly Period
MDA	- Maternal Deaths Audit
MDGs	- Millennium Development Goals
MMR	- Maternal Mortality Rate
MTEF	- Medium Term Expenditure Framework
NASCOP	- National AIDS and STD Control Programme
NGO	- Non- Governmental Organisation
NLTP	- National Leprosy and Tuberculosis Programme
OBD	- Occupied Bed Days
OPD	- Out Patient Department
PC	- Performance Contract
PDA	- Personal Digital Assistant
PHMT	- Provincial Health Management Team
PHRIO	- Provincial Health Records and Information Officer
PMO	- Provincial Medical Officer
PMTCT	- Prevention Mother to Child Transmission
PNC	- Postnatal Clinic
PPH	- Post partum Haemorrhage
PRS	- Poverty Reduction Strategy
PS	- Permanent Secretary
RBM	- Results Based Management
RH	- Reproductive Health
SOPs	- Standard Operating Procedures
STATCAP	- Statistical Capacity Programme
SUPKEM	- Supreme Council of Kenya Muslims
SWAp	- Sector Wide Approach
TB	- Tuberculosis
TT	- Tetanus Toxoid
UNICEF	- United Nations Children and Education Fund
VCT	- Voluntary Counselling and Testing
VF	- Verification Factor
VHC	- Village Health Committees
WCBA	- Women of Childbearing Age
WHO	- World Health Organisation
WRA	- Women of Reproductive Age

FOREWORD

"In 1977 the World Health Assembly decided that the main social target of governments and of WHO should be attainment by all the people of the world by the year 2000 of a level of health that will permit them lead a socially and economically productive life"

In 1978 an international conference on Primary Health Care (PHC) held in Alma-Ata USSR stated that "PHC is the key to attain the above target". These showed that there was need at the global level to give guiding principles based on national experience and modify them to an acceptable global framework. The main thrusts are the development of the health system infrastructure with PHC approaches for the delivery of country programmes that reach the whole population. – (Global strategy for health for all by the year 2000, WHO, Geneva 1991. Pg –11). Countries will review their health systems with the aim of reshaping them as necessary to conform to the above characteristics.

Tremendous inequalities exist between the developed and developing countries, two-thirds of the population do not have reasonable access to any permanent form of health care. The highest proportion of resources for the delivery of health care is concentrated in the large cities [Services Availability Mapping (SAM) 2004 results in Kenya show this inequality in health care].

To strengthen health systems need concerted effort e.g. Jon E. Rohde in his lecture 'Why the other half dies?' at the Birmingham University viewed child mortality from the four dimensions which we can adopt and apply to strengthen the health care systems .i.e.

- Epidemiologically, the majority of deaths which occur are due to a limited number of causes.
- In the technological dimension, affordable technologies exist to reduce deaths resulting from these major causes.
- In the organizational dimension, a consumer-oriented approach to health permits a higher coverage and helps to bring about behavioural changes in daily life.
- Lastly, if the political will is there, the road blocks which lie in the way of a reduction of child and maternal mortality world wide can be lifted. Thus it will help us address and improve on reporting of the 4th and 5th Millennium Development Goals (MDGs).

We can make the possible a reality if the campaign is joined in each country by a vast array of the media, religious institutions non governmental organizations and private enterprises which can provide or contribute to the services delivery systems necessary to extend this opportunity to the poor and the remote. Some of the organization's that tries to lift this in Kenya are the AfriAfya, Tropical Institute of Community Health (Great Lakes University), DANIDA, AMREF, ADRA Kenya, UNCEF, World vision, members of HENNET including FBOs (CHAK, KEC and SUPKEM) and the Aga Khan Community Health Services among others.

Strengthening Health Systems requires better Health Information which is the foundation for better health. To strengthen Health Systems, we need to be guided by the following principle of Health Information Systems reforms:-

1. Health Information Strengthening should be seen within the broader context of strengthening statistical capacity and should adhere to the general criteria common to all forms of information.
2. Health Information System reform should be integrated within broader efforts to improve health systems including country poverty reduction and development strategies.

3. Reforms of systems should start with simple and achievable objectives and should introduce further changes in a staged approach, enhancing capacity at each stage and ensuring the engagement of all partners in the process.

The Ministry of Health, Kenya and other stakeholders through the effort of DANIDA HSPS and Health Metrics Network (HMN) strengthening of country Health Information systems started this initiative in 2006. An assessment of the statistical constituencies in the country has been done through the interactive HMN assessment tool and results are available together with various other HMIS reviews. The value of better health is its impact on better health outcome i.e. Mortality, Morbidity, Disease outbreaks and health status. Advocacy for strengthening health systems should focus on the value of health information as a public good.

Monitoring and evaluating health systems have been of positive impact on the perception of the need for clear policy and organizational framework for health information. In the absence of a properly articulated government policy on health information, the system does not exist as entity but a highly fragmented and uncoordinated parallel sub-system. The focus should be directed on improving the availability and utilization of sound health information for policy making and planning, programme monitoring and evaluation, monitoring of international goals such as MDGs, ERS and measuring equity in health. An established network of government, community and stakeholders will work to strengthen the capacity of HIS to provide high quality and timely effective health systems information. Effective health systems benefits would enable managers make evidence based decisions at all levels i.e. community, district, provincial/regional and national levels to:-

- Detect and control emerging and endemic health problems, monitoring progress towards health goal.
- Empower individuals, communities and women in particular with timely and understandable health related information.
- Strengthen the evidence based decisions for effective health policies.
- Improve governance, mobilize new resources and ensure accountability in their use.

To retain doctors/staff with highest technical capacity is critical and I will recommend that countries should build in-house capacities more so in mid-level managers/workers for sustainability and retention. Every one can share it and no one can be excluded from the benefits resulting from greater knowledge.

This indicator manual forms the basis of standard operations at all levels of health care with minimum data sets, indicators and procedures. As a sector a properly functional health information system is critically required to support service delivery and report the performance of KEPH. All are encouraged to read carefully this indicator and standard operating procedure manual to guide you in ensuring that your practice are in line with the HIS sector approaches. Your suggestions and improvement towards this manual is highly appreciated.



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EXECUTIVE SUMMARY

A health information system does not exist by itself. It supports management of a health system whose ultimate goal is to improve and maintain the health of individuals, families and communities and provide the managerial staff of a health service with information relevant to their work. Health information is therefore required for health planning, monitoring and evaluation of health programmes. Also more importantly teach both staffs working in information processing and those directly involved in health care.

Properly organized Health Information System is a prerequisite for the efficient administration of public health services and their planning should be given high priority. Donor influence in Health information system is also avoided as in case of reviews. The overall purpose of these principles is to suggest that health information systems development must proceed as an integral part of efforts to strengthen the health care system and that **health data be recorded and used firstly, in support of individual care, local health service operation and community action.**

Placing emphasis on the use of data within the services will help increase the completeness and validity of the data that are selectively reported for supporting decision-making at all levels of the health system and for supporting health system, planning and development including service integration. Strengthening the Health Information System at the various service levels should be undertaken in support of efforts to develop health services and improve their **performance.**

Great prudence should be applied when making changes to components of health information systems that are working fairly well. Overall revision in health service recording and reporting should rarely be undertaken. The selection and definition of a manageable data set or set of **"Essential health indicators"** is recommended as a sound activity for initiating the review and strengthening of health information systems and for devising a practical National Health Service monitoring capability. Promotion and use of the indicator should strengthen routine programme management and the health information system in the country.

The manual contains various Health Sector Compendium of Indicators for Monitoring and Evaluation of the health sector services by Cohorts: The indicators have been elaborated by stating the indicators; standard definitions, how the indicator is calculated, data source, which level the indicator is of priority use and periodicity (how often is report submitted), status i.e. who are the key users of this indicator and keenly outlines the ***Functions:** given using coded methodologies i.e. 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey.

Public health decision-making is critically dependent on the timely availability of sound data. The role of the Health Information System is to generate, analyze and disseminate such data. Counting deaths is one component of the health information system, an integrated effort to collect, process, report and use health information and knowledge to influence policy-making, programme action and research. **To enable health facilities at primary level record this statistics sample integrated registers have been provided for in this manual with minimum variables to be collected. Transfer of statistics to some reporting forms will require tally sheets which are also included.** Except immunisation where by you immunise as well as record and tally, It should be noted that transfer will be from the register to tally and then to the summary forms. **It will be important that tallies are done at close of business during the day or morning before starting another day.** All the relevant registers and forms for data collection tools have been given MOH numbers (example

Label MOH 333 for Maternity (Delivery) register and should be given priority. It is important that any other forms introduced to health workers to fill, should be through the consultation of the HMIS. Efforts have been done to integrate the tools and minimise the number of forms and registers by the health providers.

The critical elements in Health Information System (HIS) are usually to turn raw data into useful form and extrapolate this through sector indicators outlined above. It is vital that important milestones of Health Information System are well addressed by the DHMT, PHMTS and all other HIS stakeholders; Data collection, Data processing, Data reporting, Data dissemination and use. **Emphasis should be given to primary level as first level of users of the data that they collect. To maintain accuracy in recording data collected through tally sheets, health workers should tally from the registers on daily basis.** It is important that all health providers maintain the standard operating procedures which are outlined in this manual. Health records are legal documents and should not be handled by un-authorised persons. **Feedback at all levels of the service delivery both horizontally and vertically must be impressed and health facility must keep a copy of any report submitted. It is important for data validation and audits.**

Table 1: NATIONAL ELIGIBLE POPULATIONS AND PROPORTIONS:

POPULATIONS	PROPORTIONS
Population under one year (< 1 year)	4.5 Percentage of the total population
Population aged 0 – 59 months (< 5years)	18 Percentage of the total population
Population aged 0 – 11 months	20 Percentage of children aged 0 – 59 months
Population aged 6 – 11 months (Vitamin A target)	80 Percentage of children aged 0 – 11 months
Population aged 9 – 11 months	25 Percentage of children aged 0 – 11 months
Population aged 12 – 59 months	80 Percentage of children aged 0 – 59 months
Population aged 9 – 59 months	(9 – 11 months) + (12 – 59 months) or 85Percentage of population under 5 years
Population aged 5 – 14 years	29 Percentage of the total population
Population under 15 years	48 Percentage of the total population
Population of Women of Reproductive Age [WRA (15 – 49 years)]	24 Percentage of the total population
Population aged 60+ (elderly)	5.2 Percentage of the total population
Live births	Expected/estimated number of deliveries
Expected pregnant women	Expected Number of live births (4.5 Percentage of total population)
Expected deliveries	Expected Number of live births (4.5 Percentage of total population)
Surviving infants	Total population * (CBR) * (1 – IMR) or Total live births – total infant deaths
Male to Female ratio	M : F = 1 : 1.1
Estimated number of emergency obstetric complications	0.75 Percentage of the total expected pregnant women
Estimated number of abortions	0.75 Percentage of the total expected pregnant women

NOTE: The above proportions are derived from national population of 2002 projected from the Kenya 1999 population census but the proportions varies from district to district.

Source: Analytical report on population projections Volume VII August 2002

CHAPTER 1

HEALTH SECTOR INDICATOR MANUAL

Introduction:

The Kenya's Ministry of Health Strategic plan (1999 – 2004) articulates the ministry's strategy to strengthen its co-ordination function with the private sector and non-governmental organizations in health care delivery, proper design of Health sector plans and implementation requires an integrated health information system.

The demand for good and quality health information is growing and is driven in part by the move towards performance-based resource allocations and significant increases in resources for health mobilized in recent years for example through the GLOBAL fund for HIV/AIDS, TB and Malaria (GFATM), Global Alliance for Vaccines and Immunizations (GAVI), World Bank, DFID, National Statistical System, and other development partners. The strategic objectives are tied to Reversing the Health Sector trends and the Millennium Development Goals (MDGs) of reducing child and maternal mortality rates, prevalence rates of HIV/AIDS, Tuberculosis, malaria, and related diseases. In order to achieve these objectives there is need to have in place timely quality and relevant health data and information and strategic plans to:-

- Frequently monitor short-term programme outputs;
- Enhanced reporting of health outcomes to monitor MDGs and
- Provide a foundation for sound informed decision-making.

The recent upsurge in demand for health information cannot be adequately met at present because there has been insufficient investment in building streamlined health information systems capable of generating data on the full array of health-related issues.

Based on the Health Policy Framework Paper (1994 - 2010), implementation plans (1996), HMIS Needs assessment report (2003) and the Health Sector strategic plan (2005 – 2010) has outlined those areas that require immediate attention. Also the need for an effective Health Information Systems is urgently required to support improvements and efficiency of the health services delivery and the quality of care offered by the ministry of Health facilities during the Annual Operational Plans (AOPs) as they address the Kenya Essential Package for Health (KEPH).

Investing in the development of effective health information systems would have multiple benefits and would enable decision- makers at all levels to:-

- Detect and control emerging and endemic health problems, monitor progress towards health goals; and promote equity.
- Empower individuals and communities with timely and understandable health related information and drive improvements in quality of services;
- Strengthen the evidence –based for effective health policies; permit evaluation of scale- up efforts; and enable innovation through research;
- Improve governance; mobilize new resources and ensure accountability in their use;
- Frequently monitor short-term programme outputs and support performance-based resource allocations;
- Enhance reporting of health outcomes to monitor MDGs and

- Provide a foundation for sound informed decision-making.

Strengthening national, provincial and districts health information systems will also require a collaborative effort.

The collection, processing, analysis and utilization of accurate data at the facility and district levels are of utmost importance in the provision of quality care. The development of an effective health management information system will therefore greatly improve the efficiency of the health services delivery at all levels. It is, therefore not surprising that the main constrains for implementing public health care services reported is inadequate information for managerial process. This calls for health managers and policy makers to put in place sound health management information system (HMIS) which is defined as **“The effective and Efficient Collection, Collation, Analysis and Evaluation of Information relating to characteristics of people and communities, their External Milieu (i.e. environmental, socio-cultural, economic and available health systems) and health affecting interventions at individual and collective levels, so as to identify resources used and health outcomes of people and communities so as to enable informed decision making”**

Collection, processing, analysis and utilization of accurate data at the facility and district levels is of utmost importance in provision of quality care but the fact that utility of data is not appreciated, programme strategies and monitoring indicators as a basis for information systems are not efficiently defined, data are inadequately and inefficiently integrated into the managerial process regarding collection, processing, analysis of data and micro-computer and information technologies are not sufficiently developed.

The Ministry recognizes that shifts to decentralization process to planning necessitate effective decentralization of health management systems. This is considered a vital component of health sector reform that plays key role in determination of efficiency and effectiveness of implementation of health service delivery system at all levels. Further, the Ministry also recommends that integration of health information systems through liaison with other components of health deliveries is one of the key strategies towards strengthening monitoring and evaluation, while these are key in performance, all data collection, analysis, reporting and dissemination should be obtained from one reporting desk (source centralized) which in turn, enhance effective implementation of health sector performance and Joint Programme of Work and Funding (JPOWF).

Since a properly organized Health Management Information System (HMIS) is needed to provide timely, relevant and quality information required by the Ministry to manage its programmes and activities, the revision of the health sector data collection and reporting tools and development of an effective health management information system will therefore greatly improve the efficiency of health services delivery at all levels and provide evidence based health care services to all Kenyans. “If solutions are brought in from outside, they tend not be sustainable”. We are keen to build our own capacity, sort for investment and propagate health information as something essential.

THE VALUE AND IMPORTANCE OF HEALTH INFORMATION SYSTEM

A health information system does not exist by itself. It supports management of a health system whose ultimate goal is to improve and maintain the health of individuals, families and communities. This was highlighted 24 years ago as “...a system that provides specific information support to the evidence decision-making process at each level of an organization” (Hurtubise, 1984). This is what should drive our conceptual thinking. And this is what should drive our efforts to improve Health Information System.

Primary objectives:

1. To provide the managerial staff of a health service with information relevant to their work.
2. To enable planners in studying trends in the demand for health care and workload of the services.
3. To provide information for health planning, monitoring and evaluation of health programmes.
4. To provide a framework for health research studies in the management, planning and clinical fields
5. To teach both staffs working in information processing and those directly involved in health care.

The main function of a health management information system is to indicate through continuous analysis of the situation and performance of the health services, the action or adjustments needed in order to meet specified goals. Properly organized Health Information System is a prerequisite for the efficient administration of public health services and their planning should be given high priority. At a conference by WHO on Regional office for Europe on health information system, emphasis was placed on the need for a critical assessment of users needs and on ways of improving the quality of data input.

It is however, complementary that the data needed for planning and management should be extracted from the routinely collected data for the performance of specific tasks. The quality of data depends on the efficient organization of the flow of information at the local levels. This should ensure accurate and up to date input without undue cost. There is need for training staff and it is considered that it should be a general educational programme on the subject for health personnel at all levels. Such services require a considerable investment of funds and their cost-effectiveness is vital.

Modern methods of recording and storing information permit more rational organization management systems. The computers has a central role, if there is an automated or outline computer system in a hospital for example, the data added to primary file should be made available to the different administrative points of the health services.

Advantages of a functioning health information system:

- i. Information is readily available when requested or required, avoiding the last minute rushes to look for data.
- ii. Policy makers and managers of programmes use the information for the health and development planning and implementation and are sensitized on importance and effective utilization of information.
- iii. Resource mobilization and allocation. Once data is readily available, it is easy to project the required resources by extrapolating from the past trends with a fairly good accuracy. Rule of the thumb should not be the norm or the practice.
- iv. Monitoring trends – Disease surveillance is functional and it is thus easy to predict the occurrence of epidemics of diseases.
- v. Problem and gap identification – Various departments and institutions becomes part of the system; there is collaboration and co-ordination among various actors.
- vi. The work and duties of the staff that are involved in the system is appreciated and recognized.
- vii. Ad-hoc surveys and consultancies are avoided.
- viii. Decision making and priority service setting.
- ix. Operational research and training becomes easy and enables quick retrieval of the evidences in practice and use evidence based practices for demonstration.

- x. Monitoring and evaluation of projects and programmes will be made easier and alongside working corrective measures or change of strategies will be realized in the initial stages.
- xi. Donor influence in Health information system is also avoided as in case of reviews.

Guiding principles:

The approach recommended for strengthening National Health Information System (NHIS) follows a number of principles which have been derived from the assessment of HIS development experiences around the world and WHO past efforts to support such development. These principles relate not only to information system design and use, but also to more effective styles of Technical co-operation.

The overall purpose of these principles is to suggest that health information systems development must proceed as an integral part of efforts to strengthen the health care system and that **health data be recorded and used firstly, in support of individual care, local health service operation and community action.**

Placing emphasis on the use of data within the services will help increase the completeness and validity of the data that are selectively reported for supporting decision -making at all levels of the health system and for supporting health system, planning and development including service integration. Therefore:-

1. Strengthening the Health Information System at the various service levels should be undertaken in support of efforts to develop health services and improve their **performance**.
2. Any data to be recorded at any service level **MUST** have an explicitly identified use (for decision or action in terms of case or community management by staff or community members) at all levels. An implication of this principle is that no data should be requested from service levels to be reported to higher levels which do not have an actionable use at the recording level as well as at the receiving levels.
3. Any changes or developments to data recording and reporting should be made only to improve the provision of care at the patient and community level, particularly for those populations most in need. One implication of this principle is that countries, municipalities or regions should not be encouraged to change their information system primarily to provide data for central level and international reporting purposes.
4. Each Health administration must assess its needs for clinical and managerial information based on its mission, goals, priorities, core service responsibilities, levels and functions, models of service delivery, resources and access to information technology. The Health Information System should be designed so as to exceed the capability of the administration to manage it.
5. Great prudence should be applied when making changes to components of health information systems that are working fairly well. This applies particularly to reporting systems of specialized services programmes such as family planning or Tuberculosis control or EPI. Overall revision in health service recording and reporting should rarely be undertaken. Changes in the system should aim to progressively integrate the recording and reporting system at the local service level.
6. Efforts should be made to make better use of existing data at all levels through practical analysis, improved presentation of data and efforts to improve the flow and sharing data across programmes and services.
7. Practical use of information should be encouraged and supported for database maintenance and report generation. Such computerization should normally employ generic software that is widely available database management systems and spreadsheets. Major computerization efforts should

not dominate the selection of indicators and data or the design of records and reports, but support the improvement of data management through the application of these principles.

8. The selection and definition of a manageable data set or set of “**Essential health indicators**” is recommended as a sound activity for initiating the review and strengthening of health information systems and for devising a practical National Health Service monitoring capability. Core health indicators should be chosen for national, provincial and district use with the following criteria in mind:-
 - a. **Useful for action.** – the data needed for the indicator are useful for the person doing the recording with recorded data contributing to necessary action being taken with regard to the case, family, community or district being served.
 - b. **Relevant for national and programme monitoring.**- the indicator can serve to measure progress toward stated national and programme goals, objectives, targets, norms and standards. Such indicators focus on priority health problems in the country and the services and resources intended to manage those problems. Promotion and use of the indicator should strengthen routine programme management and the health information system in the country.
 - c. **Valid, consistent, reliable, representative and sensitive.** - the indicators should possess the normal desirable characteristics of health data, example capable of being recorded across the services with the necessary degree of validity, consistency, reliability, representative of all population groups and be sensitive to short term changes in the variable of interest.
 - d. **Ease of generation and measurement.** - The indicator data should as much as possible result from normal service and surveillance, usually existing within routine records and reports.
 - e. **Understandable:** - the indicator should deal with a single clear idea which everyone will see as an important measure. Composite indexes should be avoided.
 - f. **Ethical:** - Data collection, including the choice of the data source, computation of the indicator and its use should not conflict with accepted ethical values. Sometimes it is necessary to define proxy indicators to reflect conditions which are difficult or impossible to measure directly. For example, the rate of school absenteeism could be used as a proxy for the morbidity rate of school aged children, where there is high rate of school enrolment.

One of the principal objectives of the compendium is to emphasize the importance of choosing standard indicators and measuring them repeatedly over time. The indicators suggested in this manual are based on a review of country and programme experiences in Performance Monitoring & Evaluation (PME). The list of the indicator below is as a result of efforts by various stakeholders in health through a process of harmonization of Health sector indicators that was started several years ago. The arrangement of the indicators is by KEPH levels in accordance with NHSSP II and Performance Monitoring and Evaluation Framework (PMEF).

HEALTH SECTOR INDICATORS BY COHORTS:

One of the principal objectives of the compendium is to emphasize the importance of choosing standard indicators and measuring them repeatedly over time. The list of core indicators suggested in this compendium is based on a review of country and programme experiences in monitoring and evaluation. Protocols for the measurement of all indicators are provided and most have been field-tested. Indicators contained here can be used as they are; every effort has been made during their development to ensure

that they are relevant to most situations and countries comparisons and that they provide a comprehensive view of Kenya's health sector.

A description of each indicator is given to provide fundamental information that will help the reader to select, calculate, collect and interpret the indicator. Each indicator is described with a brief statement that includes the following:

- Definition: This is the standard description of the indicator.
- Calculation: This is the computation of the indicator using numerator and denominator where applicable.
- Data source: These are the primary data collection tools where data is obtained.
- Level: This is the point where data is used or transmitted from. This can be at health facility level, District level, provincial level or national level.
- Periodicity/ frequency: This indicates how often data is transmitted from one point to the next on a specified timeline.
- Use(s): The main purpose for which the data is collected.
- Status: This is the responsible institution/programme where data is primarily used or reported to.
- ***Functions i.e. 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey**
- Levels of care:
 - Level 1 = Community
 - Level 2 = Dispensary and clinics
 - Level 3 = Health Centre including Maternity and nursing homes
 - Level 4 = Sub district and District hospitals (primary hospitals)
 - Level 5 = Provincial and general hospitals (secondary hospitals)
 - Level 6 = National referral hospitals (tertiary).
- N = Numerator
- D = Denominator

Note: Detailed explanations of some definitions are also highlighted below the functions with the number superscript. The core indicators should be monitored over a period of at least 2 years before revising and introducing new indicators.

HEALTH SECTOR COMPENDIUM OF INDICATORS FOR MONITORING AND EVALUATION BY COHORTS:

Table 2: PREGNANCY, DELIVERY AND THE NEWBORN (UP TO 2 WEEKS)

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY / FREQUENCY	USE(S)	STATUS	FUNCTION *
1. Percentage of Women of Reproductive Age (WRA) receiving Family Planning (FP) Commodities:	The proportion of Women of Reproductive Age (WRA) 15 -49 years who have received family planning commodities ¹	Numerator: Number of clients (WRA, 15-49) who have received family planning commodities. Denominator: Estimated Total number of women (15-49 years) in the catchment area. ($N/D*100$)	Numerator: Daily Activity (FP) Register MOH 512 for levels 2 – 6 ² Denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District Facility	Monthly	To determine couple year protection. To estimate the FP uptakes. To determine the quantities required.	Reproductive Health (RH)	1, 2,3,4
2. Percentage of Antenatal Clinic (ANC) clients attending at least 4 visits:	The proportion of Antenatal clients who have visited the Antenatal clinic at least four (4) times for the current pregnancy.	Numerator: Total number of ANC clients who have visited the clinic at least 4 times for the current pregnancy. Denominator: Total number of ANC clients attending first visit ³ in the health facility. ($N/D*100$)	Numerator: Antenatal Clinic (ANC) Register MOH 405 for levels 2 – 6 ² . Denominator: Register MOH 405	National Provincial District Facility	Monthly	To determine the antenatal coverage and utilization for safe motherhood. To detect any abnormalities for the mother and child.	Reproductive Health (RH), MDG.	1, 2, 3,4
3. Percentage of pregnant women attending at least 4 ANC visits:	The proportion of pregnant women who have visited the Antenatal clinic at least four (4) times for the current pregnancy.	Numerator: Total number of ANC clients who have visited the clinic at least 4 times for the current pregnancy. Denominator: Estimate number of pregnant women in the period. ($N/D*100$)	Numerator: Antenatal Clinic (ANC) Register MOH 405 for levels 2 – 6 ² . Denominator: Register MOH 405 KNBS Survey	National Provincial District Facility	Monthly	To determine the antenatal coverage and utilization for safe motherhood. To detect any abnormalities for the mother and child.	Reproductive Health (RH), MDG.	1, 2, 3,4
4. Percentage of Deliveries conducted by skilled health attendants in health facilities.	The proportion of deliveries conducted by skilled health staff ⁴ in a health facility.	Numerator: Number of deliveries conducted in health facilities. Denominator: Estimated number of expected deliveries in the catchment area. ($N/D*100$)	Numerator: Maternity Register MOH 333 for levels 2 – 6 ² Denominator: Kenya National Bureau of Statistics (KNBS).	National Provincial District Facility	Monthly	To ensure safe delivery and safe motherhood. To estimate coverage. To prevent Maternal and neonatal deaths.	Reproductive Health (RH), MDG.	1, 2, 3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Family planning commodities**¹ include contraceptives such as pills, condoms, Injectables, implants, etc.

* **Levels 2 – 6**² refer to health facilities providing care from clinics to national referrals and teaching hospital.

***Skilled Health attendant/ Staff**⁴ is a health worker/attendant with an accredited health professional - such as a midwife, doctor or nurse - who have been Educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the puerperium.

***First ANC visit**³ – The number of clients visiting antenatal clinic for the first time during the current pregnancy.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
5. Percentage of Newborns with Low Birth Weights (LBW) –(less than 2500 grams)	The proportion of the Newborns with low birth weight Less than 2500 g (up to and including 2499 g) within one hour of birth	Numerator: Number of newborns with low birth weights Less than 2500 g (up to and including 2499 g). Denominator: Total live births. (N/D*100)	Numerator: Maternity Register MOH 333 for levels 2 – 6 ² . ,CWC (postnatal) register, Denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District Facility	Monthly	For Growth monitoring. To reduce infant mortality.	Child Health, MDG.	1,2, 3, 4
6. Percentage of HIV infected pregnant women who received preventive antiretroviral therapy to reduce the risk of mother -to- child transmission (PMTCT).	The proportion of HIV positive pregnant women who have received Preventive antiretroviral therapy (ART) to reduce the risk of mother -to- child transmission during the last 12 months.	Numerator: Number of HIV infected pregnant women who received preventive antiretroviral therapy (ART) during the last 12 months. Denominator: Total number of pregnant women ⁵ who tested HIV positive in the last 12 months. (N/D*100)	Antenatal (ANC) MOH 405 or Maternity Registers MOH 333 for levels 2 – 6 ² . for both Numerator and Denominator	National Provincial District Facility	Monthly	HIV prevention to the child. To ensure safe motherhood	Reproductive Health (RH), MDG.	1,2, 3, 4
7. Percentage of pregnant women distributed with LLITNs	The proportion of pregnant women who have received Long Lasting Insecticide Treated Nets (LLITNs) in the current pregnancy.	Numerator: Number of pregnant women who have received LLITNs in the current pregnancy. Denominator: Estimated number of pregnant women in the catchment area. (N/D*100)	Numerator: Antenatal (ANC) MOH 405 for levels 2 – 6 ² Denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District Facility	Monthly	To prevent malaria in pregnancy. To ensure safe motherhood. To estimate LLITNs coverage.	Reproductive Health (RH), Malaria Control, MDG.	1,2, 3, 4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Estimating number of HIV- infected pregnant women⁵** is based on sentinel surveillance data from Antenatal clinics: usually the district prevalence

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY / FREQUENCY	USE(S)	STATUS	FUNCTION *
8. Percentage of pregnant women receiving two doses of Intermittent Presumptive Therapy (IPT2)	The proportion of pregnant women attending Antenatal clinic who have received two (2) doses of Intermittent Presumptive Therapy (IPT2)	Numerator: Number of pregnant women who have received two (2) doses of Intermittent Presumptive Therapy (IPT 2). Denominator: Estimated number of expected pregnancies in the catchment area. $(N/D*100)$	Numerator: Antenatal Clinic (ANC) Register MOH 405 for levels 2 – 6 ² Denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District Facility	Monthly	To determine the antenatal coverage for safe motherhood To prevent malaria in pregnancy.	Reproductive Health (RH), Malaria Control, MDG	1,2, 3, 4
9. Percentage of Health Facilities providing Basic Emergency Obstetric Care (BEOC)	The proportion of health facilities that have performed all 6 signal functions ¹⁰ for <i>Basic Emergency Obstetric Care (BEOC)</i> .	Numerator: Number of Health Facilities level 2-6 ² providing all six functions of Basic Emergency Obstetric Care. Denominator: Total number of existing health facilities in the catchment area. $(N/D*100)$	Numerator: Rapid surveys and support supervision reports at levels 2 – 6 ² Denominator: Health facility inventory MOH 715.	National Provincial District	Monthly Semi-Annual (half yearly)	To ensure safe motherhood.	Reproductive Health (RH), MDG	1, 2,3,4
10. Percentage of Health Facilities providing Comprehensive Emergency Obstetric Care (CEOC):	The proportion of health facilities that have performed all 8 signal functions ¹¹ for Comprehensive Emergency Obstetric Care	Numerator: Number of health facilities performing all the eight (8) signal functions of CEOC. Denominator: Total number of health facilities existing levels 4 -6 ² . $(N/D*100)$	Numerator: Rapid surveys and support supervision reports at levels 4– 6 ⁶ Denominator: Health facility inventory MOH 715.	National Provincial District	Monthly Semi-Annual (half yearly)	To ensure safe motherhood.	Reproductive Health (RH), MDG	1,2,3,4
11. Percentage of Maternal Deaths Audited	The proportion of Maternal deaths reviewed in facilities to confirm causes and circumstances of death.	Numerator: Number of Maternal Deaths Audited (reviewed) in health facility. Denominator: Total number of maternal deaths reported. $(N/D*100)$	Numerator: Rapid surveys and support supervision/ Audit reports at levels 4 – 6 ⁶ . Denominator: MOH 333 register for level 4- 6 ⁶ and MOH 268 Disease index cards	National Provincial District Facility	Monthly Semi-Annual (half yearly)	Measure the proportion of deaths that are reviewed in order to put Maternal health interventions in place.	Reproductive Health (RH), MDG.	1,2, 3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

* **The six (6) signal functions**¹⁰ of BEOC are: 1. Parenteral Antibiotics 2. Parenteral Anticonvulsants 3. Parenteral Oxytocics 4. Assisted Vaginal Delivery (vacuum extraction) 5. Manual removal of placenta 6. Removal of retained products (MVA).

***The eight (8) signal function**¹¹ for CEOC are: The above 6 plus, 7. Blood transfusion 8. Surgical interventions (Caesarean section)

***Levels 4 – 6**⁶ refer to health facilities providing care from Sub-district to national referrals and teaching hospital.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
12. Facility based Maternal Mortality Ratio (MMR):	Number of facility maternal mortality ⁸ occurring at the health facility per live births. Expressed as the number of deaths per 100,000 live births	Numerator: Number of Maternal Deaths in a facility. Denominator: Total number of live births in a facility. ($N/D \times 100,000$)	Numerator: Maternity Register MOH 333 for levels 2 – 6 ² Denominator: Maternity Register MOH 333 for levels 2 – 6 ²	National Provincial District Facility	Annual (per year)	To promote and ensure safe motherhood. To determine the life expectancy.	Reproductive Health (RH), MDG.	1,2,3,4
13. Maternal Mortality Ratio (MMR): - Population based	Number of maternal Mortality ⁹ occurring in a given catchment area per live births. Expressed as the number of deaths per 100,000 live births	Numerator: Number of Maternal Deaths. Denominator: Total number of live births ($N/D \times 100,000$)	Numerator: Maternity Register MOH 333 for levels 2 – 6 ² and Household survey, Verbal Autopsy Denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District Facility	Annual (per year) Every 5 years by KDHS DSS	To promote and ensure safe motherhood. To determine the life expectancy.	Reproductive Health (RH), MDG.	1,2,3,4
14. Percentage of fresh still births in the health facility	Proportion of fresh still births among all still births (fresh and macerated) in the health facility,	Numerator : Number of fresh still births babies Denominator: Total number of still births (fresh and macerated) in the health facility ($N/D \times 100$)	Perinatal mortality audit, Maternity/ Delivery register MOH 333 for both Numerator and Denominator.	National Provincial District Facility	Monthly	To determine the efficiency of any maternity unit	Child Health, MDG.	1,2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Facility based maternal death**⁸ is the death of a woman while pregnant or within 42 days of termination of pregnancy irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accident occurring in the health facility.

***Maternal Mortality/death**⁹ is the death of a woman while pregnant or within 42 days of termination of pregnancy irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accident occurring in a given catchment area.(Population based indicator)

Table 3: EARLY CHILDHOOD (2 WEEKS TO 5 YEARS)

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
15. Percentage of Newborns receiving BCG:	The proportion of Newborns who have received Bacillus Calmette Guerin (BCG) vaccination:	Numerator: Number of children less than 1 year (<1 yr) who have been vaccinated against Tuberculosis Denominator: Estimated number of live births in the catchment area. (N/D*100)	Numerator: Immunisation Register MOH 510 for levels 2 – 6 ² . Denominator: Kenya National Bureau of Statistics (KNBS).	National Provincial District Facility	Monthly	To determine the immunization coverage against Tuberculosis To achieve maximum child survival.	DVI, Child Health, MDG.	1,2,3,4
16. Percentage of Children under one (1) year of age immunized against Measles:	The proportion of children less than 1 year (<1 yr) who have been vaccinated against Measles.	Numerator: Number of children less than 1 year (<1 yr) who have been vaccinated against Measles. Denominator: Estimated number of surviving infants [aged less than 1 year (<1 yr)] (N/D*100)	Numerator: Immunisation Register MOH 510 for levels 2 – 6 ² . Denominator: Kenya National Bureau of Statistics (KNBS).	National Provincial District Facility	Monthly	To determine the immunization coverage against measles. To achieve maximum child survival.	DVI, Child Health, MDG.	1,2,3,4
17. Percentage of Children under one (1) year of age fully immunized:	The proportion of children less than 1 year (<1 yr) who have received all the national antigens ¹² or completed the immunisation schedule against preventable diseases.	Numerator: Number of children less than 1 year (<1 yr) who have received all antigens. Denominator: Estimated number of surviving infants [aged less than 1 year (<1 yr)] (N/D*100)	Numerator: Immunisation Register MOH 510 for levels 2 – 6 ² . Denominator: Kenya National Bureau of Statistics (KNBS).	National Provincial District Facility	Monthly	Determine fully immunized children. To achieve maximum child survival Fully Immunisation Coverage	Nutrition, Child Health, MDG.	1,2,3,4
18. Percentage of Children under 5 years (< 5 yrs) attending Child Welfare Clinic (CWC) for growth monitoring services (new cases)	The proportion of children less than five years who are attending Child Welfare Clinic (CWC) for the first time (New visit) for growth monitoring e.g. weighing.	Numerator: Number of New (first visit) ¹⁵ children less than five years who are attending Child Welfare Clinic (CWC) for growth monitoring Denominator: Estimated number of Children less than 5 years in the catchment area. (N/D*100)	Numerator: Child Welfare Clinic (CWC Register MOH 511 for levels 2 – 6 ² . Denominator: Kenya National Bureau of Statistics (KNBS).	National Provincial District Facility	Monthly	For growth monitoring. To achieve maximum child survival	Nutrition, Child Health, MDG.	1,2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

* **All the national antigens**¹² - All the national antigens as per national immunisation schedule (BCG, 3 doses of OPV, 3 Doses of Pentavalent and measles). Including or excludes all the OPV Birth dose and excluding yellow fever vaccination which is not done country wide but in a few selected districts.

***First Visit**¹⁵ - Refer to a client who comes for the first time to the Health Facility for the services during the calendar year.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
19. Percentage of Children under 5 years (< 5 yrs) attending Child Welfare Clinic (CWC) who are underweight	The proportion of children under five years who are attending Child Welfare Clinic (CWC) and are underweight.	Numerator: Number of children under five years who are attending clinic and are underweight Denominator: Total number of children attending Child Welfare Clinic (CWC). (<i>N/D*100</i>)	Numerator: Child Welfare Clinic (CWC Register MOH 511 for levels 2 – 6 ² . .Denominator: Child Welfare Clinic (CWC Register MOH 511 for levels 2 – 6 ² .	National Provincial District Facility	Monthly	For growth monitoring. To achieve maximum child survival	Nutrition, Child Health, MDG.	1,2,3,4
20. Percentage of Children less than 5 years (< 5 yrs) receiving Vitamin A supplement	The proportion of children less than five years who are receiving vitamin A.	Numerator: Number of children less than five years receiving Vitamin A supplement. Denominator: Estimated number of Children less than 5 years. (<i>N/D*100</i>)	Numerator: Permanent Register MOH 510 and Child Welfare Clinic (CWC Register MOH 511 for levels 2 – 6 ² , Tally sheet denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District Facility	Monthly	To prevent blindness and enhance treatment. To achieve maximum child survival	Nutrition, Child Health, MDG.	1, 2, 3, 4
21. Percentage of children under five years of age (< 5 years) distributed with Long Lasting Insecticide Treated Nets (LLITNs)	The proportion of children under five years who have received Long Lasting Insecticide Treated Nets.	Numerator: Number of children under five years who have received LLITNs. Denominator: Estimated number of children under five years in the catchment area. (<i>N/D*100</i>)	Numerator: Antenatal (ANC) MOH 405 for levels 2 – 6 ² Denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District Facility	Monthly, quarterly	To prevent malaria in under five years. To achieve maximum child survival	Child Health, Malaria Control, MDG.	1,2,3,4
22. Percentage of under 5 years treated for malaria,	The proportion of under 5 years patients treated for malaria in the health facility among all malaria cases (both under five and over five years) in the specified period.	Numerator: Number of under 5 year patients treated for malaria in the facility. Denominator: Total number of malaria cases reported (both under five and over five years) (<i>N/D*100</i>)	Numerator: Under five years out patients register MOH 204 A, In-patient register MOH 301, Disease Index cards MOH 268. Denominator: under five years out patients register MOH 204 A Over five years out patients register MOH 204 B. In-patient register MOH 301. Disease Index cards MOH 268,	National Provincial District Facility	Monthly, quarterly	To prevent deaths due to malaria in above five years.	Child Health, Malaria Control, MDG.	1,2,3,4
23. Percentage of Health Facilities providing treatment as per the IMCI guidelines	The proportion of health facilities with clinical staff with skills in management of childhood illnesses	Numerator: Number of health facilities providing treatment as per the IMCI guidelines. Denominator: Total number of existing health facilities in the catchment area. (<i>N/D*100</i>)	Numerator: Rapid surveys and support supervision reports at levels 2 – 6 ² . Denominator: Health facility inventory using MOH 715 template and Health Facility Assessment (HFA) ¹⁶ .	National Provincial District	Semi Annually (half yearly) To prevent deaths due to malaria in under five years. To achieve maximum child survival	To achieve maximum child survival	Child Health, MDG.	2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

*IMCI- integrated management of childhood illness.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
24. Percentage of Districts with Community IMCI interventions:	The Proportion of districts with Community initiative in IMCI interventions in management of childhood illnesses.	Numerator: Number of districts with Community initiatives in IMCI in management of childhood illnesses. Denominator: Total number of district in a catchment area. ($N/D*100$)	Numerator: Rapid surveys and support supervision reports at levels 2 – 6 ² or Service delivery indicators MOH 105 or HFA ¹⁶ report.	National Provincial	Semi Annually (half yearly)	To achieve maximum child survival	Child Health, MDG.	2,3,4
25. Infant Mortality Rate (IMR)	The number of deaths of children under 1 year of age per 1000 occurring in the catchment area population.	Numerator: Number of deaths of children under 1 year of age in the catchment. Denominator: Total Live births in the catchment area. ($N/D*1000$)	Numerator: Surveys. In-patient register MOH 301 and Maternity register MOH 333 for levels 2 – 6 ² Denominator: Kenya National Bureau of Statistics (KNBS).	National Provincial District	Annual Every 5 years. Any other specified period.	To estimate population growth. To achieve maximum child survival To estimate surviving infants	Child Health, MDG.	3, 4
26. Facility Infant Mortality Rate (IMR)	The number of deaths of children under 1 year of age per 1000 occurring in the health facility	Numerator: Number of deaths of children under 1 year of age in the health facilities. Denominator: Total Live births in the facility ($N/D*1000$)	Numerator: In-patient register MOH 301 and Maternity register MOH 333 for levels 2 – 6 ² . Denominator: Maternity register MOH 333 for levels 2 – 6 ² .	National Provincial District Facility	Annual	To estimate population growth. To achieve maximum child survival	Child Health, MDG.	3, 4
27. Under five (5) years Mortality Rate (< 5 MR):	The number of deaths of children under 5 years of age per 1000 population.	Numerator: Number of deaths of children under 5 year of age in the catchment area. Denominator: Total population under five years of age in the catchment area. ($N/D*1000$)	Numerator: Surveys. In-patient register MOH 301, Disease Index Cards MOH 268 and Maternity register MOH 333 for levels 2 – 6 ² .Denominator: Kenya National Bureau of Statistics (KNBS)	National Provincial District	Annual Every 5 years. Any other specified period	To calculate the life expectancy To estimate population growth. To achieve maximum child survival	Child Health, MDG.	2, 3, 4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Health Facility Assessment (HFA¹⁶)**- is a rapid assessment or survey carried out in the health facility to determine services available, service provision, and qualities of services or provider information.

Table 4: LATE CHILDHOOD (6 TO 12 YEARS)

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
28. Facility Under five (5) years Mortality Rate (< 5 MR):	The number of deaths of children under 5 years of age per 1000 occurring in the facility	Numerator: Number of deaths of children under 5 year of age in the health facility. Denominator: Total population under five years of age admitted in the facility. $(N/D*1000)$	Numerator: In-patient register MOH 301, Disease Index Cards MOH 268 and Maternity register MOH 333 for levels 2 – 6 ² . Denominator: In-patient register MOH 301	National Provincial District	Annual Every 5 years. Any other specified period	To calculate the life expectancy To achieve maximum child survival	Child Health, MDG.	2, 3, 4
29. Percentage of school children correctly de-wormed at least once in the year:	The proportion of the school children de-wormed using drugs such as Mebendazole 500mg, Albendazole 400mg e.g. once in the year.	Numerator: Number of school children de-wormed in the year. Denominator: Total number of school children in the year within the catchment area. $(N/D*100)$	Numerator: School de-worming register for both numerator Denominator: Kenya National Bureau of Statistics (KNBS)	Provincial District Facility	Annual Any other specified period.	To improve the health of school going children. To achieve maximum child survival.	Child Health, MDG.	2,3,4
30. Percentage of schools with adequate sanitation facilities:	The proportion of schools (day, boarding, primary secondary) with Adequate sanitation ²³ .	Numerator: Number of schools with adequate sanitation at inspection. Denominator: Total number of schools in the catchment area. $(N/D*100)$	Inspection report. Surveys MOH 708 Environmental Health summary	Provincial District Facility	Annual or any other specified period.	To improve health in schools and the environment. To achieve maximum child survival.	Environment al health,	2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Adequate sanitation**²³ Means that the facility has running water, enough clean toilets to the proportion of children, properly maintained compound, well ventilated class rooms and other living facilities including kitchen and dinning.

Table 5: ADOLESCENTS (13 TO 24 YEARS)

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
31. Percentage of Health facilities providing youth friendly services ¹⁷ :	The Proportion of health facilities offering services that attracts the youths whenever they need to seek health services.	Numerator: Number of health facilities offering youth friendly services ¹⁷ . Denominator: Total health facilities in the catchment area. ($N/D*100$)	Supervision reports. Special surveys.	National Provincial District	Annual or any other specified period.	To improve access of health services to the adolescents.	Reproductive health	2,3,4
32. HIV prevalence among 15 to 24 year old pregnant women:	The rate of HIV infections among the pregnant women aged between 15 to 24 years tested at the sentinel sites in a specified period.	Numerator: Number of HIV positive pregnant women aged 15 to 24 years. Denominator: Total number of pregnant women tested for HIV at the sentinel sites in the catchment area. ($N/D*100$)	Reports from Sentinel sites. Special Surveys	National Facility	Annual	To determine the prevalence of HIV in the country. To determine the trend of HIV epidemic in a given geographical area.	Reproductive health, NASCOP, ERS, MDG	2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

* **Youth friendly services**¹⁷ – Health facilities offering services that attracts the youths whenever they need to seek health services and have at least skilled health personnel and guidelines.

Table 6: ADULTS/ ALL LIFECYCLES (25 TO 59 YEARS)

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY / FREQUENCY	USE(S)	STATUS	FUNCTION *
33. Percentage of adults and children with advanced HIV infection started on Anti Retroviral Therapy (ART):	The proportion of new HIV positive patients started on Anti Retroviral Treatment.	Numerator: Number of new HIV positive patients started on ART. Denominator: Total number of patients with advanced HIV infection. ($N/D*100$)	Pre ART register and ART register	National Provincial District Facility	Monthly.	To avert deaths caused by HIV. To improve health of the HIV positive patients with the aim of increasing their productivity capacity. To increase the life expectancy of the HIV positive patients	NASCOP, ERS, MDG	1,2,3,4
34. Percentage of Adults and children with advanced HIV infection receiving Anti Retroviral Therapy (ART)	The proportion of Adults and children with advanced HIV infections who are currently receiving Anti retroviral Therapy in accordance with the nationally approved treatment protocol at the end of reporting period.	Numerator: Number of Adults and children with advanced HIV infections who are currently receiving Anti retroviral Therapy. Denominator: Estimated number of adults and children with advanced HIV infection. ($N/D*100$)	Numerator: Number of HIV positive cases who have received ART treatment. Denominator: STEPS TO DETERMINE ART ELIGIBLE POPULATION ¹⁸	National Provincial District Facility	Monthly.	To avert deaths caused by HIV. To improve health of the HIV positive patients with the aim of increasing their productivity capacity. To indicate ART treatment dropout rate (defaulters). To increase the life expectancy of the HIV positive patients	NASCOP, ERS, MDG	1,2,3,4
35. Percentage of population Counsellled and Tested for HIV: (VCT, PITC, DTC, HBCT)	The proportion of population counsellled and tested for HIV within the specified period.	Numerator: Number of clients counsellled and tested for HIV within the specified period. Denominator: Total population in the catchment area ($N/D*100$)	VCT, PITC, DTC, HBCT clinic service registers. ANC register MOH 405 and Maternity register MOH 333	National Provincial District Facility	Monthly.	To increase the number of people who know their HIV status for behaviour change	NASCOP,	1,2,3,4
36. Percentage of collected blood units screened for HIV in a quality assured manner:	The proportion of blood units collected and screened for HIV using a framework tool used by the WHO.	Numerator: Number of blood units collected and screened for HIV in blood centres. Denominator: Total number of blood units collected. ($N/D*100$)	Regional blood bank registers.	National Provincial District Facility	Annually	To assess progress in ensuring a safe blood supply.	NASCOP,	1,2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

* **ART Eligible population**¹⁸ –Adults and children with advanced HIV infections who are currently receiving Anti retroviral Therapy in accordance with the nationally approved treatment protocol at the end of reporting period. Denominator: **STEPS TO DETERMINE ART ELIGIBLE POPULATION**¹⁸ 1. Get the population of the catchment area 2. Compute the estimated Population that is HIV+ve (apply prevalence) 3. Compute 15% (Percentage) from the estimated HIV+ve population.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
37. Percentage of persons 5 years and above treated for malaria:	The proportion of persons 5 years and above patients treated for malaria in the health facility for the period.	Numerator: Number of 5 years and above patients treated for malaria in the facility. Denominator: Total number of malaria cases reported in the health facility. $(N/D*100)$	Over five years and above patient register MOH 204 B. In-patient register MOH 301. Disease Index cards MOH 268 for both numerator and denominator	National Provincial District Facility	Monthly.	To determine the proportion of patients treated for malaria. Estimate the burden of malaria in the population over five years.	Curative and Rehabilitative services, DOMC, MDG	1,2,3,4
38. Ten most frequent causes ⁹ of out patient attendance:	The most common causes of out patient morbidity that affect patients attending out patient department in the health facility for the period.	Numerator: Number of new disease specific cases that are most frequently reported in the facility. Denominator: Total number of the ranked Frequency distributions ²⁴ of cases seen in out patients	Under five and Over five out patient registers MOH 204 A and 204 B for both numerator and denominator	National Provincial District Facility	Monthly.	To determine the burden of disease in the facility/ catchment area	HIS, WHO	1,2,3,4
39. Ten most frequent causes ⁹ of inpatient morbidity:	The most common causes of in-patient morbidity that affect patients admitted in the health facility for the period.	Numerator: Number of new disease specific cases that are most frequently reported in the in-patient in the health facility. Denominator: Total number of the ranked Frequency distributions ²⁴ of cases admitted.	In-patient register MOH 301 and Maternity register MOH 333 and Disease Index cards MOH 268 for both numerator and denominator	National Provincial District Facility	Monthly and reporting quarterly.	To determine the burden of disease in the in-patient in the health facility/ catchment area.	Curative and Rehabilitative services	1,2,3,4
40. Ten most frequent causes of in-patient deaths	The most common causes of in-patient deaths in the health facility for the period.	Numerator: Number of in-patient deaths occurring due to specific diseases that are most frequently reported in the health facility. Denominator: Total number of the ranked Frequency distributions ²⁴ of cases admitted and died in the health facility.	In-patient register MOH 301. Disease Index cards MOH 268	National Provincial District Facility	Monthly and reporting quarterly.	To determine the frequent causes of death in the health facility/ catchment area.	Curative and Rehabilitative services	1,2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Ten most frequent causes**⁹ Sum of all the disease specific entities, calculate the proportion of each entity and rank them from the most frequent to least frequent then select the first ten cases out of the entire list.

***Ranked Frequency distributions**²⁴ – all diseases are ranked according to the order of magnitude of the cases and frequency of occurrence determined using the total number of cases reported as the denominator. Then the top ten of the most frequently occurring cases are selected plus All other cases which will determine the rest of the cases.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
41. Malaria in-patient case fatality rates:	The proportion of in-patient deaths caused by malaria in the health facility for the period.	Numerator: Number of deaths caused / due to malaria reported in the health facility for the period. Denominator: Total number of malaria cases admitted in the health facility for the period. $(N/D*100)$	In-patient register MOH 301. Disease Index cards MOH 268 for both numerator and denominator	National Provincial District Facility	Monthly and reporting quarterly.	To determine the frequency of deaths due to malaria in the population in the health facility/catchment area.	Curative and Rehabilitative services, MDG	1,2,3,4
42. Number of condoms distributed:	This refers to the number of condoms distributed from all outlets in a given area for a period.	Numerator: Total number of condoms distributed. Denominator: None. (N)	Daily Activity register (Family Planning) MOH 512. Post Natal register MOH 406 All other sources	National Provincial District Facility	Monthly	To prevent Sexually Transmitted Infections (STIs). To prevent unwanted pregnancies . Calculate the Couple Year Protection (CYP) ²⁵ .	NASCOP, Reproductive Health	1,2,3,4
43. TB case detection rate	The proportions of TB cases identified, investigated, confirmed and are on treatment.	Numerator: Number of new TB cases detected. Or Number of new smear-positive TB cases detected. Or Number of new smear-positive TB cases detected under DOTS. Denominator: Estimated number of new TB cases countrywide / in the catchment area. $(N/D*100)$	Facility TB register Laboratory register MOH 240. Quarterly reports on TB case registration Country estimates of TB incidence by WHO.	National	Monthly Annually	Give country/regional estimates of TB incidence . To reduce cross infections . To reduce deaths caused by tuberculosis To determine the burden of tuberculosis in the catchment area.	WHO. NLTP, MDG	1,2,3,4

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* **Couple Year Protection (CYP)**²⁵. – The Calculation of CYP for condoms is estimated at use of 150 condoms per year. Thus CYP = the total number of condoms distributed divide by 150 then you get the number of couples protected by use of condoms.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
44. Tuberculosis cure rate:	This is the proportion of new tuberculosis smear positive cases registered in a specified period that have undergone and completed treatment and have tested smear negative at the end of treatment period (cured).	Numerator: Number of new smear-positive TB cases registered in a specified period that were cured. Denominator: Total number of new smear-positive TB cases registered in the same period. (N/D*100)	Facility Tuberculosis register Laboratory registers MOH 240. Quarterly reports on treatment outcomes.	National Provincial District	Monthly Quarterly Annually	To determine the proportion of patients cured from tuberculosis infection. To determine the programme efficiency To determine drug efficacy, compliance	NLTP, MDG	1,2,3
45. Tuberculosis Treatment Completion Rate (Sm+ve/ DOTs)	The proportion of new tuberculosis cases registered in a specified period that have completed treatment under Direct Observed Treatment (DOTs) whether or not it met the criteria for cure or failure.	Numerator: Number of new smear-positive TB cases registered in a specified period that completed treatment whether or not it met the criteria for cure or failure Denominator: Total number of new smear-positive TB cases registered in the same period. (N/D*100)	Facility Tuberculosis register Laboratory register MOH 240. Quarterly reports on treatment outcomes.	National Provincial District	Quarterly Annually	To determine TB treatment Outcomes. To determine the proportion of patients under DOTs, completing treatment. To measure the effects of DOTs strategy.	NLTP, MDG	1, 2, 3
46. Percentage of districts with Functional Health Stakeholders Forum (DHSF):	The Proportion of districts with functional District Health Stakeholders Forum (DHSF) ²⁰	Numerator: Number of districts with functional stakeholders' forum. Denominator: Total number of district in the catchment area. (N/D*100)	Provincial management support system Reports. DHMT management support system reports	National Provincial	Annual or any other specified period	To support services delivery in the districts. To plan, monitor and share the available resources in the district	PHMT, HSCC	2, 3,

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

* **Functional Health Stakeholders Forum**²⁰ -Community units that are conducting quarterly regular meetings, have minutes, planning, monitoring and supporting health services in a coordinated manner.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
47. Percentage of Trained Community Health Committees (CHCs):	The proportion of Community health committees trained on community strategy to manage health services at level 1 (community level).	Numerator: Number of Community Health Committees (CHCs) trained in a period. Denominator: Total expected community health committee in the catchment area. ($N/D*100$)	Community Health Committees reports.	Provincial District Facility	Annual or any other specified period	To manage and support service delivery at community level. To link the community with the facility.	DHMT	1, 2, 3
48. Percentage of Community Health Workers (CHWs) trained:	The proportion of community health workers trained on community strategy and have been provided with kits to provide basic health services to the households under their operation	Numerator: Number of community health workers trained and have kits, in a period. Denominator: Total community health workers selected in the catchment area. ($N/D*100$)	Training Reports. Facility health management support system reports for both numerator and denominator.	Provincial District Facility	Annual or any other specified period	To provide basic health services at community level. To link the community with the facility.	DHMT	1, 2, 3
49. Percentage of Functioning Community Health Units (FCHUs):	The proportion of functional community health units ¹³ with trained CHCs, CHWs and Kits.	Numerator: Number of number of community health units with trained CHCs, CHWs and Kits. Denominator: Total expected community units. ($N/D*100$)	Facility Reports. Facility health management support system reports. DHMT reports for both numerator and denominator.	National Provincial District	Annual or any other specified period	To provide basic health services at community level. To link the community with the facility.	DHMT	1, 2, 3
50. Percentage of Households with access to safe water and sanitation.	The proportion of households with access to safe water and sanitation.	Numerator: Number of households with access to safe water and sanitation. Denominator: Total number of Households in the catchment area. ($N/D*100$)	Survey reports.	National Provincial District	Any specified period preferred	To prevent avoidable diseases in the population.	DHMT, Division of Environmental Health (DEH)	2,3,4

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Function Community Health Units**¹³-Community units that are conducting quarterly regular meetings, have minutes, planning, monitoring and supporting health services in a coordinated manner.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
51. Percentage of Households sprayed with Insecticide Residual Spray (IRS).	The proportion of households sprayed with Insecticide Residual Spray (IRS).	Numerator: Number of households sprayed. Denominator: Total number of household in a catchment area. ($N/D*100$)	Household IRS Reports for both numerator and denominator	National Provincial District	Annual or any other specified period preferred	To reduce the mosquito population. To protect members of households contracting malaria.	DHMT, DOMC	2,3,4
52. Percentage of Health facilities without all tracer drugs ¹⁴ for greater than 2 weeks (> 2 weeks)	The proportion of health facilities that experience essential drug stock - outs for more than 2 weeks in a month.	Numerator: Number of health facilities without essential drugs for >2 weeks. Denominator: Total number of health facilities in the catchment area. ($N/D*100$)	District Reports. Special survey for both numerator and denominator.	National Provincial District	Monthly	To ensure availability of essential drugs supply.	DHMT, KEMSA	1,2,3,4
53. Percentage of emergency surgical cases operated within one hour	The proportion of all emergency surgical cases operated within one hour of decision.	Numerator: Number of surgical cases operated within one hour Denominator: Total number of emergency surgical cases due for operation. ($N/D*100$)	In-patient register MOH 301. Disease/operational Index Cards MOH 268, Nurses cardex, patient notes both numerator and denominator.	National Provincial District Facility	Monthly, quarterly	To determine the efficiency in care. To save lives.	Hospital Management, Curative and Rehabilitative services	1,2,3
54. Percentage of cold surgical cases operated on within one month.	The proportion of all cold surgical cases operated within one month of decision.	Numerator: Number of cold surgical cases operated within one month Denominator: Total number of cold surgical cases due for operation. ($N/D*100$)	In-patient register MOH 301. Disease/operational Index Cards MOH 268. Nurse's cardex, patient notes both numerator and denominator.	National Provincial District Facility	Monthly, quarterly	To determine the efficiency in care. To save lives.	Hospital Management, Curative and Rehabilitative services	1,2,3

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Tracer drugs¹⁴** – The list of 15 drugs provided here should be available in a health facility at any given time namely 1 =Cap Amoxicillin 250mg, 2=. Syrup Amoxicillin 125mg/5ml, 3= Tab Paracetamol 500mg, 4. = Tab Cotrimoxazole 480mg 5. = Tab Albendazole 400mg 6. = Chlorpheniramine 4mg, 7= Tab AL 20/120mg x 24s 8. = Tab Metronidazole 200mg 9. = Injectables Gentamycine 20mg/2ml 10. = Injectables Benzylpenicillin 1mu, 12. = Injectables Hydrocortisone 100mg 13. =ORS 500ml /Sachet 14. = 1% Tetracycline eye ointment 15. = 1% Clotrimazole cream

Note: If the health facility misses one of the tracer drugs e.g. 1/15, 2/15, 3/15 etc then they should indicate the number of days without any of the above tracer drugs. For district any facility going without any of the above tracer drugs for greater than two weeks should be counted as without tracer drugs.

Table 7: ELDERLY (60+ YEARS)

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
55. Percentage of Health facilities providing regular checkups for the elderly:	The proportion of health facilities giving services (routine medical checkups) specifically to the elderly.	Numerator: Number of health facilities giving routine medical checkups to the elderly. Denominator: Total number of health facilities in the catchment area. (N/D*100)	District reports and MOH 715 Health facility inventory for both numerator and denominator	National Provincial District	Annual or any other specified period preferred	To ensure the elderly live a healthy lifestyle. To increase life expectancy	DHMT, Curative and Rehabilitative services	1,2,3
56. Percentage of districts with functional support systems to promote healthy Life-styles for the elderly:	The proportion of districts with planned and organized to promote healthy life-styles¹⁵ to the elderly.	Numerator: Number of districts with planned and organized services to the elderly. Denominator: Total number of districts in the catchment area. (N/D*100)	District reports. PHMT reports for both numerator and denominator.	National Provincial District	Annual or any other specified period preferred	To ensure the elderly live a healthy lifestyle. To increase life expectancy	DHMT, Curative and Rehabilitative services	1,2,3
57. Percentage of secondary hospitals with specialized geriatric care available:	The proportion of secondary hospitals providing specialized geriatric care.	Numerator: Number of general hospitals providing specialized geriatric care services to the elderly levels 4-6 ⁶ . Denominator: Total number of general hospitals levels 4-6 ⁶ . (N/D*100)	District reports. PHMT reports for both numerator and denominator.	National Provincial District	Annual or any other specified period preferred	To ensure the elderly live a healthy lifestyle. To increase life expectancy	DHMT, Curative and Rehabilitative services	1,2,3

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

*Healthy Life-Styles¹⁵ – is a site specifically designed for parents and caregivers to provide information to help you eat healthy food, avoid excessive fats, sugar and alcohol, no nicotine, drink plenty of water and exercise (be more physically active).

Table 8: EFFICIENCY INDICATORS

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
58. Doctor Population ratio:	The number of doctors serving a specific population.	Numerator: Number of doctors. Denominator: Estimated population in a specified catchment area. Expressed as number of doctors per 10,000 population. $(N/D*10,000)$	Staff compliment (establishment) for the numerator. Kenya National Bureau of statistics (KNBS) for denominator	National Provincial District	Semi-Annual (half yearly).	To determine availability of care. To rationalise distribution of doctors	DHMT, Curative and Rehabilitative services	1,2,3
59. Nurse Population ratio:	The number of nurses serving a specific population.	Numerator: Number of nurses. Denominator: Estimated population in a specified catchment area. Expressed as number of nurses per 10,000 population. $(N/D*10,000)$	Numerator. Staff compliment (establishment) Denominator: .Kenya National Bureau of statistics	National Provincial District	Semi-Annual (half yearly).	To determine availability of care. To rationalise distribution of nurses.	DHMT, Curative and Rehabilitative services	1,2,3
60. Community Health Extension Workers (CHEWs) Population ratio:	The number of CHEWs (Public Health/officer Technician or Nurse) serving a community unit in a population.	Numerator: Number of community Health Extension workers (CHEWs) Denominator: Estimated population in a specified catchment area. Expressed as number of CHEWs per 10,000 population. $(N/D*10,000)$	Numerator: Health facility/ district staff compliment (establishment) Denominator: Kenya National Bureau of statistics	National Provincial District	Semi-Annual (half yearly).	To co-ordinate and facilitate provision of health services in a community unit. To rationalise distribution of CHEWs	DHMT, Preventive and promotive health services	1,2,3
61. Community Health Workers (CHWs) Population ratio:	The number of CHWs serving in a community unit in a population.	Numerator: Number of CHWs. Denominator: Estimated population in a specified catchment area. Expressed as the number of CHWs per 10,000 population. $(N/D*10,000)$	Numerator: Health facility/ district staff compliment (establishment) Denominator: Kenya National Bureau of statistics	National Provincial District	Semi-Annual (half yearly).	To determine the service provision to the community.	VHCs, Health facility Management committee.	1,2,3

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY/ FREQUENCY	USE(S)	STATUS	FUNCTION *
62. Service output per provider:	The ratio of services provided against the number of staff providing the services in a health facility per cadre.	Numerator: Total Service workload in all providing areas. Denominator: Total number of personnel providing the services per cadre. $(N/D*1000)$	Numerator. Health facility/district staff compliment (establishment) Denominator: Workload MOH 717 and Facility Service delivery reporting template MOH 105	National Provincial District	Monthly	To determine amount of work per provider. To rationalise distribution of staff	HMT, DHMT, Curative and Rehabilitative service	1,2,3
63. Ratio of Health facilities per population:	The ratio of health facilities per given population in a given area providing health services.	Numerator: Number of health facilities. Denominator: Estimated population. $(N/D*10,000)$	Numerator: Health facility inventory template MOH 715. Denominator -KNBS	National Provincial District	Semi-Annual (half yearly) or any other period preferred	To determine the distribution of health facilities per population. Mapping of health services available in the catchment area/ population.	DHMT, PHMT, HMIS	1,2,3,4
64. Bed occupancy rate	The proportion of occupied beds in a health facility	Numerator: Number of inpatient days. Denominator – Total Available bed days ²¹ . $(N/D*100)$	Facility Daily Bed Return (DBR). Patient case record. In-patient register MOH 301. Facility Service delivery reporting template MOH 105 for both numerator and denominator	National Provincial District	Semi-Annual (half yearly) or any other period preferred.	To determine the available bed capacity. Project for Health facility needs	DHMT, PHMT, HMIS	1,2,3,4
65. Average Length of Stay (ALOS):	The average length of days/ duration patients stays in a hospital in a specified time period.	Numerator: Total In-patient days. Denominator: Total discharges and deaths. (N/D)	Facility Daily Bed Return (DBR). Patient case record. In-patient register MOH 301. Diagnostic Index card MOH 268. Facility Service delivery reporting template MOH 105 for both numerator and denominator	National Provincial District Facility	Monthly	To determine the bed utilization . Determine efficiency of service provision.	HMT, DHMT, PHMT, HMIS	1,2,3
66. Utilization rate of Out Patient Attendants (OPD) - Male:	The proportion of male attendants (clients) who are registered and provided with services at the out patient department.	Numerator: Total number of Male out Patient Attendants. Denominator: Estimated population of both males and females in the catchment area. $(N/D*100)$	Numerator: Out Patient Register MOH 204 A. Denominator –Kenya National Bureau of Statistics	National Provincial District Facility	Monthly	Estimated access and utilization of Out Patient services by male population	HMT, DHMT, PHMT, HMIS	1,2,3

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Available bed days**²¹. Number of beds available multiply by the number of days in the period.

INDICATOR	DEFINITION	CALCULATION	DATA SOURCE	LEVEL	PERIODICITY / FREQUENCY	USE(S)	STATUS	FUNCTION *
67. Utilization rate of Out Patient Attendants (OPD) -Female:	The proportion of female attendants (clients) who are registered and provided with services at the out patient department.	Numerator: Total number of Female out Patient Attendants/ clients. Denominator: Estimated population of both Females and males in the catchment area. (N/ D*100)	Numerator: Out Patient Register MOH 204 A. Denominator – KNBS	National Provincial District Facility	Monthly	Estimated access and utilization of Out Patient services by female population	HMT, DHMT, PHMT, HMIS	1,2,3
68. Percentage of clients satisfied with services:	The proportion of clients satisfied with services.	Numerator: Number of clients satisfied with services. Denominator: Total clients interviewed ²² (N/ D*100)	Special Surveys reports for both numerator and denominator.	National Provincial District	Annual or any other specified period preferred.	To measure the quality of care.	HMT, DHMT, HMIS, Curative and Rehabilitative services	2,3,4
69. Percentage of health facilities that submit timely, accurate reports to national level.	The proportion of health facilities or districts that submits core data series ¹⁹ timely, accurate reports to the national	Numerator: Number of health facilities or districts with timely, reporting of key data series. Denominator: Total Health facilities or Districts in the catchment area. (N/ D*100)	District check list and National check list for both numerator and denominator	National Provincial District	Monthly	To measure timeliness and accurate of reporting.	DHMT, PHMT, HMIS,	1,2,3,
70. Percentage of health facilities that submit complete, accurate reports to national level.	The proportion of health facilities or districts that submits core data series ¹⁹ complete, accurate reports to the national	Numerator: Number of health facilities or districts with complete reporting of key data series. Denominator: Total Health facilities or Districts in the catchment area (N/ D*100)	District check list and National check list for both numerator and denominator	National Provincial District	Monthly	To measure completeness, and accurate of reporting.	DHMT, PHMT, HMIS,	1,2,3,

***Functions:** 1 = Routine Reporting, 2 = Process Evaluation/ Monitoring, 3 = Programme Review/Impact evaluation, 4= special survey

***Core data series**¹⁹ – Out patient data, Inpatient, Immunization, service workload, TB, HIV/AIDS, Malaria, Nutrition, Service delivery and Reproductive Health.

***Clients interviewed**²² - They are clients selected and interviewed with an outsider that is by civil society groups, DHMTs in the Health facility or KNBS

CHAPTER 2

DATA COLLECTION TOOLS

INTRODUCTION

The inability to generate reliable information needed to make decisions based on evidence is a major obstacle to public health services. Public health decision-making is critically dependent on the timely availability of sound data. The role of the Health Information System is to generate, analyze and disseminate such data. **“Nothing exists until it is measured”** the physicist Niels Bohr famously stated in 1930. The work of John Snow during the Cholera epidemics that ravaged London in the mid 1800s is an early example of an epidemiological investigation. Snow’s groundbreaking work was made possible by the **registers of births and deaths maintained** by local authorities in every English parish from the early 1800s. Without information on numbers of deaths from cholera and **the street address of each victim**, Snow’s **mapping of mortality** in relation to the sitting of water pumps would not have been possible. Counting deaths is one component of the health information system, an integrated effort to collect, process, report and use health information and knowledge to influence policy-making, programme action and research.

The critical elements in Health Information System (HIS) are usually to turn raw data into useful form and extrapolate this through sector indicators outlined above. The main components are:-

- Data collection
- Data processing
- Data reporting
- Data dissemination and use.

Kenya’s Health Information System was established in 1972, when a committee including representatives from the Ministry of Health, World Health Organization, Central Bureau of Statistics and the Attorney General Chambers was formed to initiate the process. The task of this committee was to design a Health Information System (HIS) for Kenya. This was a result of an evaluation of the Ministry of Health on the available data which indicated very little data available in the form of useful data. The committee studied the problems associated with the inadequate reports and data and established the following: -

1. The forms used by hospitals (Med. 21, Med. 22, and Med 23) could not be used outside the hospitals because they were both bulky and complicated.
2. The number of qualified medical staff were minimal and could not fill out the forms completely
3. The district hospital was overloaded with the responsibility of collecting, compiling and reporting all medical cases that occurred within the district.
4. The workload at the district level was so much that there were private, mission hospitals and other smaller health units.

The review suggested that an overhaul of the existing reporting system was necessary including a decentralization of reporting by the district hospitals. The responsibility to report was therefore, placed **on each health facility irrespective of the controlling agencies.**

The existing forms were reviewed and revised based on priority preventive and curative health areas. The revised forms were designed and piloted in 1974 in three districts – Kwale, Mombasa and Kitui, representing 7 Percentage of the population of Kenya. The intention of the pilot study was to compare and contrast reporting problems in urban, near urban and rural areas. The trial was meant to last for one year and the results of the trial were to form the basis of the final forms. Unfortunately, it was not possible to finish the study after one year but the pilot project was completed in 1976 and the suggestion and recommendations were adopted as policy. Thus HIS was born. In September 1976, Kilifi was added to the system. In December 1976 it was decided that whole Kenya should be introduced to the system. A number of documents such as Antenatal cards, Environmental sanitation, medical personnel and medical inventory reports etc. were tried during the pilot study but were not included as part of the HIS because those responsible for studying and recommending the documents did not submit their findings to the committee in time for their approval. This and other important data collection instruments however, could be introduced in the future as the MOH saw fit.

The committee approved the following documents for use by all units:

1. Med 800 - Out patient Register
2. Med 801 - Out patient card
3. Med 802 - Out patient tally sheet.
4. Med 803 - Immunization tally sheet.
5. Med 804 - Monthly Laboratory report
6. Med 901 - Discharge sheet.
7. Med 902 - Out patient Monthly Activity Report.
8. Med 903 - Immunization summary

In 1982, another Committee of professionals was formed to investigate on the accuracy and efficiency of all health data collection forms. The Committee was satisfied on the application of the tools and recommended minor changes.

In 1984, in response to the national policy on District focus for Rural Development, the Ministry of Health decentralized its reporting activities by establishing Health Information Systems (HIS) offices in all districts where all Health data form all health facilities would be processed.

In order to support the policy making role of the Ministry of Health in Management, planning and budgeting as well as strengthening the co-ordination function with NGO's and the private sector in health care delivery, a proper design and implementation of integrated health information and management system will be critical taking into consideration the achievement and constraints encountered during the review period. Health Information and Management Systems are critical as stated in the National Policy Framework paper 1994 – 2010, National Health Sector Strategic Plan I and II 1999 – 2004, 2005 - 2010 and the Performance Monitoring and Evaluation (PME) Framework 2005 to 2010 respectively.

To meet this greatest challenge the health sector under the coordination of Ministry of Health HMIS division initiated the process to review and integrate data collection (Registers) and reporting tools (summary forms) in April 2006 to meet the current challenges and demand for data. The process took over one year to agree on indicators and variables to be included in the data sets or what should be collected by the registers and reporting summaries. The revised data collection (registers) tools in 2006/07 are as follows:

INTEGRATED MINISTRY OF HEALTH DATA COLLECTION AND REPORTING TOOLS

DATA COLLECTION TOOLS (REGISTERS)

1. MOH 204 A OUTPATIENT REGISTER (under five years)
2. MOH 204 B OUT PATIENT REGISTER (over 5 years)
3. MOH 511 CHILD WELFARE CLINIC (CWC) REGISTER
4. MOH 510 IMMUNISATION REGISTER FOR CHILDREN
5. MOH 333 MATERNITY (DELIVERY) REGISTER
6. MOH 406 POSTNATAL REGISTER
7. MOH 512 DAILY ACTIVITY (FAMILY PLANNING) REGISTER
8. MOH 301 IN-PATIENT REGISTER
9. MOH 209 RADIOLOGY REGISTER
10. MOH 240 LABORATORY REGISTER
11. MOH 268 DIAGNOSTIC INDEX CARD
12. MOH 405 ANTENATAL CLINIC (ANC) REGISTER

Note: The registers listed above are applicable to service levels 2, 3, 4, 5 and 6 but specific facilities will use according to services provided. Sample registers, summaries are at the bottom of each page and instructions for health workers are also appended below:

MOH 405 ANTENATAL REGISTER STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	Record the day the client visits your health facility either as a new client or a re-visit (recorded as DD:MM:YY)
B	ANC No.	This is the identification number which is given to new or 1st visit clients visiting your health facility for that particular pregnancy.
C	Re-Attendant	Record the existing ANC number from the Maternal and Child Health Booklet/ Card.
D	No of visits	The count of the voluntary visit that the client makes to the clinic for check up or follow ups.
E	Full Names	Record at least THREE names of the client
F	Age	Record the actual stated age of the Client expressed in figures/ numbers. Age here must be indicated in years and NOT 'A'
G	Marital Status (1=M, 2=W, 3=D, 4=S 5=Se)	Record 1=Married, 2=Widowed, 3=Divorced, 4=Single and 5=Separated
H	Sub Location	This refers to client's residential location
I	Village/Estate	This refers to client's residential village / estate
J	Parity	Number of previous pregnancies the client has had prior to this one, for example Para 1+ 0
K	Gravidae	The number of the current pregnancy. For example in her third pregnancy, a woman is said to be gravida three (3).
L	LMP	Last menstrual period – Record the date in this column with the format DD:MM:YY.
M	EDD	Expected Date of Delivery - Record the date in this column with the format DD:MM:YY
N	Gestation age (weeks)	Record the Duration of pregnancy expressed in weeks
O	weight (kg)	Record the client's actual weight in Kilograms.
P	B/P	Record the Blood Pressure readings of the client.
Q	Hb	Record the Haemoglobin levels of the client
R	RPR/VDRL Pos/Neg (ONLY those tested during this visit)	This is the routine test carried out for syphilis. Record results ONLY for those tested during the current visit as negative (-ve) or positive (+ve).
S	HIV- Pos/Neg (ONLY those tested during this visit)	Record the HIV test results ONLY for those tested during the current visit, as negative (-ve) or positive (+ve).
T	Screened for TB? Y/N	Record 'Y' for Client screened for TB and 'N' for Client not screened
U(i)	Received HIV results? Y/N	Indicate in this column the results (Yes if given or No if not given).

U(ii)	Other conditions (Use key provided)	Record diagnosis of other medical condition(s) client may complain of or detected during examination or investigations as:1= Hypertension, 2 = Diabetes, 3=epilepsy, 4= Malaria in Pregnancy (MIP), 5= Sexually Transmitted Infections/Reproductive Tract Infections (STIs/RTIs), 6=Others (specify)
V	Cotrimoxazole given? (Y/N)	Indicate in this column whether cotrimoxazole was given ('Y' if given or 'N' if not given).
W	Dose of TT Given (e.g. TT1, TT3, etc)	This refers to Tetanus Toxoid Vaccine given to the woman during the visit. Record as per dose given - TT1, TT2, TT3, TT4 or TT5
X	Given Iron supplementation? Y/N	Indicate in this column 'Y' if the client is given Iron Supplementation or 'N' if not given.
Y	Given Folic? Y/N	Indicate in this column 'Y' if the client is given Folic or 'N' if not given.
Z	Given IPT 1? Y/N	Intermittent Presumptive Treatment for Malaria first dose. Indicate in this column 'Y' if the client is given IPT1 or 'N' if not given.
AA	Given IPT 2? Y/N	Intermittent Presumptive Treatment for Malaria Second dose. Indicate in this column 'Y' if the client is given IPT2 or 'N' if not given.
AB	Received ARV prophylaxis Mother? Y/N	Indicate if client is given ARV Prophylaxis: Record 'Y' or 'N'
AC	Received ARV prophylaxis Baby? Y/N	Indicate if client is given ARV Prophylaxis for Baby: Record 'Y' or 'N'
AD	Received ITN? (Indicate the visit No.)	Indicate if the client has received Insecticide treated Net (ITN). The count of the visit number when the client received the ITN should be indicated
AE	Counselled on? use key provided	Record 1= Birth Plan, 2= Danger signs, 3 = FP, 4 = HIV, 5= Supplemental feeding, 6=Breast Care, 7=Infant feeding 8= ITN Use and 9=STIs/RTIs
AF	Additional Treatment given? Use key provided	Record 1 = Hypertension, 2=Diabetes, 3=Epilepsy, 4=Malaria in Pregnancy (MIP)
AG	Partners	Record if the client's partner has been 1=Counselled, 2=Tested, 3=Referred for HIV
AH	Partners status	Record if the client's partner's HIV status was found to be 1=Positive 2=Negative
AI	HIV+ Partners Referred for follow-up? Y/N	Indicate in this column for the partners that are found HIV positive if Counselling and referred for follow-up 'Y' or 'N'
AJ	Remarks	Any comments for the individual Client (e.g. client referred, advised to return for review, Discussed STI/RTI/HIV risk with client, etc)

Table 10: MOH 406 POSTNATAL REGISTER

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Date	PNC No.	In-Patient No / Ref.No	Full names	Age	Level of education	Sub Location	Village/ Estate	Date of Delivery	Place of delivery	State of Baby	Temperature	Pulse	BP	Palor: (Mild =1 Moderate = 2 Severe = 3) and HB	Breast Exam (1= Normal; 2=Cracked nipple; 3=Engorged; 4=Mastitis; 5=Abscess)	Uterus: 1=Normal; 2=Tender; 3=Sub-involutd	PPH Y/N	C/S site: 1=Normal; 2=Bleeding; 3=Infected	Lochia: 1=Normal; 2=Foul smelling; 3=Excessive	Episiotomy/tear: 1=Healed; 2=Repaired; 3=Gaping; 4=Infected	HIV status: (1= +ve; 2= -ve)	
X	Y	Z	AA	AB	AC	AD	AE	AF	AG													
Diagnosis	Mothers 1=Counselled; 2=Tested; 3=Received result; 4=HIV+; 5=follow-up	Counselled on Neonatal care (Y/N)	Counselled on FP (Y/N)	On ARVs (Y/N)	Cotrimoxazole/Septtrin Prophylaxis (Y/N)	Screened for Cancer of the cervix: (Y/N)	other conditions	Remarks														

Total attendances : _____	Total No Counseled: _____	Total No on ARV's: _____
	Total HIV +ve: _____	Mothers: _____
		Infants: _____

MOH 406 POSTNATAL REGISTER STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	This is the day the mother reports to your health facility either as a first visit or re-visits (recorded as DD: MM: YY).
B	PNC No.	Record the Post-natal clinic number or the ANC number
C	In-Patient No / Ref:No	Record the unique identification number given to the Mother on admission at maternity
D	Full names	Record at least THREE names of the mother/client
E	Age	Record the actual stated age of the patient expressed in figures/ numbers. Age here must be indicated in years and NOT 'A'
F	Level of education	Record the maximum educational level attained by the mother
G	Sub Location	This refers to client's residential location
H	Village/ Estate	This refers to client's residential village / estate
I	Date of Delivery	Record the day the mother actually delivers. (Recorded as DD: MM: YY).
J	Place of delivery	Record the exact point where the delivery occurred for example home, health facility, on the road etc.
K	Mode of delivery	Record the method of delivery for example SVD, C/S.
L	State of Baby	Indicate the condition of the baby using the APGAR Scores (see table below)
M	Temperature	Record the vital signs- actual reading of the thermometer
N	Pulse	Record the vital signs-
O	BP	Record the Blood Pressure readings.
P	Palor	Record using the key provided i.e. (1 = Mild; 2 = Moderate; 3 = Severe) and HB
Q	Breast Examination	Record using the key provided. i.e. (1 = Normal; 2 = Cracked nipple; 3 = Engorged; 4 = Mastitis; 5 = Abscess)
R	Uterus:	Record using the key provided i.e. 1 = Normal; 2 = Tender; 3 = Sub-involuted
S	PPH (Y/N)	Record 'Y' if client has PPH and 'N' if no PPH observed
T	C/S site:	Record using the key provided. i.e. 1 = Normal; 2 = Bleeding; 3 = Infected
U	Lochia:	Record using the key provided i.e. 1 = Normal; 2 = Foul smelling; 3 = Excessive
V	Episiotomy/tear:	Record using the key provided i.e. 1 = Healed; 2 = Repaired; 3 = Gaping; 4 = Infected
W	HIV status	Record using the key provided i.e. 1 = Positive; 2 = Negative)

X	Diagnosis	Record or indicate the results of your examinations
Y	Mothers	Indicate 1 = Counselling; 2 = Tested; 3 = Received result; 4 = HIV+; 5 = follow-up
Z	Counselled on Neonatal care (Y/N)	Record using the key provided by Indicating ' Y ' Counselling on neonatal care and ' N ' if not Counselling
AA	Counselled on FP (Y/N))	Record using the key provided by Indicating ' Y ' if Counselling on Family planning and ' N ' if not Counselling on Family planning.
AB	On ARVs (Y/N)	Record using the key provided by Indicating ' Y ' if patient is given ARV and ' N ' if patient qualify for ARVs but not put on ARV
AC	Cotrimoxazole/Septrin Prophylaxis (Y/N)	Record using the key provided by Indicating ' Y ' if the patient has been put on prophylaxis and ' N ' if patient qualify and not put on prophylaxis
AD	Treatment	Record using the key provided by indicating (1= Multivitamin, 2=Haematinics)
AE	Screened for Cancer of the cervix: (Y/N)	Record ' Y ' if screened for cancer and ' N ' if not
AF	other conditions	Record any other conditions identified during examination
AG	Remarks	Any other comments that will be beneficial to the client and service.

MOH 333 MATERNITY REGISTER STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

The register should be used in all maternity units A separate row should be used for each baby in case of a multiple birth		
Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	The date the mother is admitted to the maternity Unit (recorded as DD: MM: YY).
B	No. of ANC Visits.	The count from the mother's ANC card for number of visits made to ANC
C	In-Patient No	The admission number given to all clients/patients admitted to the maternity unit
D	Full names	Record at least THREE names of the mother/client
E	Age	Record the actual stated age of the Client expressed in figures/ numbers. Age here must be indicated in years and NOT 'A' .
F	Marital Status (1=M , 2=W, 3=D, 4=S, 5=Se)	Record 1=Married, 2=Widowed, 3=Divorced, 4=Single and 5=Separated
G	Sub Location	This refers to client's residential location
H	Village/Estate	This refers to client's residential village / estate
I	Parity	Number of previous births the client has had prior to this one, for example Para 1+ 0
J	Gravida	The number of the current pregnancy. For example in her third pregnancy, a woman is said to be gravida three (3).
K	LMP	Last menstrual period – Record the date in this column with the format DD: MM: YY.
L	EDD	Expected Date of Delivery - Record the date in this column with the format DD:MM:YY
M	Gestation at Birth	Record the Duration of pregnancy expressed in weeks
N	Diagnosis	Record any illness diagnosed; indicate NONE if no illness is noted.
O	Date of Delivery	Record the day the mother actually delivers. (Recorded as DD: MM: YY).
P	Time of Delivery	Record the actual time the mother delivers.
Q	Duration from onset of labour	This should include duration at home and within the Health facility
R	Mode of delivery	Record the method of delivery for example SVD, C/S, Assisted Vaginal delivery, Breech presentations
S	APGAR Score	Record the assessment of skin colour, heart rate, reflex irritability, muscle tone and respiration using the APGAR scale (table below)
T	If baby dead: 1 =FSB, 2 = MSB	Indicate in this column using appropriate key provided i.e. 1 for Fresh Still Birth (FSB), 2 for Macerated Still Birth (MSB)
U	Baby weight (grams)	Record the actual weight in grams
V	Sex of Baby	Record M for Male or F for Female.
W	Mother's conditions after delivery	Record A=Alive or D=Dead
X	Blood loss (in mls)	Record the amount of blood lost during delivery (in millilitres)
Y	Placenta complete (Y/N)	Indicate 'Y' if placenta complete and 'N' if not complete.

Z	Counselled and Tested HIV ANC Y/N	If the mother/woman had been seen Counselling & Tested for HIV at ANC should indicate 'Y' or 'N'
AA	Counselled and Tested HIV MAT Y/N	If the mother/woman had been Counselling and tested at the Maternity ward should indicate 'Y' or 'N'
AB	HIV status (1 = Pos; 2 = Neg)	Record 1= positive and 2 = negative
AC	Partners (1=Counselled, 2=Tested, 3=Referred for HIV)	Record if the client's partner has been 1=Counselled, 2=Tested, 3=Referred for HIV
AD	Partners status (1=positive 2= Negative)	Record if the client's partner's HIV status was found to be 1=Positive 2=Negative
AE	VDRL Serology Results (+ve / -ve)	Indicate the results, whether positive or negative.
AF	ARV drug given (Mother) Y/N	Record 'Y' if the mother is given Antiretroviral drugs and 'N' if not given
AG	ARV Prophylaxis given (Baby) Y/N	Record 'Y' if the baby is given Antiretroviral drugs and 'N' if not given
AH	VIT "A" supplementation to mother Y/N	Indicate whether mother was given Vitamin "A" supplementation immediately after delivery
AI	Feeding Options (1=Exclusive, 2=Formulae)	Indicate the mother's choice after she is Counselling and advised on the feeding options by indicating 1 for exclusive breastfeeding and 2 for formula
AJ	Delivery conducted by (name)	Indicate name of the person who conducted the delivery
AK	Birth notification number	Indicate the serial number from the birth notification sheet.
AL	Date of Discharge	Indicate the date of discharge recorded as DD:MM:YY
AM	Condition of baby on discharge (A/D)	Record the condition of the baby on discharge, either A = Alive or D = Dead
AN	comments	Record any other remarks that may be beneficial to the mother or child e.g. referral

APGAR Scoring for Newborns:

A score is given for each sign at one minute and five minutes after the birth. If there are problems with the baby an additional score is given at 10 minutes. A score of 7-10 is considered normal, while 4-7 might require some resuscitative measures, and a baby with apgars of 3 and below requires immediate resuscitation.

	Score of 0	Score of 1	Score of 2	Acronym
Skin color	blue all over	blue at extremities	normal	Appearance
Heart rate	absent	<100	>100	Pulse
Reflex irritability	no response to stimulation	grimace/feeble cry when stimulated	sneeze/cough/pulls away when stimulated	Grimace
Muscle tone	none	some flexion	active movement	Activity
Respiration	absent	weak or irregular	strong	Respiration

Table 12: MOH 512 DAILY ACTIVITY (FAMILY PLANNING) REGISTER

		Contraceptives Dispensed at this visit																																		
		Oral Contraceptives										Injectables					Implants					Emergency Contraceptive pill														
		(Cycles)										(Vials)					(Sets)					(Doses)														
		Combined contraceptive pills					oral					Progestin only pills																								
Bbf																																				
Received																																				
On Hand																																				
Date	Name of Client	Client Number	Age	Sex	Sub Location	Village/Estate	Client Type		New	Rev	New	Rev	From	To	Change of Method	Qty Disp.	New	Rev	From	To	Change of Method	Qty Disp.	New	Rev	From	To	Change of Method	Qty Disp.	New	Rev	From	To	Change of Method	Qty Disp.	Cases	Qty Disp.
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE						
Totals																																				
Losses																																				
Bal on Hand																																				

Table 13: MOH 512 DAILY ACTIVITY (FAMILY PLANNING) REGISTER STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

COLUMN HEADINGS					Column	DATA DEFINITIONS / EXPLANATIONS	
					Bbf		
					Received		
					On Hand		
					Date	A	Date of client visit
					Name of Client	B	Client's Name
					Client Number	C	Client's Service Registration Number
					Age	D	Client's Age
					Sex	E	Client's Sex
					Sub Location	F	Provincial Administration Sub Location Residence
Village/Estate					G	Provincial Administration Village Residence	
Client Type	New	H	FP First Visit Client				
	Rev	I	FP Revisit Client				
Contraceptives Dispensed at this visit	Oral Contraceptives	(Cycles)	Combined oral contraceptive pills	New	J	New Client on Combined Oral Contraceptive Pill	
				Rev	K	Revisit Client on Combined Oral Contraceptive Pill	
				Change Method of	From	L	Client Change from Oral Combined Pill Another FP Method
				To	M	Client Change from Oral Combined Pill to Another Method of choice or Recommended	
			Qty Disp.	N	Number of Cycles Dispensed to Client on the Day of Visit		
			Progestin only pills	New	O	New Client on Progestin Only Pill	
	Rev	P		Revisit Client on Progestin Only Pill			
	Change Method of	From		Q	Client Change from Progestin Only Pill to Another FP Method		
		To		R	Client Change from Progestin Only Pill to Another Method of Choice or Recommended		
	Qty Disp.	S		Number of Cycles Dispensed to Client on the Day of Visit			
	Injectables	(Vials)			New	T	New Client on DMPA Injectable
			Rev		U	Revisit Client on DMPA Injectable	
Change Method of			From		V	Client Change from DMPA Injectable Another FP Method	
			To		W	Client Change from DMPA Injectable to Another Method of Choice or Recommended	
Qty Disp.			X		Number of Vials Injected to Client on the Day of Visit		
Implants	(Sets)		New	Y	New Client on Implant		
			Rev	Z	Revisit Client on Implant		
			Change Method of	From	AA	Client Change from Implant to Another FP Method	
				To	AB	Client Change from Implant to Another Method of Choice or Recommended	
Qty Disp.	AC	Number of Implants Inserted to Client on the Day of Visit					
Emergency Contraceptive pill	(Doses)		Cases	AD	Number of Cases Seen for Emergency Contraception		
			Qty Disp.	AE	Number of Doses Dispensed for Emergency Contraception Cases on the Day of Visit		
IUCDs	(Sets)		New	AF	New Client on IUCD		

				Rev		AG	Revisit Client on IUCD
				Change Method of	From	AH	Client Change from IUCD to Another FP Method
					To	AI	Client Change from IUCD to Another Method of Choice or Recommended
				Qty Disp.		AJ	Number of IUCD Inserted to Client on the Day of Visit
Condoms	(Pieces)	Male		New		AK	New Client on Male Condoms
				Rev		AL	Revisit Client on Male Condoms
				Change Method of	From	AM	Client Change from Male Condoms to Another FP Method
					To	AN	Client Change from Male Condoms to Another Method of Choice or Recommended
			Qty Disp.		AO	Number of Male Condoms dispensed to Client on the Day of Visit	
		Female		New		AP	New Client on Female Condoms
				Rev		AQ	Revisit Client on Female Condoms
				Change Method of	From	AR	Client Change from Female Condoms to Another FP Method
	To		AS		Client Change from Female Condoms to Another Method of Choice or Recommended		
	Qty Disp.		AT	Number of Female Condoms dispensed to Client on the Day of Visit			
Sterilization	(Number of Cases)	Male		Change of Method from other methods		AU	Number of Male Clients changed method for Sterilization
				Done		AV	Number of Male Clients for Sterilization on the Day of Visit
		Female		Change of Method from other methods		AW	Number Female Clients changed method for Sterilization
				Done		AX	Number of Female Clients counseled for Sterilization
		Referral		Done		AY	Number of Female Clients referred for Sterilization on the Day of Visit
Natural FP	(Number of Cases)			Counselled		AZ	Number of Female Clients Counseled for Natural FP
				Referral		BA	Number of Female Clients Referred for Natural FP
VCT Counselling		C&T on site		Yes/No		BB	Client Counseled and tested on site during the consultation
		Referred for C&T		Yes/No		BC	Client referred elsewhere for counselling and testing
HIV Status		Pos/Neg				BD	Record HIV status using the key provided (1=Positive, 2=Negative)
Diagnosis	Insert provisional or confirmed diagnosis					BE	Record or indicate the results of provisional or confirmed diagnosis of FP client following history taking and examination
Remarks						BF	Any information that may be necessary

Table 14: MOH 240 LABORATORY REGISTER

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
Date	OPD/ IP/ Ref. No.	Lab. No	Re-visit	Full Names	Age in Years	Sex	Village/Estate	Address	Clinical Diagnosis	Prior Treatment	Type of Specimen	Condition of the specimen	Investigation required	Date sample collected	Date Sample received	Clinician Name	Date Sample Analyzed	Results	Date Results dispatched	Amount charged	Comments	Name of analyzing Officer	Signature
No. of Routine tests: _____										No. of Special tests: _____													

MOH 240 The register is to be introduced in all Laboratory Centres/Health facilities with laboratory services. Step by step instructions on how to fill the register		
Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	Record Date when the client visits the laboratory or the date specimen is delivered to laboratory (recorded as DD: MM: YY).
B	OPD/ IP/ Ref. No.	Ref. No. is the number referred for patient or specimen sent to the other reference Laboratory
C	Lab. No	The number given by the Laboratory Technician/Technologist before specimen taken.
D	Re-visit	Record the patient's existing number from the card
E	Full Names	Record at least THREE names of the patient
F	Age in Years	Record the actual stated age of the patient expressed in figures/ numbers. Age here must be indicated in years and NOT 'A' or 'C'
G	Sex	This should be recorded as M for male and F for female
H	Village/Estate	This refers to client's residential village / estate
I	Address	The physical address, landmarks or telephone numbers should be written in this column to enable tracing or follow-ups
J	Clinical Diagnosis	Diagnosis before confirmation
K	Prior Treatment	Type of treatment before the collection and confirmation of specimen
L	Type of Specimen	Record the kind of specimen whether blood, urine, stool etc.
M	Condition of Specimen	The situation of the specimen at the time is being received in the laboratory
N	Investigation required	Identify and record the type(s) of investigation required on specimen.
O	Date sample collected	Indicate the date when the specimen is collected. (Recorded as DD: MM: YY).
P	Date Sample received	Indicate the date when the specimen is received. (Recorded as DD: MM: YY).
Q	Clinician Name	Record the name of the clinician who is requesting for the investigation.
R	Date Sample Analyzed	Indicate the date the specimen is examined. (Recorded as DD: MM: YY).
S	Results	Record the outcome of the requested investigations
T	Date results dispatched	The date results are released or leave (from) the laboratory
U	Amount charged	Record the total amount of fee charged for the services received or amount waived or exempted (if not received indicate in comments).
V	Comments	Record any other remarks that may be beneficial to the patient or facility (e.g. specify if amount charged is waived or received, etc).
W	Name of analyzing Officer	Record the name of the person conducting the examination
X	Signature	This is the signature of analyzing officer as endorsement to confirm that the analyzing process has been carried out.

Table 15: MOH 511 CHILD WELFARE CLINIC (CWC) REGISTER

Date	CWC no	Re-visit	Full names	Age	Sex	Sub location	Village/estate	Address	Weight in kgm	IUW (Y/N)	Any danger signs this visit	Issued with a net this visit? (y/n)	Type of follow-up	Referral	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Total New Clients: _____										Total underweight: _____					
Total Re- visits: _____										Total Referrals: _____					
Total No issued with ITNs: _____															

MOH 511 CHILD WELFARE CLINIC (CWC) REGISTER STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

The register is used at the MCH for clients/children less than 5 years (0 - 59 Months) who attend Child Welfare Clinic (CWC). This register is kept SEPARATE from Permanent EPI register

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	Record the actual date the child attends the CWC clinic or Health Facility (recorded as DD: MM: YY).
B	CWC NO	The child Welfare Clinic number that will be given to New clients only visiting any Health Facility for the FIRST TIME . It is usually given once for the child and it should be used throughout the life time when visiting any clinic.
C	Re-visit	indicated the existing number from the CWC Card
D	Full Names	Record at least THREE names of the CHILD
E	Age	Record the actual stated age of the patient expressed in figures/ numbers. Age here must be indicated in years, months, weeks and days e.g. 2 years 4 months, (two years and four months) or 2 4/12 years and NOT 'C' .
F	Sex	This should be recorded as M for male and F for female
G	Sub Location	This refers to client's residential location
H	Village/Estate	This refers to client's residential village / estate
I	Address	The physical address, landmarks or telephone numbers should be written in this column to enable tracing or follow-ups
J	Weight in Kg	Record the Weight in Kilograms after growth monitoring and indicate the same on the Child Health card.
K	UW (Y/N)	Record according to growth monitoring chart: 'Y' if the child is Underweight and 'N' if not underweight
L	Any Danger signs this visit	Any danger signs:- The Health Worker should indicate any danger signs identified such as Bloody Diarrhoea, sunken eyes or any signs that require urgent interventions
M	Issued with a net this visit? (Y/N)	Record or indicate 'Y' if given during that particular visit or 'N' if not given at this visit.
N	Type of Follow-up	The child may be having Marasmus and need nutritional follow-up or other danger signs and need follow-up. Specific types of follow-ups should be indicated
O	Referral	Indicate the purpose of referral if the child is referred within the facility and place if the child is referred to other levels of care outside Health facility.
P	Remarks	Any comments for the individual Child e.g. to follow-up

Table 16: MOH 510 IMMUNISATION REGISTER FOR CHILDREN

		DATE WHEN IMMUNISATION WAS GIVEN MUST BE INDICATED. TICKS OR CHECKS ARE NOT ACCEPTABLE																						
Date	Serial Number	Child's Number	Child's Names	Sex	Date of Birth	Date first Seen	Father's Full Names	Mother's Full Names	Location/ Sub-location	Address	BCG	Revaccination	Polio birth Dose	1st Polio	2nd Polio	3rd Polio	DPT/Hep.B/ Hib.1	DPT/Hep.B/ Hib.2	DPT/Hep.B/ Hib.3	Measles	Yellow Fever	Vitamin A	Fully Immunized	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y

MOH 510 IMMUNISATION REGISTER FOR CHILDREN **STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS**

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	Record the day the child reports to your health facility either as a first visit or re-visit (recorded as DD: MM: YY).
B	Serial Number	This is the identification number given to the child on the first attendance and is facility specific. Usually written serially. 1, 2, 3...
C	Child's Number	This is the unit number given once for the lifetime of the child i.e. the child's Identity – ID in health
D	Child's Names	Record at least THREE names of the CHILD
E	Sex	This should be recorded as M for male and F for female
F	Date of Birth	Record the day the child was born or delivered as DD: MM: YY.
G	Date first Seen	Record the day the child is first seen at your health facility as DD: MM: YY.
H	Father's Full Names	Record at least three names of the father.
I	Mother's Full Names	Record at least three names of the mother
J	Location	This refers to client's residential location
K	Address	The physical address, landmarks or telephone numbers should be written in this column to enable tracing or follow-ups
L	BCG	Record the date immediately after the child receives BCG vaccination as DD: MM: YY.
M	Revaccination	Record the date immediately after the child receives BCG revaccination as DD: MM: YY.
N	Polio birth Dose	Record the date immediately after the child receives Polio birth dose vaccination as DD: MM: YY.
O	1st Polio	Record the date immediately after the child receives 1st Polio vaccination as DD: MM: YY.
P	2nd Polio	Record the date immediately after the child receives 2nd Polio vaccination as DD: MM: YY.
Q	3rd Polio	Record the date immediately after the child receives 3rd Polio vaccination as DD: MM: YY.
R	DPT/Hep.B/ Hib.1	Record the date immediately after the child receives Penta 1 vaccination as DD: MM: YY.
S	DPT/Hep.B/ Hib.2	Record the date immediately after the child receives Penta 2 vaccination as DD: MM: YY.
T	DPT/Hep.B/ Hib.3	Record the date immediately after the child receives Penta 3 vaccination as DD: MM: YY.
U	Measles	Record the date immediately after the child receives measles vaccination as DD: MM: YY.
V	Yellow Fever	Record the date immediately after the child receives Yellow fever vaccination as DD: MM: YY.
W	Vitamin A	Record the dates Vitamin A was given as DD: MM: YY.
X	Fully Immunized	Record the date the child completes all antigens as DD: MM: YY.
Y	Remarks	Record any comments for the individual child e.g. to follow-up

Table 17: MOH 204 A OUTPATIENT REGISTER (under five years)

Date	OPD No.	Revisit	Full Names	Age	Sex	Sub Location	Village/ Estate	Address	Danger signs	Visual Acuity **RE / LE**	Durational of illness	Diagnosis/ classification	HIV- (1=Counselled, 2=Tested)	HIV (Pos / Neg)	3=Nutrition education 4=Nutrition supplements	Treatment	Follow-up (Y/N)	Referral (Y/N)	Amount charged	REMARKS
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

	Male:	Female:				
No. of New patients:	_____	_____				Total No. followed-up: _____
No. of Re-attendants:	_____	_____				Total Referrals: _____

MOH 204 A OUTPATIENT REGISTER (under five years) STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

The register is to be used for children less than 5 years (0-59 months) who are sick and visit the facility for care. The register also covers the IMCI component and should not have any other register for districts implementing IMCI

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	Record the actual date the sick child attends the clinic or Health Facility to seek treatment (recorded as DD: MM: YY).
B	OPD No.	This is a unique identification number, which is given to a new outpatient annually and on first visit that keeps the patient individually identified.
C	Revisit	The OPD number of the patient who returns to the Health Facility for service or follow ups in the case of IMCI.
D	Full Names	Record at least THREE names of the patient
E	Age	Record the actual stated age of the patient expressed in figures/ numbers. Age here must be indicated in years, months, weeks and days e.g. 2 years 4 months, (two years and four months) or 2 4/12 years and NOT 'C' .
F	Sex	This should be recorded as M for male and F for female
G	Sub Location	This refers to client's residential location
H	Village/ Estate	This refers to client's residential village / estate
I	Address	The physical address, landmarks or telephone numbers should be written in this column to enable tracing or follow-ups
J	Danger signs	Using the IMCI guidelines Clinician should indicate the danger signs identified from the child.
K	Visual Acuity **RE / LE**	Record the result from the Test of the patient' vision to identify the early blindness
L	Durational of Illness	Number of days the illness has taken since its onset
M	Diagnosis/ classification	The districts with IMCI strategy MUST indicate the final classification of the illness e.g. severe pneumonia. While districts not started IMCI strategy will indicate the diagnosis as PNEUMONIA
N	HIV (1=Counselled, 2=Tested)	Record using the appropriate key provided i.e. (1=Counselled, 2=Tested)
O	HIV (Pos / Neg)	Record the HIV status whether negative (-ve) or positive (+ve).
P	3=Nutrition education 4=Nutrition supplements	For those found HIV+ Record using the appropriate key provided i.e. (3=Nutrition education 4=Nutrition supplements)
Q	Treatment	Record the name and number of Drugs from the prescription
R	Follow-up (Y/N)	Record Yes (Y) for a patient who requires follow-up and No (N) for those who do not require follow-up.
S	Referral (Y/N)	Record Yes (Y) for a patient who requires referral and No (N) for those who do not require referral
T	Amount charged	Record the total amount or fee charged for the services received or amount waived or exempted.
U	REMARKS	Any comments for the individual patient.

Table 18: MOH 204 B OUT PATIENT REGISTER (over 5 years)

Date	OPD No.	Re-visit	Full Names	Age in Years	Sex	Sub Location	Village/Estate	Address	Visual Acuity **RE / LE**	HIV- (1=Counselled, 2=Tested)	HIV (Pos / Neg)	3=Nutrition education 4=Nutrition supplements	Diagnosis	Treatment/ prescription number	Amount charged	Referral	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R

	MALE:	FEMALE:	
No. of New patients:	_____	_____	Total No. followed-up: _____
No. of Re-attendants:	_____	_____	Total Referrals: _____

MOH 204 B OUT PATIENT REGISTER (over 5 years) **STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS**
The register will be used for both Male and Female above 5 years (60+ months) who are sick and visit the Health Facility for treatment

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	The actual date the patient is seen at the Health Facility (recorded as DD: MM: YY).
B	OPD No.	This is a unique identification number, which is given to a new outpatient annually and on first visit that keeps the patient individually identified.
C	Re-visit	The OPD Number of the patient who returns to the Health Facility for the services during the calendar year.
D	Full Names	Record at least THREE names of the patient
E	Age in Years	Record the actual stated age of the patient expressed in figures/ numbers. Age here must be indicated in years and NOT 'A' or 'C'
F	Sex	This should be recorded as M for male and F for female
G	Sub Location	This refers to client's residential location
H	Village/Estate	This refers to client's residential village / estate
I	Address	The physical address, landmarks or telephone numbers should be written in this column to enable tracing or follow-ups
J	Visual Acuity **RE / LE**	Record the result from the Test of the patient' vision to identify early blindness
K	HIV (1=Counselled, 2=Tested)	Record using the appropriate key provided i.e. (1=Counselled, 2=Tested)
L	HIV (Pos / Neg)	Record the HIV status whether negative (-ve) or positive (+ve) .
M	3=Nutrition education 4=Nutrition supplements	For those found HIV+ Record using the appropriate key provided i.e. (3=Nutrition education 4=Nutrition supplements)
N	Diagnosis	The provisional or final diagnosis from the clinician must be indicated in this column
O	Treatment/ prescription number	Record the name and number of Drugs from the prescription
P	Amount charged	Record the total amount or fee charged for the services received or amount waived or exempted.
Q	Referral	The patients will be referred from one level to another for specialized services and different levels MUST be indicated (Level 1 - 6 of NHSSP II)
R	Remarks	Any comments for the individual patient.

Table 19: MOH 209 RADIOLOGY REGISTER

Date	Opd/in-pt no.	X-ray number	Full names	Age in years	Sex	Sub location	Village/estate	Address	Type of x-ray examinations	Referral	Amount charged	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M
Total Special examinations: _____ Total Simple examinations: _____												

MOH 209 RADIOLOGY REGISTER IS TO BE USED IN ALL X-RAY UNITS. STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date	Record the actual date the patient is done the examination (recorded as DD: MM: YY).
B	OPD/In-PT No.	Record the unique identification number that has been given to a new outpatient or in-patients.
C	X-Ray Number	Record the unique identification X-ray unit number, that keeps the patient individually identified.
D	Full Names	Record at least THREE names of the patient
E	Age in Years	Record the actual stated age of the patient expressed in figures/ numbers. Age here must be indicated in years and NOT 'A' or 'C'
F	Sex	This should be recorded as M for male and F for female
G	Sub Location	This refers to client's residential location
H	Village/Estate	This refers to client's residential village / estate
I	Address	The physical address, landmarks or telephone numbers should be written in this column to enable tracing or follow-ups
J	Type of X-Ray Examinations	Record the kind of examination (s) carried out
K	Referral (Y/ N)	Record 'Y' for a patient (Y) who requires referral and 'N' for those who do not require referral
L	Amount charged	Record the total amount or fee charged for the services received or amount waived or exempted.
M	Remarks	Any comments for the individual patient.

Table 20: MOH 301 IN-PATIENT REGISTER

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Date of Admission	In-patient No	Full Names	Age in Years	Sex	Sub-Location	Village/Estate	Address	HIV- (1=Counselled, 2=Tested)	HIV (Pos / Neg)	3=Nutrition education 4=Nutrition supplements	Diagnosis	Treatment/ prescription Number	Date of Discharge	Outcome (A = Alive D = Dead)	Referral	Remarks

The register is for all patients to be admitted to the hospital/hospitalized for treatment care regardless of age.

MOH 301 IN-PATIENT REGISTER STEP BY STEP FILLING IN THE REGISTER GUIDELINES FOR THE HEALTH PROVIDERS

Column	DATA DEFINITIONS / EXPLANATIONS	
A	Date of Admission	Record Date when the patient is admitted (recorded as DD: MM: YY).
B	In-patient No	This is a unique identification number given to a patient on admission. Note: Unlike the OPD number which changes every calendar year, once admitted the patient retains the same number throughout his or her life of medical care in your facility.
C	Full Names	Record at least THREE names of the patient
D	Age in Years	Record the actual stated age of the patient expressed in figures/ numbers. Age here must be indicated in years and NOT 'A' or 'C'
E	Sex	This should be recorded as M for male and F for female
F	Sub-Location	This refers to client's residential location
G	Village/Estate	This refers to client's residential village / estate
H	Address	The physical address, landmarks or telephone numbers should be written in this column to enable tracing or follow-ups
I	HIV (1=Counselled, 2=Tested)	Record using the appropriate key provided i.e. 1=Counselled; 2=Tested
J	HIV (Pos / Neg)	Record the HIV status whether negative (-ve) or positive (+ve) .
K	3=Nutrition education 4=Nutrition supplements	For those found HIV+ Record using the appropriate key provided i.e. (3=Nutrition education 4=Nutrition supplements)
L	Diagnosis	This is the final diagnosis that is made by the clinician for the patient on discharge. If a patient suffers from more than one diagnosis, all must be entered into the diagnosis column.
M	Treatment/ prescription Number	Record the name and number of Drugs from the prescription
N	Date of Discharge	Record the day the patient leaves your facility / ward
O	Outcome (A or D)	Record the result of illness - either Alive = A , Dead = D
P	Referral	Indicate different levels of referral for service delivery
Q	Remarks	Any comments for the individual patient.



Ministry of Health

MOH 216

Figure 1: MOH 216 MATERNAL AND CHILD HEALTH BOOKLET

MOTHER & CHILD HEALTH CARE

AFYA YA MAMA NA MTOTO



*Onyesha kitabu hiki kila mara
Uendapo kliniki ya wamama na watoto*
**Carry this booklet at all times
during a visit to the mother and
child health clinic.**

CHAPTER 3

INSTRUCTIONS ON DATA REPORTING TOOLS (Summary forms)

MATERNAL AND CHILD HEALTH BOOKLET MOH 216

The Maternal and Child Health Booklet is a revised version and combination of the Antenatal card and Child Welfare Card. The first part contains the mother's full antenatal and post natal profile.

- (i) ANC
- (ii) Postnatal
- (iii) Second part contains the child's details on immunizations and other services delivered to a child before age 5 years that will be detached from the booklet.

In case of multiple deliveries the health worker should initiate a booklet for each child.

The health worker is advised to be extra careful while filling the information in the booklet by ensuring that correct information is recorded in the appropriate spaces provided. The growth monitoring charts should be marked progressively as the child grows. Health workers are advised to share the information pertaining to the child with the mother or care taker.

GENERAL GUIDELINES FOR FILLING THE SUMMARY FORMS:

1. The first step in completing data reporting forms is to ensure that all the identification particulars are filled in before completing the particular form. These are the names of the province, district, constituency, facility and the period for which the report is covering.
2. Specific ages should be reported within the appropriate age classification.
3. In forms where data is disaggregated by sex, the appropriate data should be filled in the correct column or spaces provided.
4. Care must be taken to separate new or first visits and re-visits or re-attendances.

Note: New or first visit –these are patients/clients who come to your facility for the First time. While **Revisit or Re-attendance**- these are patients/clients who make subsequent return visits after the first visit.

5. Where there is a provision to show totals, they **MUST** be aggregated.
6. While making entries in the forms, accuracy **MUST** be maintained to avoid errors or transposition of figures.
7. While reporting, completeness **MUST** be observed. No spaces should be left blank and no dashes. You are instead encouraged to practice zero reporting.
8. The name of person preparing the report, the date the report is being completed and the commitment signature **MUST** be filled in.
9. Once the reports are completed, they are supposed to leave your facility before the 5th of the following month to the District Health Information System (DHIS).
10. At the district, once all the reports from the health facilities have been received, summaries should be promptly made.
11. The district **MUST** maintain a checklist of all reports and all facilities and check the reports against the facilities to ensure completeness and timeliness.
12. Using a copy of the summaries made, districts **MUST** analyze and share the information at their level.
13. Districts should submit the summaries to the province or national level **on or before 15th** of the following month and give feedback to the health facilities.

14. The province collects all the district reports, make copies (manual or electronic) do the analysis and use the information as they make arrangement to transmit the summaries to the national level **before 21st of the following month if data flows through the province inform of hard copies.**
15. Likewise, provinces should make and maintain a checklist of the reports and districts to ensure timeliness and completeness. They must give feedback to the districts and share the report at that level.
16. To maintain accuracy in recording data collected through tally sheets, health workers should tally from the registers on daily basis.
17. The national level data repository (HIS) should acknowledge receipt, process and analyze the data and give feedback to the lower levels and share the information horizontally and vertically.
18. All levels are encouraged to prepare annual reports that will encompass all activities, outputs and in-puts.
19. For communicable diseases that are for immediate reporting, such should be reported without further delay using the appropriate tools and channels for example using case based investigation forms.
20. Using the File Transfer Protocol (FTP), the district should upload their data to the **FTP site on or before 15th of the following month.**

How to handle the tally sheets

Tally sheets are working sheets on which data is recorded to facilitate ease of count at the time of making summaries. Proper understanding of the content of each tally sheet is essential. The proper way of making a tally is to slash a zero with forward slash (**Killing one zero at ago**) for example 0/

Tallies are normally made immediately a clinician is through with a patient/ client before attending to the next and at the end of the day or early next morning from the register. This depends on circumstances at the facility.

How to handle the Summary sheets

Summary sheets will be completed at the end of the specified period, either from tally sheet or registers or any other source documents. As the health facility submits the summaries to the next level, a copy **Must** remain in the health facility.

Summaries:

If the health information system forms are so complicated that those who are to complete them cannot understand them or the forms are not available all the time, data will not be collected properly. Therefore, every effort must be made to simplify forms and to ensure that there is a constant supply of them. Such forms can have a space for some simple on the spot analysis e.g. total numbers or percentage to be calculated. Sample tally sheets and summary sheets are appended below:

1. MOH 105 Service delivery
2. MOH 701 A Under five (<5) years Daily outpatient morbidity tally sheet.
3. MOH 701 B Over five (>5) years Daily outpatient morbidity tally sheet.
4. MOH 705 A Under five (<5) years Daily outpatient morbidity summary sheet.
5. MOH 705 B Over five (>5) years Daily outpatient morbidity summary sheet.
6. MOH 702 Immunisation and Vitamin "A" Tally sheet
7. MOH 710 Immunisation and Vitamin "A" summary sheet.
8. MOH 704 Child Health and Nutrition Information System tally sheet.
9. MOH 711 A Integrated tool for RH, HIV/AIDS, Malaria, TB, and Child nutrition health facility summary.
10. MOH 711 B Integrated tool for RH, HIV/AIDS, Malaria, TB, and Child nutrition District summary.
11. MOH 717 Monthly Workload report for hospitals (Service workload for all areas)
12. MOH 268 Diagnostic Disease Index
13. MOH 718 In-patient morbidity and mortality summary sheet.
14. MOH 708 Environmental Health services
15. MOH 715 Semi Annual Health Facility services inventory form

MOH integrated Tally and SUMMARY FORMS:

Table 21: MOH 105 SERVICE DELIVERIES

REPUBLIC OF KENYA - MINISTRY OF HEALTH

MOH 105

SERVICE DELIVERY REPORTING TEMPLATE FOR YEAR: _____

DISTRICT: _____ FACILITY NAME: _____ MONTH: _____

* NATIONAL INDICATOR	Enter the Value (Number)															
	Eligible POPn	Baseline	Target	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	TOTAL
A Pregnancy, Delivery and the Newborn (upto 2 weeks)																
1	Number of WRA receiving FP commodities															
2	Number of women attending at least 4 ANC visits															
3	Number of deliveries conducted by skilled health attendants in Health facilities															
3b	Number of live births															
4	Number of new borne s with low birth weight (LBW)															
5	Number of HIV positive pregnant women receiving preventive ARVs treatment (PMTCT)															
6	Number of LLITN distributed to pregnant women															
7	Number of pregnant women receiving IPT 2															
8	Number of HFs providing Basic Obstetric Emergency Care (BOEC)															
9	Number of HFs providing Comprehensive Obstetric Emergency Care (COEC)															
10	Number of maternal deaths occuring at health facility															
11	Number of maternal deaths audited															
B Early Childhood (2 weeks to 5 years)																
12	Number of children under one year vaccinated against measles															
13	Number of children under one year fully immunised															
14	Number of newborne received BCG															
15	Number of underweights among under five attending CWC															
16	Number of children under five attending Growth Monitoring Clinic (New visits)															
17	Number of children under five receiving Vitamin A															
18	Number of LLITNs distributed to children under 5 years															
19	Number of under five years treated for malaria															

F Elderly (>60 years)													
44	Number of Health facilities providing regular check-ups targeted at elderly persons												
45	Number of facilities (level 4 and above) with specialized geriatric care												
G Efficiency indicators													
46	No of doctors												
47	No of Nurse s												
48	No. of Community Health Extension Workers (CHEWS, or PHT's)												
49	No. of community health workers (CHW's)												
50	Total number of Health personnel												
51	Total no of GoK health facilities reporting												
52	Total number of NGO/FBO health facilities reporting												
53	Total number of private health facilities reporting												
54	Total number of beds												
55	Total number of OBD												
56	Total number of deaths/discharges												
57a	Total number of OPD attendance- Male												
57b	Total number of OPD attendance- Female												

NOTE:(a) Provide a separate list Semi-annually (June and December) for numbers 46 to 53, but enter values every month.
 (b) Report only unshaded area and other indicators for services been offered in the facility
 (c) Enter annual Eligible Population, Baseline (previous year), Target to be achieved by the end of the period
 (d) The shaded parts are to be filled at the district level by the DHRIO

Reported by: _____ Designation: _____ Signature: _____ Date: _____

(Revised 2008)

TABLE 22: MOH 701A -UNDER FIVE YEARS DAILY OUTPATIENT MORBIDITY TALLY SHEET

REPUBLIC OF KENYA - MINISTRY OF HEALTH

UNDER 5 YEARS - DAILY OUTPATIENT MORBIDITY TALLY SHEET

MOH701A

DISEASES (New Cases Only)	DATE:																				#	
1 Diarrhoea	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	1
2 Tuberculosis	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	2
3 Dysentery	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	3
4 Cholera	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	4
5 Meningococcal Meningitis	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	5
6 Neonatal Tetanus	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	6
7 Poliomyelitis (AFP)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	7
8 Chicken Pox	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	8
9 Measles	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	9
10 Infectious Hepatitis	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	10
11 Mumps	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	11
12 Clinical Malaria	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	12
13 Confirmed Malaria	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	13
14 Urinary Tract Infection	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	14
15 Typhoid fever	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	15
16 Bilharzia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	16
17 Intestinal worms	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	17
18 Malnutrition	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	18
19 Anaemia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	19
20 Eye Infections	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	20
21 Ear Infections	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	21
22 Other Dis. of Respiratory System	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	22
23 Pneumonia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	23
24 Mental Disorders	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	24
25 Dental Disorders	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	25
26 Dis. of the skin (incl. wounds)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	26
27 Congenital Anomalies	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	27
28 Poisoning	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	28
29 Accidents - Fractures, injuries, etc.	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	29
30 Sexual Assault	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	30
31 Burns	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	31
32 Bites - Animal, Snake, etc	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	32
33 Diabetes	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	33
34 Epilepsy	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	34
35 Dracunculosis	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	35
36 Yellow Fever	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	36
37 Viral Haemorrhagic Fever	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	37
38 New AIDS Cases	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	38
39 Plague	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	39
40 Brucellosis	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	40
41	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	41
42	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	42
43 ALL OTHER DISEASES	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	43
44 NO. OF FIRST ATTENDANCES	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	44
45 FIRST ATTENDANCES (cont.)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	45
46 RE-ATTENDANCES	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	46
47 REFERRALS IN	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	47
48 REFERRALS OUT	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	48

(Revised 2005)

Table 26: MOH 702-IMMUNIZATION AND VITAMIN A TALLY SHEET

REPUBLIC OF KENYA - MINISTRY OF HEALTH, DIVISION OF VACCINATION AND IMMUNIZATION (DVI)
IMMUNIZATION AND VITAMIN A TALLY SHEET

MOH 702

PROVINCE: _____ DISTRICT: _____ CONSTITUENCY: _____ FACILITY NAME: _____ AGENCY: _____ MONTH: _____ YEAR: _____
 TALLY FOR ALL VACCINES AND VITAMIN A ADMINISTERED (ALL HEALTH FACILITIES SHOULD HAVE THIS TALLY SHEET)

ANTIGEN		DAYS OF THE MONTH																				TOTALS			
1.	BCG	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
2.	DPT/Hep B/ HiB1	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
3.	DPT/Hep B/ HiB2	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
4.	DPT/Hep B/ HiB3	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
5.	OPV(Birth dose)	Within 2 weeks	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
6.	OPV1	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
7.	OPV2	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
8.	OPV3	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
9.	Measles	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
10.	Yellow fever	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
11.	Fully Immunized Child (FIC)	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
12.	Tetanus Toxoid for women of child bearing age (15-49 years)	1st Dose	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		2nd Dose	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
		3d Dose	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
		4th Dose	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
		5th Dose	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
13.	Vitamin A	Under 1 Year (100,000 IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000		
		Above 1 Year (200,000 IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
		Lactating Mothers (200,000 IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	

(Revised 2008)

SECTION B
MONTHLY VACCINE STOCK AND VITAMIN A WASTAGE MONITORING REPORT

AT FACILITY LEVEL: FILL MONTHLY "TOTAL"; AT DISTRICT LEVEL: EACH C

14.	BCG	[A]Doses in stock at the beginning of the month																					
		[B]Doses received within the month																					
		[C]Total doses stocked in the month= [A+B]																					
		[D]Doses remaining at the end of the month																					
		[E]Doses used in the month= [C-D]																					
		[F]Number of children vaccinated during the month																					
		[G]Doses wasted in the month=[E-F]																					
		[H]Wastage rate in the month=[G/E]X100																					
15.	OPV	[A]Doses in stock at the beginning of the month																					
		[B]Doses received within the month																					
		[C]Total doses stocked in the month= [A+B]																					
		[D]Doses remaining at the end of the month																					
		[E]Doses used in the month= [C-D]																					
		[F]Number of children vaccinated during the month																					
		[G]Doses wasted in the month=[E-F]																					
		[H]Wastage rate in the month=[G/E]X100																					
16.	MEASLES	[A]Doses in stock at the beginning of the month																					
		[B]Doses received within the month																					
		[C]Total doses stocked in the month= [A+B]																					
		[D]Doses remaining at the end of the month																					
		[E]Doses used in the month= [C-D]																					
		[F]Number of children vaccinated during the month																					
		[G]Doses wasted in the month=[E-F]																					
		[H]Wastage rate in the month=[G/E]X100																					
17.	DPT-HIB- HEP B	[A]Doses in stock at the beginning of the month																					
		[B]Doses received within the month																					
		[C]Total doses stocked in the month= [A+B]																					
		[D]Doses remaining at the end of the month																					
		[E]Doses used in the month= [C-D]																					
		[F]Number of children vaccinated during the month																					
		[G]Doses wasted in the month=[E-F]																					

18.	TT	[A]Doses in stock at the beginning of the month																				
		[B]Doses received within the month																				
		[C]Total doses stocked in the month= [A+B]																				
		[D]Doses remaining at the end of the month																				
		[E]Doses used in the month= [C-D]																				
		[F]Number of children vaccinated during the month																				
		[G]Doses wasted in the month=[E-F]																				
		[H]Wastage rate in the month=[G/E]X100																				
19.	Vitamin A-100,000 IU	[A]Caps in stock at the beginning of the month																				
		[B]Caps received within the month																				
		[C]Total Capsule stocked in the month= [A+B]																				
		[D]Caps remaining at the end of the month																				
		[E]No. of children supplemented in the month= [C-D]																				
		[F]Number of caps during the month																				
		[G]Caps wasted in the month=[E-F]																				
		[H]Wastage rate in the month=[G/E]X100																				
20.	Vitamin A- 200,000 IU	[A]Caps in stock at the beginning of the month																				
		[B]Caps received within the month																				
		[C]Total Capsule stocked in the month= [A+B]																				
		[D]Caps remaining at the end of the month																				
		[E]No. of children supplemented in the month= [C-D]																				
		[F]Number of Caps used during the month																				
		[G]Caps wasted in the month=[E-F]																				
		[H]Wastage rate in the month=[G/E]X100																				

Summary of form submitted on ____/____/____ By _____ Designation _____ Signature _____ Date _____

Received by _____ Designation _____ Signature _____ Date _____

Facilities: Send the completed form to the Medical Officer of Health by 5th of the following month

Districts Send the completed form to the PMO, By 15th of the following month.

Province: Send Electronic copy of the completed Provincial Summary by district to the DVI Office HEAD DVI P.O BOX 43319 Nairobi by 21st of the following month

Table 28: MOH 711B NATIONAL INTEGRATED FOR RH, HIV/AIDS, MALARIA, TB AND CHILD NUTRITION

DISTRICT SUMMARY FORM

MOH 711B

REPUBLIC OF KENYA - MINISTRY OF HEALTH

**NATIONAL INTEGRATED FORM FOR
REPRODUCTIVE HEALTH, HIV/AIDS, MALARIA, TB and CHILD NUTRITION**

DISTRICT: _____ MONTH: _____ YEAR: _____

No. of Facilities expected to report: _____ No. of Facilities that reported this month: _____

A: FAMILY PLANNING		NEW CLIENTS	RE-VISITS	TOTAL
1.	PILLS	Microlut		
		Microgynon		
2.	INJECTIONS	INJECTIONS		
3.	I.U.C.D.	Insertion		
4.	IMPLANTS	Insertion		
5.	STERILIZATION	B.T.L.		
		Vasectomy		
6.	CONDOMS	No. of Clients receiving		
7.	ALL OTHERS: (specify)			
8.	TOTAL NO. OF CLIENTS			

9. REMOVALS:	IUCD	IMPLANTS
--------------	------	----------

B: MCH - ANC / PMCT		New	Re-visit	TOTAL
1.	No. of ANC Clients			
2.	No. of Clients with Hb < 7 g/dl			
3.	No. of Clients given IPT (1 st dose)			
4.	No. of Clients given IPT (2 nd dose)			
5.	No. of Clients completed 4th Antenatal Visit			
6.	No. of ITNs distributed to ANC clients			
7.	No. of ANC clients	Counselled		
		Tested for HIV		
		HIV+		
8.	No. of clients	Tested for Syphilis		
		Found +ve		
9.	No. of clients issued with preventive ARVs			
10.	No. of infants tested for HIV	At 6 wks		
		After 3 Months		
11.	HIV+ referred for follow up	Mothers		
		Partners		
12.	No. of infants issued with preventive ARVs			
13.	No. of mothers counselled on infant feeding options			
14.	No. of partners	Counselled		
		Tested		
		HIV+		

MATERNITY- PMCT		TOTAL	
1.	No of Women counselled		
2.	Women tested for HIV		
3.	Women found HIV+		
4.	No. of Women issued with preventive ARVs		
5.	No. of infant Preventive ARVs administered		
6.	Total Deliveries from HIV+ women		
7.	No initiated cotrimoxazole	Women	
		Infants	

E: MATERNITY / SAFE DELIVERIES		NUMBER	
1.	Normal Deliveries		
2.	Caesarean Sections		
3.	Breech Delivery		
4.	Assisted vaginal delivery		
5.	TOTAL DELIVERIES		
6.	Live Births		
7.	Still Births		
8.	Under Weight Babies (Weight below 2500 grams)		
9.	Pre-Term babies		
10.	No. of babies discharged alive		
11.	Referrals		
12.	Neonatal Deaths		
13.	Maternal Deaths		
Maternal complications		Alive	Dead
14.	A.P.H. (Ante Partum Haemorrhage)		
15.	P.P.H. (Post Partum Haemorrhage)		
16.	Eclampsia		
17.	Ruptured Uterus		
18.	Obstructed labour		
19.	Sepsis		

D: STI		Type of visit	Females	Males	Total
1.	Urethral Discharge	Initial visit			
		Re-att			
		Referrals			
2.	Cases of Genital ulcer disease (GUD)	Initial visit			
		Re-att			
		Referrals			
3.	Cases of Ophthalmia Neonatorum	Initial visit			
		Re-att			
		Referrals			
4.	Cases of Syphilis Serology				
5.	Grand Totals				

(Revised 2008)

Page 1 of 2

DISTRICT: _____ MONTH: _____ YEAR: _____

MOH 711B

F: PAC SERVICES		TOTAL
1.	No. of MVA	
2.	No. of D & C	
3.	No. of FP Up take	

H: VCT			15-24 years		≥ 25 years		TOTAL
			F	M	F	M	
1.	VCT Clients	Counselled					
		Tested					
		HIV+					
2.	No of couples	Counselled					
		Tested					
		Both HIV+					
		With discordant					

I: DTC			Children (0-14 yrs)		Adults (>14yrs)		TOTAL
			F	M	F	M	
1.	No. counselled	Outpatient					
		In-Patient					
2.	No. tested	Outpatient					
		In-Patient					
3.	No. HIV+	Outpatient					
		In-Patient					

G: TB		New	Re-att	Total
1.	No. of TB cases detected			
2.	No. of smear positive			
3.	No. of smear negatives			
4.	No. of Extra-pulmonary TB patients			
5.	No. of Re-treatment TB patients			
6.	Total No. of TB Patients tested for HIV			
7.	Total No. of TB Patients HIV+			
8.	No. of TB HIV patients on CPT			
9.	No. of defaulters			
10.	Total No. completed treatment (all forms of TB) who started treatment this month last year			
11.	No of TB deaths (who started treatment this month last year)			

J: CHILD HEALTH AND NUTRITION INFORMATION SYSTEM (CHANIS)			
Children Needing Follow up	F	M	TOTAL
1. Marasmus			
2. Kwashiorkor			
3. Anaemia			
4. Faltering Wt			
Others e.g. Vitamin A deficiency, etc. (Specify):			
5. _____			

K: ART			Children 0-14 yrs		Adults >14yrs		Totals		Grand Totals
			F	M	F	M	F	M	
1.	No of new patients enrolled within the month for HIV care by entry point	PMCT clients							
		VCT clients							
		TB patients							
		In patients							
		CWC							
		All others							
Sub-total									
2.	Cumulative No. of persons enrolled in HIV care at this facility at end of the month								
3.	Number of patients starting ARVs within the month by WHO stage	WHO stage 1							
		WHO stage 2							
		WHO stage 3							
		WHO stage 4							
		Sub-total							
4.	Cumulative No. of persons started on ARVs at this facility at end of the month.								
5.	Total No. of patients currently on ARVs	Pregnant women							
		All others							
		Sub-total							
6.	No. of persons who are enrolled and eligible for ART but have not been started on ART								
7.	Post exposure prophylaxis(PEP)	Sexual assault							
		Occupational							
		All others							
		Sub-total							
8.	Total No. of patients currently on prophylaxis	Cotrimoxazole							
		Fluconazole							
		Sub-total							

L: BLOOD SAFETY	NUMBER
1. Blood units collected from Regional Blood Transfusion Centers	
2. Blood units collected from other sources Other than Regional Blood	
3. Blood units screened at health facility	
4. Blood Units transfused	

BLOOD SAFETY (cont.)	NUMBER
5. Blood units screened found HIV+	
6. Blood units screened for Hepatitis B	
7. Blood units screened for Hepatitis C	
8. Blood Units screened for Syphilis	

Prepared By:		Designation:	
Date:		Signature:	

(Revised 2008)

Page 2 of 2

Table 29: MOH 717 MONTHLY WORKLOAD REPORT FOR HOSPITALS

MOH 717

**REPUBLIC OF KENYA - MINISTRY OF HEALTH
MONTHLY WORKLOAD REPORT FOR HOSPITALS**

District: _____ Health Facility: _____
 Month: _____ Year: _____ Facility Code: _____

NOTE: Complete every line- leave no blanks. If the health institution does not provide a specific service, write "NS" ("No Service"). If the institution provides the service, but workload data are unavailable, write "NR" ("Not Recorded").
 At the end of each month, this form should be completed in 2 copies and delivered by the 5th day of the following month. (January statistics should be posted by 5th February, February statistics by 5th March, and so forth) The copies should be distributed as follows:
 Original Form should be sent to the District Medical Records Office; The Copy should be retained by the Facility's Records Office.

A. OUTPATIENT SERVICES				
A.1 GENERAL OUTPATIENTS(FILTER CLINICS)		NEW	RE- ATT	TOTAL
A.1.1	Over 5 years - Male			
A.1.2	Over 5 years - Female			
A.1.3	Children Under 5 years - Male			
A.1.4	Children Under 5 years - Female			
A.1.5	TOTAL GENERAL OUTPATIENTS			
A.2. CASUALTY				
A.3 SPECIAL CLINICS(if recorded separately from General Filter Clinics)				
A.3.1	E.N.T. Clinic			
A.3.2	Eye Clinic			
A.3.3	TB and Leprosy			
A.3.4	Sexually Transmitted Infections			
A.3.5	Psychiatry			
A.3.6	Orthopaedic Clinic			
A.3.7	All other Special Clinics (Medicine,Paediatrics,Surgery etc.)			
A.3.8	TOTAL SPECIAL CLINICS			
A.4 MCH/FP CLIENTS				
A.4.1	CWC Attendances			
A.4.2	ANC Attendances			
A.4.3	PNC Attendances			
A.4.4	FP Attendances			
A.4.5	TOTAL MCH/FP			
A.5 DENTAL CLINIC				
A.5.1	Attendances (Excluding fillings and extractions)			
A.5.2	Fillings			
A.5.3	Extractions			
A.5.4	TOTAL DENTAL SERVICES			
A.6 TOTAL OUTPATIENT SERVICES (= A.1.5 + A.2 + A.3.8 + A.4.5 + A.5.4)				
A.7 MEDICAL EXAMINATIONS (except p3)			A.10 INJECTIONS	
A.8 MEDICAL REPORTS (incl. P3, compensation, insurance, etc)			A.11 STITCHING	
A.9 DRESSINGS			A.12 P.O.P	

(Revised 2008)

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FACILITY NAME: _____ MONTH: _____ YEAR: _____

B. IN-PATIENT SERVICES						
B.1 IN-PATIENTS		GENERAL ADULTS	PAEDIATRICS	MATERNITY Mothers Only	AMENITY	TOTAL
B.1.1	Discharges					
B.1.2	Deaths					
B.1.3	Absconders					
B.1.4	TOTAL DISCHARGES, DEATHS, etc.					
B.1.9	Admissions					
B.1.10	Paroles					
B.1.11	Occupied Bed Days- NHIF Members					
B.1.11a	Occupied Bed Days- Non-NHIF Members					
B.1.12	Well Persons Days					
B.1.5	Beds- Authorized					
B.1.6	Beds- Actual Physical					
B.1.7	Cots- Authorized					
B.1.8	Cots- Actual Physical					

B.2 MATERNITY SERVICES		
B.2.1	Vaginal delivery (includes Normal and assisted delivery)	
B.2.2	Caesarian Sections	
B.2.3	Fresh still birth	
B.2.4	Macerate still birth	

B.3 OPERATIONS		Number
B.3.1	Minor Surgeries (excluding circumcision)	
B.3.2	Circumcision	
B.3.3	Major Surgeries	
E. MORTUARY		Number
E.1	Body days	
E.2	Embalment	
E.3	Post-mortem	
E.4	Unclaimed body days	
F. MEDICAL RECORDS ISSUED		
F.1	New Files	
F.2	Outpatient records	

D. PHARMACY - No. of prescriptions

D.1	Common Drugs	
D.2	Antibiotics	
D.3	Special Drugs	
D.4	For Children	

C. SPECIAL SERVICES (includes both inpatients and outpatients)

C.1	Laboratory- Number of Tests	Routine	Special	Total
C.2	X-Ray- Number of Examinations	Plain without enhancement	Enhancement with contrast media	Ultrasound
		Special with Magnetic process (MRI, CT scan)		Total radiological examinations
C.3	Physiotherapy - Number of Treatments		Non- private	
C.4		Private	Non- private	Total
C.5	Orthopaedic Technology - Orthopaedic Technology - No of ITEMS e.g a pair of crutches, Prosthesis etc count as one item	Private	Non- private	Total

	Name	Designation	Signature	Date
Prepared by:				
Checked by:				
Entered by:				

Table 30: MOH 704 CHILD HEALTH AND NUTRITION INFORMATION SYSTEM TALLY SHEET FOR CHILD HEALTH WELFARE CLINICS

REPUBLIC OF KENYA - MINISTRY OF HEALTH
**CHILD HEALTH AND NUTRITION INFORMATION SYSTEM
 TALLY SHEET FOR CHILD HEALTH WELFARE CLINICS**

MOH 704

FACILITY NAME: _____ MONTH: _____ YEAR: _____

Date Sheet started: _____ Date sheet finished: _____
 (Remember to make only ONE TALLY per child per month FOR WEIGHT)

		FEMALES					MALES				
Age 0 to 11 months	NORMAL WEIGHT (HEALTHY CHILD)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	UNDERWEIGHT	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
FOLLOW-UP	MARASMUS	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	KWASHIORKOR	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	ANAEMIA	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	FALTERING WT	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	OTHER	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
Age 12 to 35 months	NORMAL WEIGHT (HEALTHY CHILD)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
		UNDERWEIGHT	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
FOLLOW-UP	MARASMUS	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	KWASHIORKOR	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	ANAEMIA	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	FALTERING WT	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	OTHER	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
36 to 59 months	NORMAL WEIGHT (HEALTHY CHILD)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
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	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
		UNDERWEIGHT	00000	00000	00000	00000	00000	00000	00000	00000	00000
		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
FOLLOW-UP	MARASMUS	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	KWASHIORKOR	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	ANAEMIA	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	FALTERING WT	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	OTHER	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000

CHILDREN WITH NORMAL WEIGHT - those whose weight falls BETWEEN the two lines of the Child Growth Curve
 CHILDREN WHO ARE UNDERWEIGHT - those whose weight falls BELOW the bottom line of the Child Growth Curve

(Revised 2008)

Table 32: MOH 718 IN-PATIENT MORBIDITY AND MORTALITY SUMMARY SHEET.

MOH 718

REPUBLIC OF KENYA - MINISTRY OF HEALTH
INPATIENT MORBIDITY AND MORTALITY SUMMARY SHEET

District: _____ Facility Name: _____ Quarter : _____ Year : _____ Sex: _____

#	CODE NO.	DIAGNOSIS	< 1 yr		1 - 4yrs		5 - 14yrs		15 - 24yrs		25 - 34yrs		35 - 44 yrs		45 - 54yrs		55 - 64yrs		65+ yrs		U/Age		TOTALS		ALS	
			A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D		
1.																										
2.																										
3.																										
4.																										
5.																										
6.																										
7.																										
8.																										
9.																										
10.																										
11.																										
12.																										
13.																										
14.																										
15.																										
16.																										
17.																										
18.																										
19.																										
20.																										

Key: A-Alive D-Dead ALS-Average Length of Stay U/Age-Unknown Age

Compiled By (Name): _____ Designation: _____ Sign: _____ Date: _____

(Revised 2008)

Table 33: MOH 715 SEMI- ANNUAL HEALTH FACILITY SERVICES INVENTORY FORM.

REPUBLIC OF KENYA - MINISTRY OF HEALTH

SEMI-ANNUAL HEALTH FACILITY SERVICES INVENTORY FORM

MOH 715

PROVINCE: _____ DISTRICT: _____ MONTH: _____ YEAR: _____

Health facility code	Health Facility Name	Type	Ownership	Division	Location	Sub-location / Village	Nearest Town	Address (box)	Email address
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									

PROVINCE: _____ DISTRICT: _____ MONTH: _____ YEAR: _____

	Phone Number	Mobile Number	Geocodes		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
			Latitude	Longitude	Immunization	Growth Monitoring	MCI	ANC	Family Planning	Basic Emergency Obstetric Care	Comprehensive Emergency Obstetric Care	PMTCT	HIV counseling and testing	ARV therapy	TB diagnosis	TB diagnostic laboratory facilities	TB treatment	Cases are an section	Emergency blood transfusion	Curative CPD	Curative In-patient	Homebased care	Radiology services	Youth friendly services		
1.																										
2.																										
3.																										
4.																										
5.																										
6.																										
7.																										
8.																										
9.																										
10.																										
11.																										
12.																										
13.																										
14.																										
15.																										
16.																										
17.																										
18.																										
19.																										
20.																										

Completed By (Name): _____ Designation: _____ Sign: _____ Date: _____

Table 34: MOH 708 ENVIRONMENTAL HEALTH SERVICES

MINISTRY OF HEALTH

Revised MOH 708

ENVIRONMENTAL HEALTH SERVICES

Date Report for (month)..... Station

1. Food Quality Control:

1.1 Food Premises.

		Total No. Existing	No. Inspect. (Rev. Month)	Total No. Licensed	No. closed (Rev. Month)	Revenue. (ksh)(A in A)	Revenue. (ksh) (C/Sharing)
1.	Retail Shops						
2.	Food wholesales						
3.	Butcheries						
4.	Eating houses						
5.	Bars & Restaurants						
6.	Bakeries						
7.	Dairies						
8.	Milk bars						
9.	Slaughter houses						
10.	Food factories						
11.	Posho mills						
12.	Fish stalls						
13.	Supermarkets						
14.	Green grocers						
15.	Beer depots						
16.	Food depots						
17.	Hotel & lodges						
	Others						
	<i>Totals</i>						

1.2 Food/Water Seizure and Sampling:

	<i>Types (specify)</i>	<i>Amount Seized</i>	<i>Units</i>	<i>Amount Condemned</i>	<i>Units</i>	<i>Reasons for/Seizure Condemning</i>
1.						
2.						
3.						
4.						
5.						

1.3 Meat Inspection:

		NUMBER INSPECTED	NUMBER PASSED	NUMBER CONDEMNED	REVENUE (A IN A)	REVENUE (C/SHAR.)	MAIN REASONS FOR ORGANS/CARCASSES CONDEMNATION
1	Bovines						
2	Shoats						
3	Camels						
4	Rabbits						
5	Chicken						
				<i>Total</i>			

1.4 Medical Examination (Food Handlers):

		TOTAL NO.	NO. EXAM.	NO. FIT	NO. NOT FIT	REVENUE (A IN A)	REVENUEC/SHARING
1.	<i>In Com. Food Premises.</i>						
2.	<i>In Learning Institutions.</i>						
3.	<i>In Health Institutions.</i>						
					<i>Total</i>		

1.5 Food Exports:

	Type (specify)	Quantity	Units	Destination (country)	Revenue. (Ksh)
1.					
2.					
3.					

1.6 Food Imports:

	Type (specify)	Quantity	Units	Origin (country)
1.				
2.				
3.				
4.				

2. Housing (plans)

	No. Submitted	No. Approved	Occ. Cert. issued	Revenue (A in A)	Revenue C/Sharing
1	Residential				
2	Commercial				
3	Institutions				

3. Water supply:

		Number Existing	Major source? (Yes/No)	Total No. Protected	No. protected (Review month)	No. quality acceptable	No. quality not acceptable
1	Springs						
2	Boreholes						
4	Shallow wells						
5	Rivers						
6	Dams						
7	Rock catchments						
8	Roof catchments						
9	Pans						
10	Piped schemes						
11	Infil.Galleries						

4. Solid/Liquid waste disposal:

		No. Exist.	Total Pop.	No. of Incins.	No. Pit Latrines	No. WCs	No. disp. Sites	Blockages cases reported	S.W. disposal Methods
1	Municipalities								
2	Council Markets								
3	Learning Instits.								
4	Health Instits.								
5	Factories								
6	Rural								

5. School Health:

		Total No.	No. Insp. (Rev. month)	Total pop. (Girls)	Total pop. (Boys)	No. pit Latrines.	No. WCs	O/break cases (No.)
1	Nursery Schools							
2	Primary Schools							
3	Secondary Schools							
4	Tertiary Institutes.							

6. Hygiene Education:

		No. Conducted	Topic	Target Group	Attendance (No.)	No. Cum. attendance
1	PHAST					
2	HACCP					
3	Barazas					
4	Seminars					

7. Vaccinations (Food handlers, high risk groups)

	Antigen	No. vaccinated	Cumm. No.	Revenue generated
1	Yellow fever			
2	Typhoid (Typhus)			
3	Meningitis			
4	Hepatitis "B"			
5	Anti-rabies			
6	Anti-venom			

8. Vector/Vermin Control:

		Premise. Scrd. No.	Amount larvicd.usd	Amount Mollus.usd.	No. Mosq. Nets supd.	No. baits Done	No. Trapd.	No. disnfs. Done	No. Of Complts
1	Mosquito								
2	Rodents								
3	Snails								
4	Others								

9. Port Health Service

		No. Points of Entry	Amount de-rated	Disinfected	Disinfected	Quarantined	Total Revenue
1	Ships						
2	Aircrafts						
3	Road vehicles						
4	Cargo/luggage						

10. Travellers screened

	Purpose	Total No.	No. Isolated	No. put on Surveillance	No. Treated		
1	Vaccination						
2	Disease Surveillance						
3							

11. Public Health Law Enforcement:

		Mosquito Control	Food Control	Housing	Building Constr.	Sanit.	Pollution Control	Comm. Diseases
1	Intimation notices served							
2	Intimation notices complied							
3	Statutory notices served							
4	Statutory notices Complied							
5	No. of Cases prosecuted							
6	Cases withdrawn							
7	Cases acquitted							
8	Cases convicted							

12. General Comments: *(You may attach additional sheet of paper if space is inadequate)*

Compiled By: Name ----- Designation -----Signature -----

Date -----

Caution!

Medical records, Health information or its contents must never be disclosed unless under the following circumstances:

1. If there is the consent, express or implied, of the patient/client.
2. If there is an order of court.
3. If the interest of the doctor or hospital cannot otherwise be safeguarded.
4. In transference between hospitals, clinics or doctors, in the interest of a patients health.
5. If there exists a higher duty than the private one to safeguard the community.

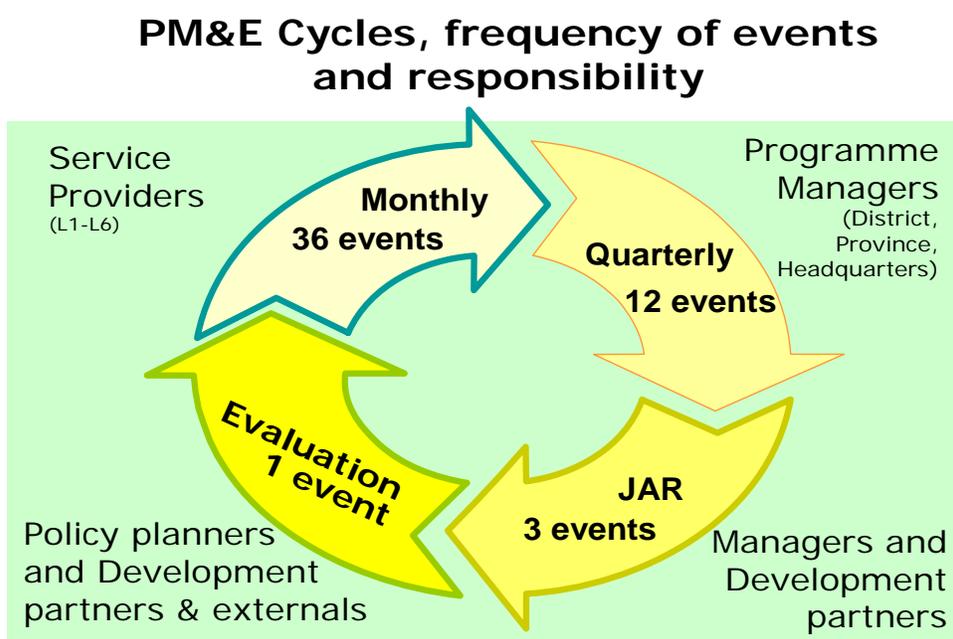
CHAPTER 4

PERFORMANCE MONITORING AND EVALUATION

Performance Monitoring and Evaluation (PM&E) has been characterised as the output of the HIS to produce statistical indicators. The 1978 Declaration of Alma Ata provided an opportunity to develop HIS to reflect broader development needs, Measurement of the indicators for monitoring progress towards the global strategy for health, and creating a global partnership for sustainable development, Agenda 21 emphasised the importance of “bridging the data gap” by increasing the relevance and availability of data, improving the cost-effectiveness of data collection and developing capacities for data management and analysis across sectors (PARIS 21 – Partnership in Statistics for Development in the 21st Century).

Below is the Performance Monitoring & Evaluation (PM&E) for Kenya Health Sector.

Figure 2: **MONITORING & EVALUATION FOR KENYA HEALTH SECTOR**



Guiding principles and criteria for selecting additional indicators

Guiding principles:

- Avoid overburdening of service providers.
- Restriction to basic minimum of indicators that are action oriented.
- Balance between the 6 levels of KEPH delivery.
- Balance between impact, outcome, output and input indicators.
- Any additional indicator to the list must be vetted by the national steering committee and should be monitored for a while to support evaluation of the process, inputs, outputs, outcome and impact.
- The indicator should be monitored for at least a period of 2 years consistently.

Critical selected areas commonly used:

Baseline:

1. Information gathered at the beginning of a study against which variations found in the study are measured.
2. A known value or quantity with which an unknown is compared when measured or assessed
3. The initial time point in a clinical trial, just before a participant starts to receive the experimental treatment which is being tested. At this reference point, measurable values such as CD4 count are recorded. Safety and efficacy of a drug are often determined by monitoring changes from the baseline values.
4. A value representing a normal background level or an initial level of a measurable quantity and used for comparison with values representing response to an environmental stimulus or intervention.
5. A known value or quantity used to measure or assess an unknown, for example a baseline urine sample.

Baseline data

1. A set of data collected at the beginning of a study or before intervention has occurred.
2. **Baseline:** a reference point used to indicate the initial condition against which future measurements are compared.

Population: denoted (n)

1. The total number of people inhabiting a specific area.
2. The set of individuals, items, or data from which a statistical sample is taken.
3. All the organisms that constitute a specific group or occur in a specified habitat
4. All of the animals in a specifically defined area considered as a whole. The population may also be defined in modes other than geography, for example the human population.

Parent population: the original population about which it is hoped to make some inferences by examination of a sample of its constituent members.

Population proportion: the percentage of the population that has the subject characteristics.

Population pyramid: a graphic presentation of the composition of a population with the largest group forming the baseline, the smallest at the apex.

Population at risk: the individuals belonging to a certain group or community who have the potential to contract a medical condition or

The population which is composed of animals that are exposed to the pathogenic agent under discussion and is inherently susceptible to it. High or special risk groups are those which have had more than average exposure to the pathogenic agent.

Population size: actual counting of a total population, the *census* method, is not often possible in large human populations. Alternatives are by various sampling techniques including *area trapping*, the trapping of all animals in an area, the *capture-release-recapture* method, the *nearest neighbour* and *line transect* methods,

The population size is expressed as the population present at a particular instant. Alternatively it can be expressed as a number of person-duration expression when the population is a shifting one and it is desired to express the population size over a period (e.g. persons per day).

Stable population: a population which has constant mortality and fertility rates, and no migration, therefore a fixed age distribution and constant growth rate.

Target population: in epidemiological terms the population from which an experimenter wishes to draw an unbiased sample and make inferences about it.

Catchment area: The surrounding area served by an institution, such as a hospital or school.

CHAPTER 5

Standard Operating Procedures (SOPs)

Procedures for completing and forwarding health information reports:

In order to make the data comparable in time and space, data collection is standardized. Sets of forms are designed on which the collected data can be recorded. Some are tally sheets, monthly report forms and annual summary sheets. Each health facility, activities are instantly recorded by tallying or register with or without existing tools and summed up at the end of the day. The sum up of the daily totals makes weekly or monthly totals for each activity available easily. The following sources of error are common and should be avoided:-

- a) Forgetting to record in the service/activity register
- b) Forgetting to tally.
- c) Misclassification
- d) Miscalculations and
- e) Figure "cooking"

Step by step guides to realise the services offered by each individual at all levels of the health care system;

Data collection, collation, consolidation and use

Data collection can be quite simple, requiring only a pen or pencil and a piece of paper. It can also get quite sophisticated, employing several people, an array of pre-printed forms, calculators, computers, Personal Digital Assistants (PDAs), Phones, and Geographical Positioning System (GPS). The data collected will be used to know the scope of the problems that a primary implementer is dealing with i.e. how many people use the services offered or what are the most common ailments affecting people in the health service area?

Data collection is on itself an activity which requires planning, time and funding. All health facility in-charges, DMSTs and DHMTs **MUST** always cost this integral activity. To ensure good data collection:-

- Identify your indicators.
- Define the indicators and state how data is obtained, what sources, use of data and how often data is collected.
- Identify the variables for different data sets
- Define each variable.
- Design the data collection tools (registers) and data reporting forms (summary tools). **Note:** In each step above build consensus at every level.
- Pre-test the new or reviewed tools in the field for at least two weeks to obtain practical inputs.
- Share the report with all the concerned stakeholders i.e. Field officers/ implementers, programme managers and development partners.
- Finalise the documents considering some suggestions and inputs.
- Print the data collection and reporting tools.
- Orientate the health workers on the tools.

Community level intervention:

- Record all the services carried out in a family register or record book.
- Extract information from the register/record book to the provided (prescribed) forms.
- Submit the completed form/ record book to your supervisor at the end of each month.
- Update the board displayed in the community with the information from your community unit.

Health facility level intervention:

- Record and maintain all the service registers at service delivery points.
- For immunisation, giving of Vitamin A and growth monitoring services **ONLY**, record in the immunisation register, give the immunization(s) and make a **Tally** of what has been given before the client leave.
- Using tally sheets provided for other services, extract the information from the register every morning or before closing the previous days business. This will minimize errors, backlogs of work and time for compilation.
- Complete also the daily summaries. This will also assist you in timely completion of the summary form(s) by only making the totals.
- The health facility in-charge should **submit all** summaries including the community units' reports to the District Medical Officer of Health (DMOH), **by 5th of the preceding month**.
- File (i.e. permanent attachment of the documents – avoid loose leaves) and maintain a copy of all reports submitted to the next level.
- The health facility should compile service delivery facility indicators, share with the members of the facility management committee. The team should also use their information for daily activities, running of the institution, annual facility planning improve health services, request for supplies and monitoring of health services at the community and health facility level.
- Provide regular feedback to the community using organized Chief "**Barazas**", community health days and other organized community meetings including women group meetings.

District level interventions:

- The district is the foci (**first data repository**) of the district health data.
- Collect, collate **all** the summary reporting forms from **ALL** the available health service institutions in the district.
- Check all reports for errors, omissions, completeness, consistency (**VALIDATE**) and enter them in the health facility checklist.
- The person receiving the report should give **expressed (WRITTEN)** feedback summary note to all the reporting facility and remind those who have not reported.
- Compile, process and make district summary data sheets. In case of the FTP, enter the summary data in the uploaded forms offline. It will be vital to download all forms to the desktop enter the data and upload the file to the site. Note that file names should not be changed.
- The DMOH or appointee should submit the district summary to the Provincial Medical Officer of Health (PMO) **by 15th of the preceding month**.
- Critically analyse in-depth the facility data.
- Discuss the important indicators in the DHMT meetings.
- Discuss the improvements with the district stakeholders in the District Health Stakeholders Forum (DHSF).
- Share the performance summary monthly with all health facilities, and stakeholders in the district.
- Using available reports plan for integrated **targeted supportive** supervision to the health facilities/community units.

Provincial level interventions:

- Collect, collate district summary reports.
- Using the checklist record the reports received and acknowledge receipt of the district reports. In case of using the FTP after uploading the file, the PHRIO should be able to acknowledge the report in writing.
- Consolidate the district summaries into a provincial report- (**second data repository**).
- Submit all consolidated reports to the national level **by 21st of the preceding month**.

- Critically analyse the district summaries.
- Share the report with the PHMT members
- Share the improvements with the provincial stakeholders.
- Using available reports plan for integrated targeted supportive supervision to the district.
- Provide technical support to the poor performing districts.

National level interventions:

- Receive provincial summary reports and record in a checklist.
- Acknowledge the receipt of the reports through a written feedback.
- Consolidate the provincial and district quarterly performance reports. This should be analysed critically to produce a quarterly feedback report.
- Critically analyse data bearing in mind different users.
- Share the progress report with the heads of the programmes.
- Share the improvements with the other stakeholders.
- Give the PHMT quarterly performance feedback.
- Using the information, complete the PC for PS, DMS and heads of departments.

Data Validation:

The quality of data depends on;

- Efficiency organisation of the flow of information at the local level.
- Accurate and up-to-date input without undue cost.
- Training of Health personnel at all levels.
- Establishment of data banks
- Enhanced confidentiality.

It is the responsibility of the Health records and information personnel to cross-check the data to determine whether it is accurate, errors or making sense to users before forwarding to the next level. Every month the concerned officers must cross-check data submitted to them and provide feedback to health facilities or any other level. Data corrections must be done by the source. Health statistics suffer from both quantitative and qualitative defects.

These are: -

- There may be omissions and errors
- Non-response due to
 - Negligence of the reporting personnel.
 - Communication problem due to inadequate postage fund, poor terrain and road network.
- Lack of adequate cautioning for defaulters.
- Reporting personnel overburdened with other duties.
- Lack of interest
- Insufficient supervision
- Inadequate training of the health personnel at all levels.

Each of the above defects can be strengthened by;

- Carrying out regular supportive supervision.
- Provision of continuous medical education (CME), workshops and seminars.
- Provision of self addressed envelopes or give funds in form of allocations.
- Network with other partners
- Enforce response by prosecuting those not reporting and provide regular feedback on performance.
- Employ more personnel trained in health records and information
- Motivate the staff.

Kinds of data:

If the health information system forms are so complicated that those who are to complete them cannot understand them or the forms are not available all the time, data will not be collected properly. Therefore, every effort must be made to simplify forms and to ensure that there is a constant supply of them. Such forms can have a space for some simple on the spot analysis e.g. total numbers or percentage to be calculated. Some of the kinds of forms are:-

Data analysis

The analysis of data collected in the health information system is simple and straightforward. Not having a calculator is an invalid excuse for lack of analysis as analysis can be done without one. The most important data analysis is to estimate coverage for the services offered e.g. what proportion of children less than 1 year complete immunisation schedule before their first birth day? Or what percentage of women delivers without attending antenatal clinics?

$$\text{Percentage coverage} = \frac{\text{number of cases in clinic}}{\text{Total number of cases in catchment population}} \times 100$$

It is vital in data analysis to identify appropriate denominators and numerators. Population data are available from the past census and population projections.

Having estimated the catchment population, the next step is to estimate the target population for various services which is the denominator of the coverage fraction. E.g. catchment population = 25,000.

a) Antenatal care

$$\text{Target population } 4.5\% \text{ of } 25,000 = \frac{4.5}{100} \times 25,000 = 1,125$$

$$\text{If number of new visits are } 976 \text{ therefore coverage} = \frac{976}{1125} \times 100 = \mathbf{86.76\%}$$

If number of re-visits are 2,090 the mean number of visits per new attendant for antenatal care is new visits + revisits divide by new visits.

$$= \frac{(976+2090)}{976} = 3.1 \text{ visits Per new antenatal attendant.}$$

b) Morbidity data

Morbidity data are collected in both outpatient and in-patient by age, and diagnosis. Considering new cases gives a picture of the morbidity pattern at the health facility for example;

Table 35: Top 4 outpatient morbidity cases

Cause	Cases	Percentage total cases	Incidence per 1000 population
Malaria	20,540	50.8	822
Diarrhoeal	3,345	8.3	
Anaemia	1,553	3.8	
ARI	6,394	15.8	
All other diseases	8,566	21.2	
Total new cases were	40,398	100	

$$\begin{aligned} \text{If the catchment population was } 25,000 \text{ thus incidence rate for malaria} &= \frac{20540}{25,000} \times 1000 \\ &= 822 \text{ attacks per } 1000 \text{ per year.} \end{aligned}$$

Quality of information:

The quality of information depends on data that is accurate, accessible, complete and timely. Timely data prompts managers to act on time and make planning not to delay. The data collected must be accessible by users to make decisions and carryout proper interventions. Accurate and complete data gives a picture of what is happening in the area in question and the process will: -

- a) Provide up to-date information and thereby improve management and evidence based decision making.
- b) Relieve supervisors from manual data analysis so that they can spend more time overseeing staff in the field.
- c) Make available useful information and provide timely and regular feedback at all levels.
- d) Provide more complete information for district, health facility, provincial and national planning i.e.
 - o Selecting appropriate target groups for various interventions
 - o Selecting the most appropriate solution
 - o Coordinate public and private activities
 - o Set fees which are affordable
 - o Set standards for client satisfaction etc.

The link between health information services and the user:

Accurate health information is needed at all levels of the health system including national/ global / provincial / regional/ district levels and health facility and community levels. Health planners and programme officers require information to identify the health problems to define strategies and to set targets. Development partners, programme implementers and communities need information to measure the progress of the programmes and to monitor a selected number of health indicators. For example lower mortality rates or fewer episodes of illnesses, malnutrition rates, immunisation coverage, disease prevalence etc.

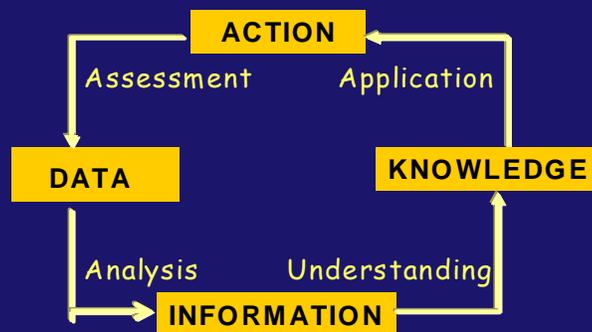
WHAT IS A HEALTH INFORMATION SYSTEM?

Health information has been variously described as the “foundation” for better health, as the “glue” holding the health system together, and as the “oil” keeping the health system running (Lippeveld T, 2001). There is however a broad consensus that a strong health information system (HIS) is an integral part of the health system, the operational boundaries of which include:

... all resources, organizations and actors that are involved in the regulation, financing, and provision of actions whose primary intent is to protect, promote or improve health (Murray C, Frenk J and WHO, 2000).

It is universally accepted that health information is essential for health decision-making at all levels of the health pyramid. From the level of individual patient care, to the management of specific health programmes through to the policy level where strategic decisions are made information is an integral part of the health pyramid. The health information system has been aptly described as “an integrated effort to collect, process, report and use health information and knowledge to influence policy-making, programme action and research” (WHO, 2000).

Figure 1 - The data for action cycle



Goal of health information systems

What is clear is that health information is much more than the collecting of data. Data have no value in themselves – value and relevance come only when they are analysed, transformed into meaningful information, and used (FIGURE 1).

The ultimate objective of a health information system is to produce information for taking action in the health sector. Performance of such a system should therefore be measured not only on the basis of the quality of data produced, but on evidence of the continued use of these data for improving health systems operations and health status (RHINO, 2003).

This principle applies at all levels – at the level of patient care, at the health facility, and at the community, district, national and global levels. A health information system is not a static entity but a process through which health-related data are gathered, shared, analysed, and used for decision-making – information is transformed into knowledge for action. These principles also apply to all countries, whatever the level of income and degree of sophistication of the health system. Nor are the boundaries of a health information system confined to health – there is a strong interdependence between health information systems and information systems in other sectors. For example, higher levels of female literacy are associated with higher compliance with home treatment for diarrhoea/dehydration in infants; improved sanitation is associated with increased child survival; food and nutrition policies affect the health of children and adults alike. Making links such as these and identifying broad areas of data common to health and other sectors is properly within the responsibility of a health information system.

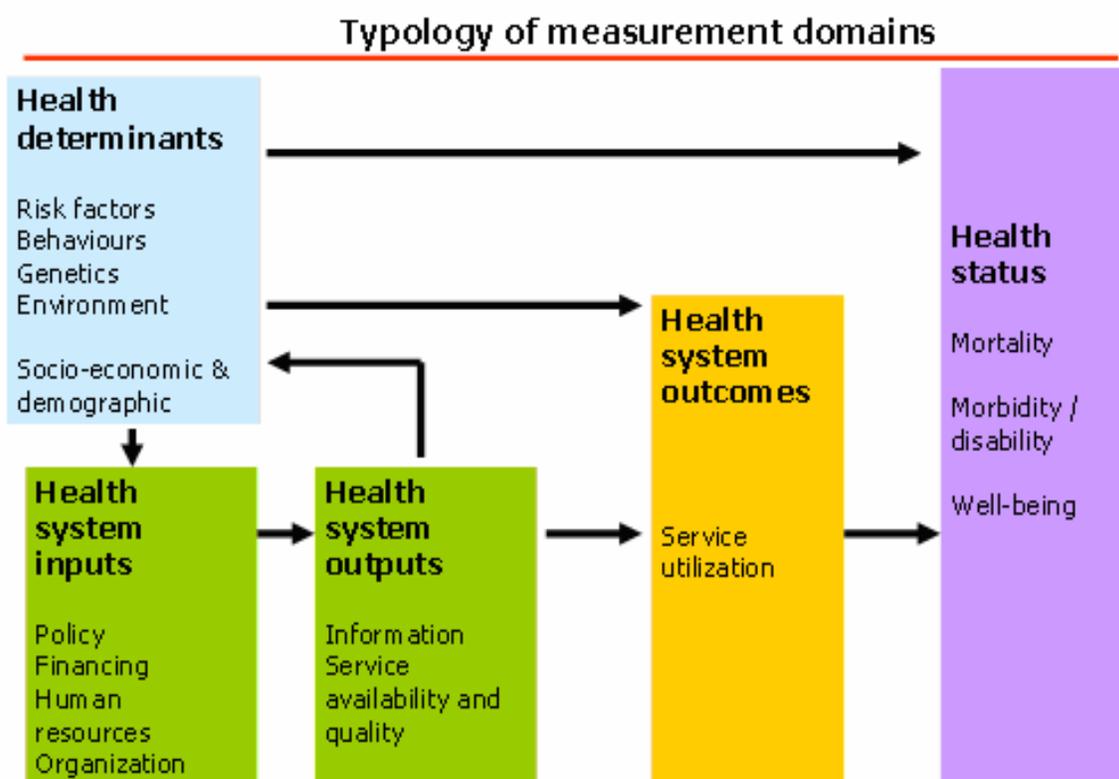
Within the health sector, different types of information are generated, ranging from data on the management and administration of health services to health system outputs such as coverage and quality of care. Although the health system has a particular interest in health outcomes (such as mortality rates) such data are not always generated through the health sector.

Domains of health information

The domains or areas of interest that a health information system should address can be grouped into four main types (FIGURE 3):

- Health determinants – socioeconomic, environmental, behavioural, and genetic factors and the contextual environments within which the health system operates.
- Health system inputs – the structures and processes of the health system (policy and organization, health infrastructure including facilities, human and financial resources, and health information systems).
- Health system outputs – the quality, use and availability of health information and services.
- Health outcomes – mortality, morbidity, disease outbreaks, and health status.

Figure 3: TYPOLOGY OF MEASUREMENT DOMAINS



Supportive management services will need management information system and thus the combination of these two systems will produce the needed “Health Management Information System (HMIS)”. HMIS is a combination of routine statistical reports and routine managerial reports which are generally standardized in format produced on a regular basis. HMIS must produce complete, accurate and timely information for it to be effective.

Health information subsystems

A health information system can be considered to consist of several separate subsystems:

- Disease surveillance and outbreak notification.
- Data generated through household surveys.
- Registration of vital events and censuses (births, deaths and causes of death).
- Data collection based on patient and service records and reporting from community health workers, health workers and health facilities.
- Programme-specific monitoring and evaluation (for example for TB, HIV/AIDS, and EPI).
- Administration and resource management (including finance/budget, personnel, and supplies).

The function of a health information system is to bring together data from all these different subsystems, to share and disseminate them to the many different audiences for health information, and to ensure that health information is used rationally, effectively and efficiently to improve health action. A strong health information system is an essential component of sound programme development and implementation, and is a prerequisite for strategic decision-making – ultimately, it provides the basis upon which improved health outcomes depend. In theory, a health information system consists of a process of gathering, sharing, analysing, and using health-related data for decision-making – information transformed into knowledge for action. In this respect the concept of a system as an entity “formed of parts placed together or adjusted into a regular and connected whole” (Chambers Dictionary) is key.

WHO ARE THE MAIN ACTORS IN THE HEALTH INFORMATION SYSTEM?

A health information system should generate information for different uses by different health system actors. Some of these actors operate at macro-decision level (for example, strategic planning, allocation of resources, and evaluation) while others operate at micro-management level (for example, case management, programme management, administration, and deployment of human resources) as shown in FIGURE 4.

The kinds of information required by each type of health system actor differ in ways such as degree of reliability, levels of aggregation, levels of detail, and diversity of topics. Given the range of actors involved and the diversity of potential data items, it is imperative that the health information system has the following interlinked characteristics:

- The ability to identify detailed and disaggregated information items useful for decision-making at various levels within the health care system that are also immediately relevant at the level of data collection.
- The ability to screen and channel to central level **only what is most essential** and detailed enough for strategic decision-making and policy analysis.

Presentation of data

In most clinics or health facilities data are gathered on immunisation, Antenatal care growth monitoring and morbidity every month. The collection of data becomes more meaningful if analysis is done regularly and locally. Furthermore presentations of data in the form of tables, charts will enhance insight into what is going on in the catchment population with respect to clinic utilization. In statistics, data are classified into qualitative and quantitative data. Qualitative data cannot be counted. A collection of quantitative data in its original form is called raw data.

- a) To analyse these data, we obtain a frequency distribution and grouped into categories, age, classes (range of values) or tables.

- b) A slight more complicated way of presenting data is through contingency table. A contingency table shows the relationship of two or more variables. E.g. age and sex of patients with blood diarrhoeal or
- c) One step further is the analysis to produce a graph of the data presented in tables, graphs, provides more insight into frequency distributions and are easier to read.
- d) Data can be summarized by measures of central tendency, mean, mode and median.
- e) Data on deaths and births can be done using the mortality and fertility rates.

Data interpretation

Interpretation involves putting the findings of the study/ data into perspective and making appropriate recommendations.

Users of health information

At each level of the health care system, users of health information have differing needs and use information in different ways. At the most basic level of client–health worker interactions, patient records are a vital source of information, whose utility is not confined to the individual level. Record reviews can be used to ascertain the extent of conformity with agreed norms and standards of care. **Confidential enquiries** and **facility-based audits review** provider practices in order to determine to what extent care could be improved and the degree to which deaths were avoidable and the potential policy implications of such avoidable factors.

At the facility level, managers need information on patient profiles, patterns of admissions and discharges, length of hospital stay, use of medicines and equipment, deployment of different categories of health care workers and ancillary staff, costs and income. At district level, planners and managers use this information and data on locally relevant population profiles and risk factors in decision-making regarding allocation of resources to different facilities. Within the public health sector, such information is transmitted upwards through district and provincial levels to the national level where basic resource allocation decisions are made. More problematic is the extent of such reporting by the private sector – unless there is a strong regulatory framework within which the private sector operates, it is unlikely that such information will be transmitted to the planning authorities. Districts should try as much as possible to encourage all health providers to submit their service data.

Although the health information generated through the reporting of routine activities by health care facilities and health care workers provides important and useful information on the activities of the health system, this is insufficient for strategic decision-making regarding the allocation of health resources. Decision-makers need information not only about service activities and users of services, but also about those who for whatever reason do not use the services. This information is generally harder to come by than routine service statistics. Health care facilities may undertake special studies of their catchment populations in order to ascertain demand or need for information and services. More often, such information is derived from household surveys in which people are asked direct questions about their perceived need for and use of health care services. The major advantage of using household surveys for such information is that it is possible to obtain socio-economically stratified information on use of all types of service, including the private sector (modern, private-for-profit, private, non-profit, traditional providers, social marketing outlets, pharmacies, etc.). An important disadvantage, however, is that household surveys are generally undertaken at national level and for reasons of costs, sample sizes are generally insufficient to permit detailed analysis at the district level.

When making strategic health sector decisions, national level authorities use health-related information from sources such as routine service statistics, household surveys, vital registration, census, national accounts, and education and employment data (particularly with regard to the production and availability of human resources for health). One visible manifestation of this process is the reporting at national level of progress towards national health-related goals such as reductions in child mortality or reduced disease transmission.

National authorities also report health-related information to international bodies such as the United Nations. Increasing interest in the performance of national health systems has been stimulated by the goals-oriented international conferences of the 1990s, summarized in the Millennium Development Goals, endorsed by 189 heads of state and government in 2000. The progress made by countries towards these and similar goals is of interest to donor agencies and governments desirous of tracking the extent to which external assistance produces tangible results in terms of improved health.

This rapid overview of the different users of health information at different levels demonstrates three important principles:

- Different types of health-related data are needed at different levels of the health care pyramid – not all items of information need to be reported at every level.
- Those working at the periphery, closest to patient management, need more detailed information on clients seen and services provided than those working at the central level.
- In order to avoid overburdening health care workers at the peripheral level, managers and planners should consider carefully what type of data should be generated at each level, bearing in mind that to the extent possible, those collecting and transmitting data upwards through the system **need to understand and appreciate why** the data are required.

Figure 4: PLANNING MECHANISMS AND COORDINATING MECHANISMS

- Use SWAp Approach to strengthen and link up

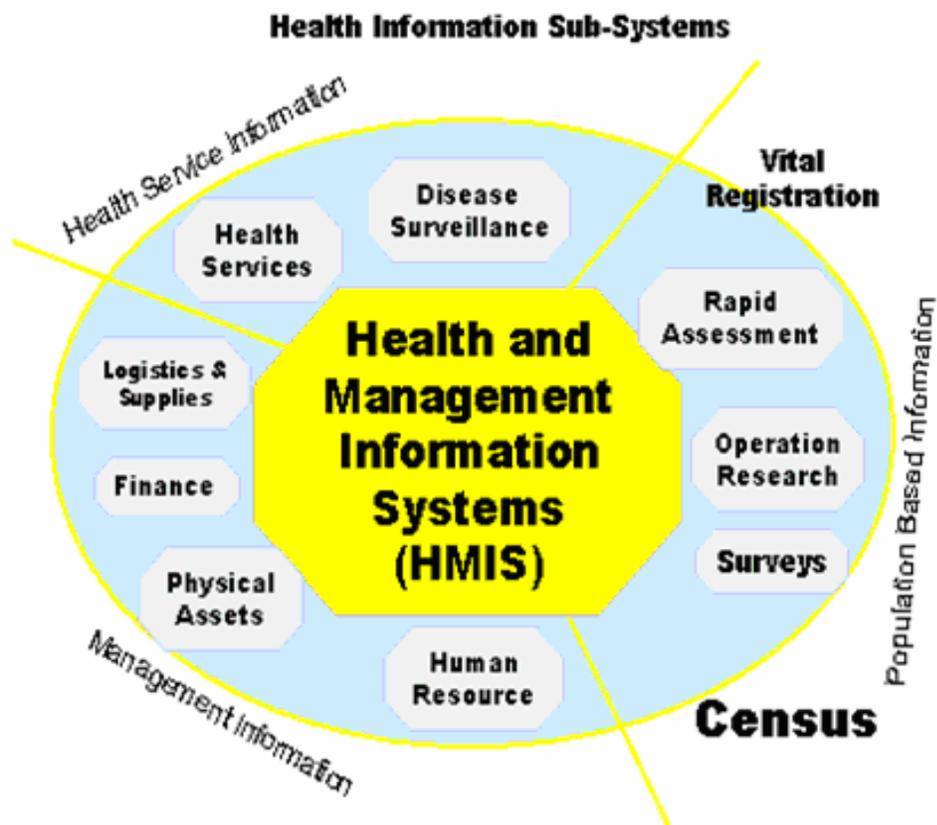


Figure 5: PLANNING MECHANISMS AND COORDINATING MECHANISMS FOR RBM M&E FRAMEWORK

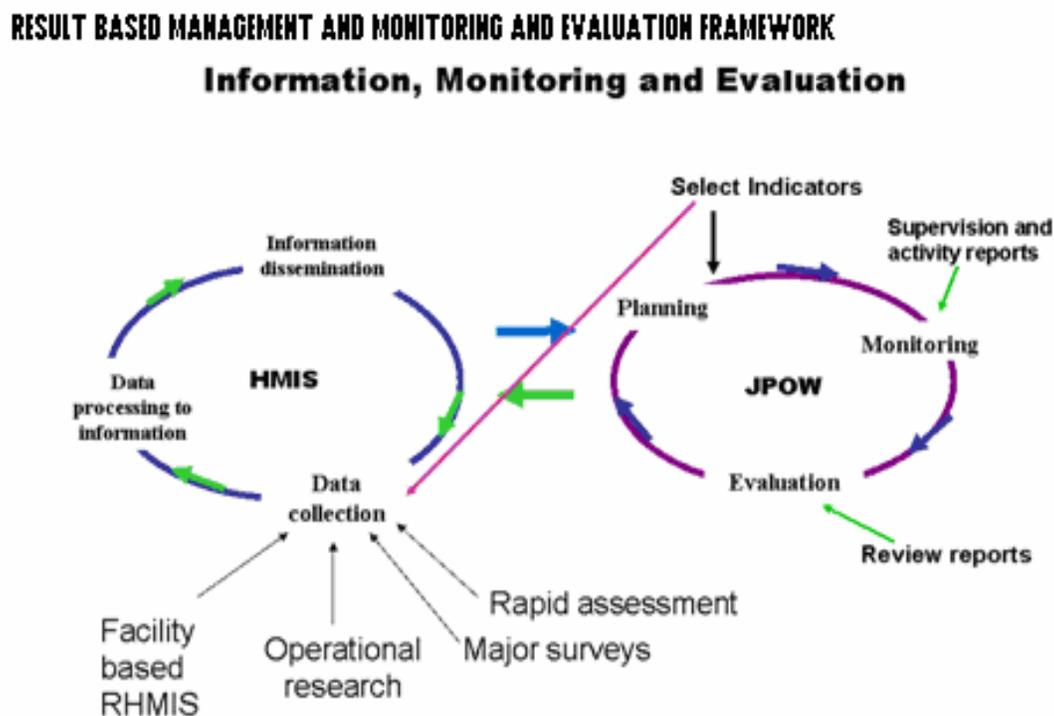
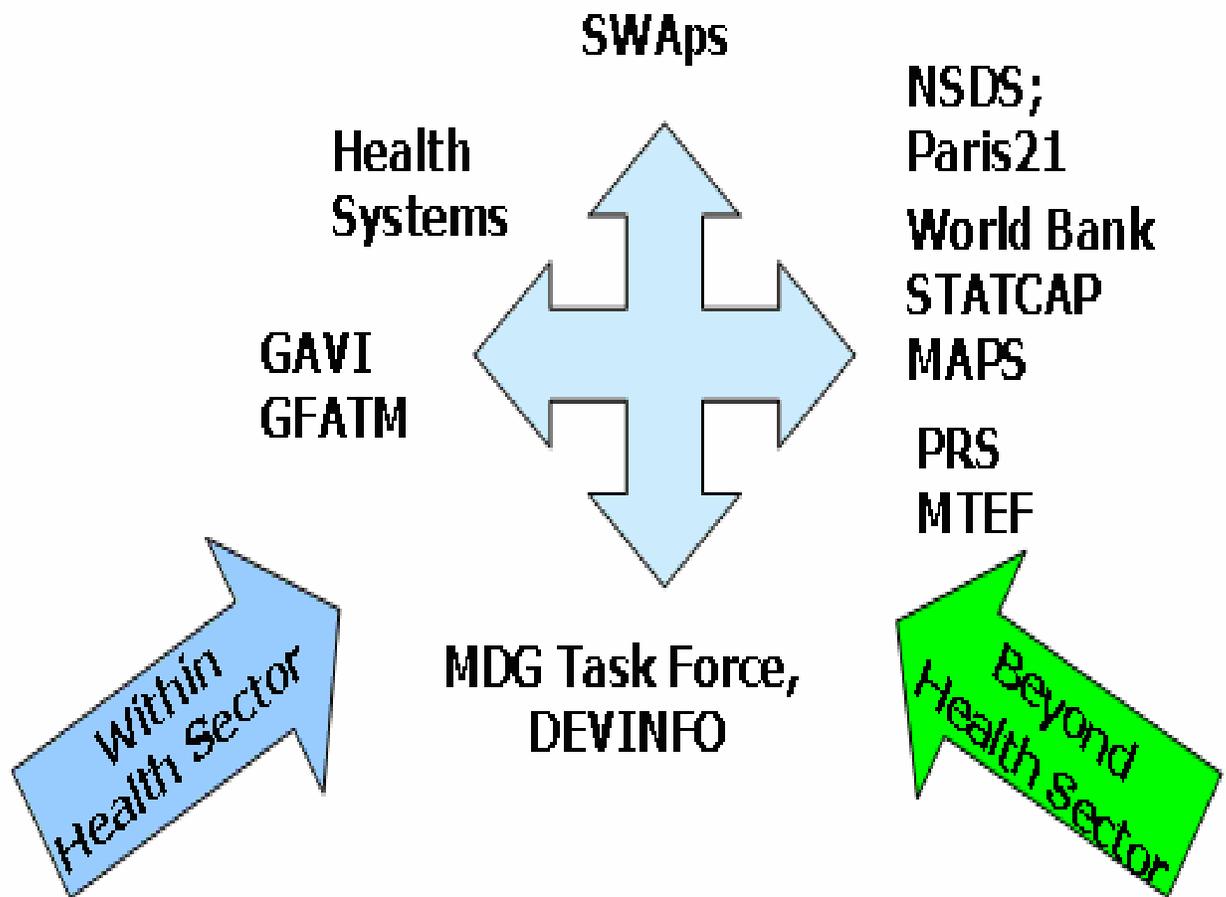


Figure 6: INTEGRATING HIS INTO NATIONAL AND GLOBAL FRAMEWORKS

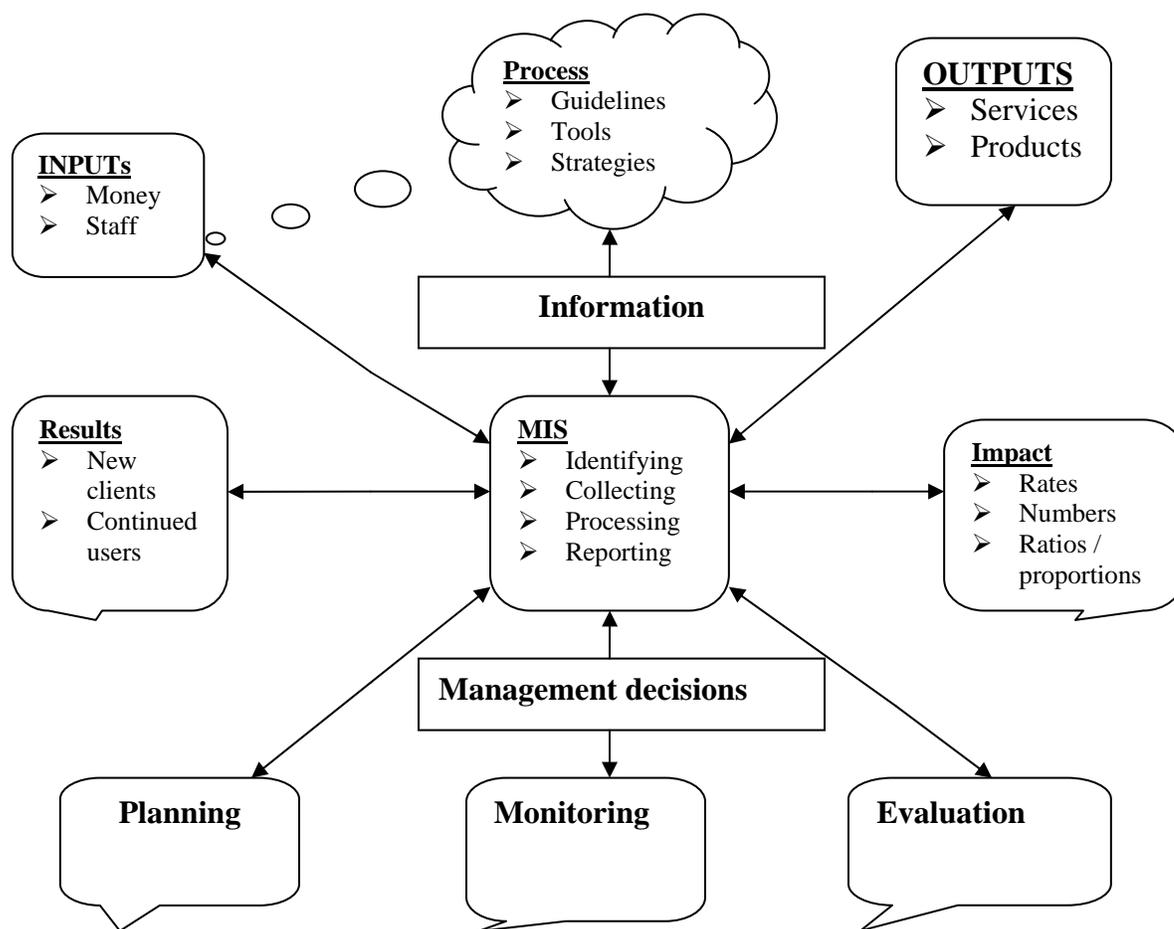


How a management information system works

Note: To permit a manager to plan, monitor and evaluate operations and performance of programmes you need:-

- Information
 - Inputs
 - Process
 - Outputs
- Information for Management decisions
 - Results
 - Management information system
 - Impact

Figure 7: How a management information system works



Inputs: Collecting data

- Inputs are the data items necessary to generate outputs and reports for management use.
- Managers have to weigh the costs and benefits in determining how complete, accurate and reliable data should be.
- Selection of indicators
 - No single “best” measure to use in developing data for decision makers.
 - The most useful indicators are often those which provide information **but limit** the quantity of data collected.
- Data collection instruments
 - Easy to use
 - Avoid duplication of data.

Processing: Management of data

- Means by which inputs are transported (Data flows) and analysed to provide useful outputs for decision making.
- Raw data is generally unusable; it has to be transformed through collating, aggregating, analyzing and presenting on time in legible, understandable formats.
- Not all processing require computer
- Manual procedures can be adequate, less complex and less costly.
- The flow of data.
 - Data should flow back to the collectors (Vertical transmission) as well as to line stakeholders/ managers (horizontal transmission) as regularly as they flow up to the top level of the organization.

- Problems in processing of data;
 - Computer breakdown
 - Delay in producing reports
 - Volume of data too high for staff use.

Data Quality Audit:

The goal of the Data Quality Audit (DQA) is to assure that management of services and allocation of resources (funding) are based on sound and accurate data. The specific domain areas include;

- Assess the quality of, accuracy, timeliness of service data and reporting system.
- Audit the reported figures given by the institution and estimate the national verification factor (VF), recounted/ reported service data.

What is auditing?

- Auditing is essentially examination of book of accounts. For example ideally on EPI the book of accounts are the various data collection tools in use ledger books, bin cards, tally and summary sheets and immunization register.
- It is an independent examination and expression of opinion on the financial statements of an entity by an appointed auditor. Without independence it is not auditing.
- Auditors examine every document or voucher which support any transaction in a business e.g. receipts, logbooks and letters of representation. Auditing covers even behaviours of staff, their professional qualifications and responsibility to duties e.g.
 - A qualified nurse or health records and information officers who are negligent to duties or
 - Unqualified staffs dealing with work beyond their scope.
 - Staff using KEPI fridge as a table, cupboards, vehicles, computers used for personal use.

Some advantages of Auditing

- Able to detect fraud
- Prevention of errors
- An “unqualified report” (opinion) can boost morale of accounting staff.
- An “unqualified report” (opinion) can be used to raise finance from banks or development partners.

What must we do?

- Ensure that all reports are available and complete tally sheets ledger books, summary sheets, bin cards, supervisory books for the audit year and current year.
- Ensure that all the data analysed are accurate though for the report not submitted nothing can be done.
- Have proper answers to the difference in data submitted since this may affect the verification factor confidence interval.
- Ensure the consistency of the data and denominators used.
- Strengthen monitoring completeness and timeliness of reports at district, provincial and national levels.
- Encourage regular written feedback
- Have old reports and forms properly kept and ready for verifications.
- Report missing data and why so.
- Ensure the retention of all health records for at least ten years (10) as stipulated in the national policy.

What we must not do?

- Inflate our data or reports
- Be fraudulent e.g. same ink, fresh ink
- Missing reports should not be re-written – may result in a “zero score”
- Keep our offices locked or say the staff with the key not available.
- Fail or sabotage the DQA verification exercise.

DESIGNING OR ASSESSING A MANAGEMENT INFORMATION SYSTEM

Steps in assessing your MIS

1. Identify all users of each type of information.
2. Assess the short and long term objectives of the organization, programme department or service delivery site.
3. Identify information needed to help different people at different levels for efficiency and effectiveness of services.
4. Eliminate information being collected and not being used.
5. Determine data collection tools (forms, registers and procedures) that are complicated or time consuming for improvement.
6. Revise any existing forms and procedures for collecting and recording information that needs improvement or prepare new ones. Keep in mind minimum data sets.
7. Set up or improve the manual or computerized systems for tabulating, analyzing and reporting information.
8. Develop procedures for confirming the accuracy of the data.
9. Train and supervise staff in using the new forms, registers, summary sheets and other instruments to collect, tabulate, analyse, present and use the information.

Note: To prepare this overview of an existing MIS start by meeting with your staff, colleagues, community leaders, volunteers and clients then collect the information systematically, writing down the answers clearly for review later on.

Analyzing the results of your assessment

1. Consider the special needs of your health services/ programme.
2. Consider information that is currently available in forms, registers, and records which can be used in decision making.
3. Identify the information you need that is not being provided by existing records, registers and forms.
4. Consider what information is needed regularly and frequently and that is needed only periodically (frequency of data collection).
5. Consider simple and inexpensive methods of collecting information to supplement the information provided by records, registers and forms e.g. rapid assessments, focus groups.
6. Consider how the information can be used by different groups working in a health care service/programme.
7. Consider if staff have the appropriate information in a usable form when needed.
8. Consider how to use information to provide effective feedback to collectors.

Feedback

Emphasize the importance of reporting and outline procedures for proper reporting. Provide to health facilities an information summary sheet. An information summary sheet is a report that presents data and its interpretation in a table or other graphic format. One or two page summary will be ideal to the health facilities.

Written Feedback:

- Newsletter
- Fact sheets and information summary sheets
- Published reports
- Public health bulletins
- Monthly and annual reports
- Newspapers.

Public forums;

- Briefings; news conferences
- Hearings and testimonies
- In-person professional conferences, lectures, and other planned meetings

Electronic media:

- Broadcast media; (TV; radio)
- FAX
- E-mail; Website
- Audio conferences; video conferences.

DATA SECURITY

Backup

Def: - Computer security - protection method whereby several duplicate data files are stored on Secondary Storage Devices in the event a catastrophic event damages the computer's main file storage system. It is advisable to store backup data files in different locations to guard against loss in the event of a fire, theft, or other unplanned event. Backup require two types, one to be backup on even days and the other on odd day. The storage device required to be stored far from the main storage (server/computer) or operation office. Reports also can be backed-up on institutional email.

Note: - Backup and Recovery: The goal will be to back up the data from any system on a daily basis. Backup media could be external hard disk, Organizational email account, flash disk, diskette, portable hard disk so that it will be available in the event of catastrophic failure.

Storage

Def: - The retention of data in any form, usually for the purpose of orderly retrieval and documentation. A device consisting of electronic, electrostatic, electrical, hardware or other elements into which data may be entered, and from which data may be obtained as desired. Storage facilities varies depending on the size of the institution and workload In a facility you require to have a folder or file, shelves, filing cabinet, box file or lockable cupboard to enable you secure the documents. While in a large institution and district you require to have a memory stick (Flash disk), Camera and PDAs you require to have a memory card, external hard drive, RW-CD, R-CD, Cabinet, shelves and lockable cupboard. The storage device/documents required to be stored far from the main office storage especially sensitive/vital documents.

Network Operations

Take all necessary precautions to prevent any destructive or malicious program (virus) from being introduced to the system. Employ appropriate measures to detect virus infection and employ all appropriate resources to efficiently disinfect any affected systems as quickly as possible.

Computer Virus Prevention, Detection, and Disinfection:

The goal of the system will be to maintain updated virus protection from a reputable source. Any and all viruses found will be quarantined or the virus will be deleted. Every organization are required to run and maintain their own anti-virus software from an approved source on all computers that have access to the HMIS system.

Records

Def: - any written document about in professional relationship with a health worker. Written accounts of acts, transactions, or instruments that are drawn up pursuant to legal authority by an appropriate officer and appointed to be retained as memorials or permanent evidence of matters to which they are related.

Patient records is not a public records and its should be kept strictly confidential but can be release only under sustain circumstance especially through patient consent (implicit, explicit), court order, when it exist a high duty than a lower duty, when there is infectious or notifiable disease. A *public record* is a document that has been filed with, or furnished by, a governmental agency and is available to the public for inspection. For example, *title of record* to property is an ownership interest that has been duly filed in the office of public land records. The term *record* also applies to the formal, written account of a case, which contains the history of actions taken, papers filed, rulings made, and all written opinions.

Data Security

Secure access to physical areas containing equipment, data, and software. Strictly safeguard all data including client-identifying information in accordance with the latest technology available and securely protect it to the maximum extent possible. Maintain and administer central and backup server operations including security procedures and maintain backups of the system to prevent the loss of data. Monitor access to all systems that could potentially reveal a violation of information security protocols. Maintain and audit accurate logs of all changes made to the information contained within the database.

Issue all User IDs and passwords for HMIS users through Technical Administrator. Only designated Technical Administrators may request and receive HMIS passwords and User IDs from Central level. Periodically change of passwords for security purposes. Not release data to any person, agency, or organization without the client's authorization and following the procedures for the release of data. Any database at all level should not be handle by many people have limited persons with right persons to handle the database which assist improve security and management of database.

In the even of manual or use of files or folders data security is paramount and file must be filed in a permanent building with fire extiquishers, exit doors, big bill board showing "No smoking", filing rooms should have well ventilated, filing equipment should be raised in case of linkage or flood .doors and windows should be grilled.

All patients/clients records and information **MUST** not be access by **un authorized (persons not directly handling the patients/clients**

Limit HMIS access to authorized users and follow all protocols of monitoring those users. Provide names of all staff members who have access to the Records Unit and certify that such staff are competent to have access to this information according to the provisions.

Preventive maintenance

Any machines, devices or equipment require regular preventive maintenance to improve efficiency and durability.

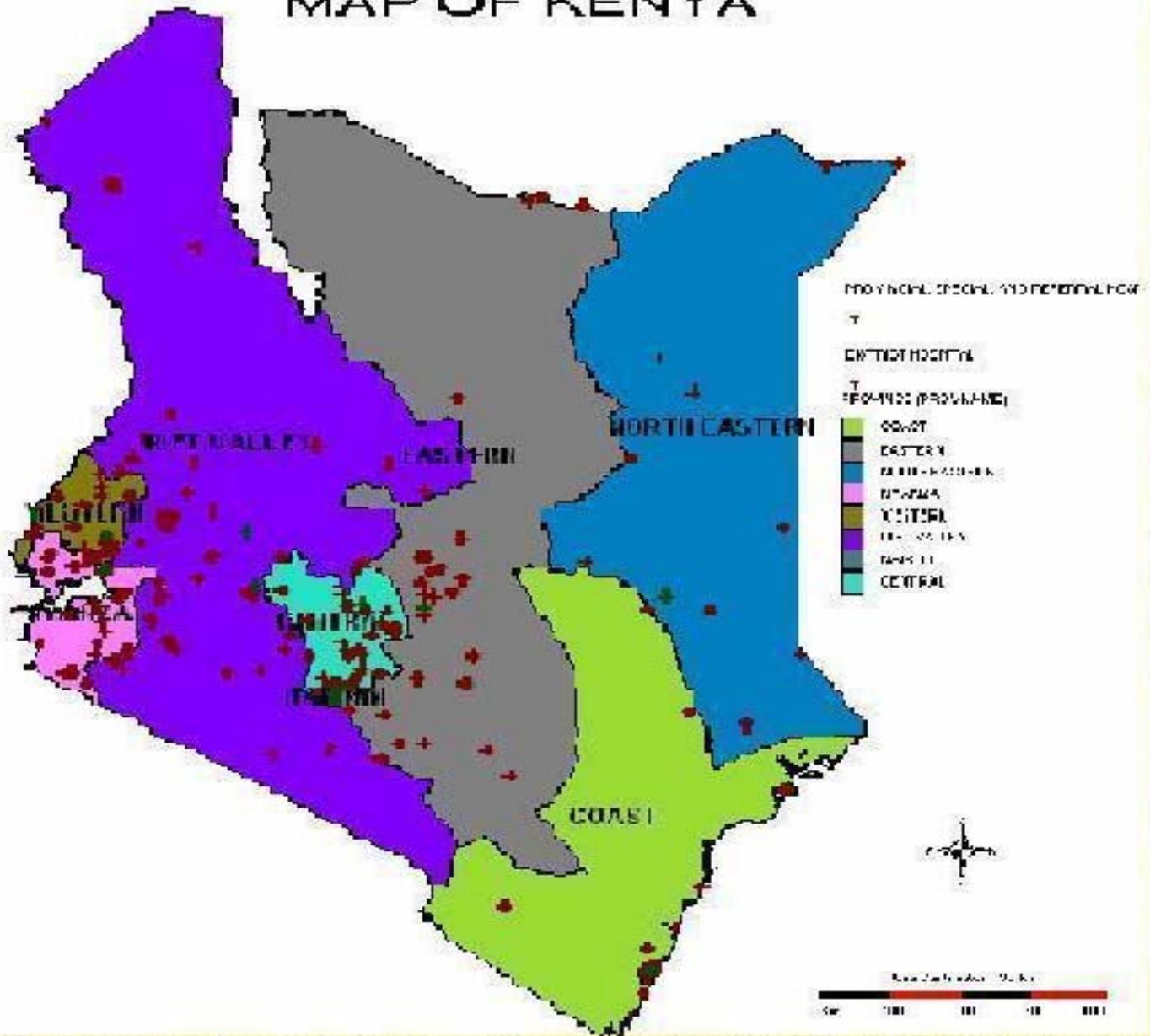
- Files/folders requires:-
 - dusting, and permanently filling of loose notes
 - weeding of inactive notes/records
 - during filling its require support file to stand upright
 - keep on a dry and cool place
- CDS, Flash disk, Memory cards, diskette
 - Place on a rag or album
 - Keep on a dry and cool place
 - Its fragile so handle with care
 - Observe proper removal and inserting the device into the electronic machine.
- Computers, laptop, printers, PDAs, Cameras, Duplo machines
 - Its fragile so handle with care
 - Read manufacture instruction while installing and assembling
 - Keep on a dry and cool place
 - Place on firm workstation, raise from surfaces and should not be placed at the edge of the workstation
 - Always wipe the equipments and workstations with dry clean clothing
 - Once a quarterly or six months do major flow up the dusty.
 - Avoid opening of equipments regularly, but it required trained technician
 - Avoid using oily and wet hands on a keyboard and monitor
 - Avoid taking tea, water, office pin near the keyboard
 - Follow the right procedure of warm booting and shutting down the devices/machines
 - Proper connection of cables
- Other general equipments – shelves, rags, workstations
 - Wipe the duty
 - Painting and avoid spilling water on the surfaces
 - Reinforce/support or acquire new shelves, workstation or rags
 - Apply oil to parts with wheels

ANNEX

Table 36: HEALTH SYSTEM INDICATORS

Area	Indicator	Time trends	Compare countries	Compare within	Target
Governance	CPIA and CPIA health	√	√		100%
	Policy index	√	√		100%
	Implementation indicators / index				
Financing	Total Health Expenditure per capita	√	√		\$40
	% General Government Expenditure on health	√	√		15%
	OOP as % of Total Health Expenditure	√	√		Low
	<i>Total health expenditure as % of GDP</i>	√	√		
Human resources	Health care professionals per 10 000 pop		√	√	2.5
	Graduates of health training institutions per 100 000 population		√		
Information	HISPIX (10-14 items)		√		100%
Medical products	Tracer drug availability on day of visit		√	√	100%
Service delivery	Health facilities per 10,000 population		√	√	
	In-patient beds per 10,000 population		√	√	
	<i>Hospital admissions per 10,000 population per year</i>		√	√	
	OPD visits per 100 population per year	√	√	√	
	General service capacity: proportion of facilities with basics		√	√	> 80%
	Specific service capacity: proportion of facilities with basics		√	√	> 80%
	Performance assessment	INPUT: THE per capita, GDP per capita, HW density		Ranking	
	OUTPUT: Under-5 mortality, life expectancy, coverage gap		Percentile		
General	% of facilities that are private				
	% of facilities that are NGO/FBO				
	Burden of disease (leading causes)				
	Level of education				
Coverage	MNCH interventions	√	√	√	100%
	HIV, TB, malaria interventions	√	√	√	100%
	Coverage gap index	√	√	√	0%
NOTES	Compare within (equity)				
	Capital / outside capital				
	Urban districts / non-urban districts				
	Provincial / regional differences				
	District differences				

MAP OF KENYA



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