REPUBLIC OF RWANDA

MINISTRY OF HEALTH

HEALTH CENTERS AND POSTS

Standard Operating Procedures for Management of Routine Health Information

Version 2016

PREFACE

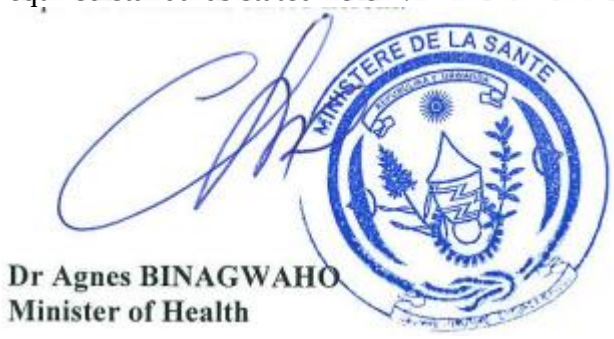
In 1998, the Rwanda Ministry of Health (MoH) established a Health Management Information System (HMIS) to facilitate the reporting of health related data across the country. Since its establishment, the HMIS has undergone a number of updates in order to accommodate the changing needs of the health sector. The fist of these changes was an upgrade of the reporting system from a MS Excel based database, which was in use since 2008, to a MS Access based database, which was used from 2008 to 2011. In 2012, in order to better align the reporting of health related data to the needs of the health sector, as well as allow for integrated reporting of all health services from every health facilities in the country, the Ministry of Health's HMIS unit adopted a more flexible and robust web-based reporting system known as DHIS-2. In the past 3 years since its inception, the DHIS-2 system has enabled health facilities across the country to improve significantly in their ability to obtain and report accurate, timely data, which the health sector can then use to improve health initiatives countrywide.

Despite the progress, there is still a challenge in ensuring that all reporting entities are working from mutually agreed upon standards in regards to routine data collection, compilation, analysis and use, reporting, dissemination, and overall security. The Standard Operating Procedures for the Management of Routine Health Information aims to help all reporting entities meet these standards and thus ensure the quality of data that is collected, analysed, and disseminated. Abiding by these detailed, routine standards will improve the MoH's ability to trust and use data both for informed decision making and future planning for the health sector.

It is therefore important not only to define mechanisms and procedures for management, use, and dissemination of health data and/or information but also to develop quality, reliable standards to ensure quality. By implementing within mutually agreed upon standards for routine data collection, compilation, analysis and use, reporting, dissemination, and overall security, best practices for management of quality health related data and/or information can be achieved. This document provides guidance on the implementation of such standards of health related data reporting, specifically focusing on the quality of the data collection and assessment processes as well as procedures for feedback of health related data and/or information.

The use of the Standard Operating Procedures for Management of Routine Health Information will build a culture of high-quality data use in order to increase evidence-based planning of interventions. Program managers and service providers must customize their interventions to meet gaps identified through routine data analysis and program evaluations. Innovative interventions incorporating data at the program and service delivery level should be customized within existing health data reporting structures so that there is consistency across the country.

I encourage all stakeholders to carefully read this guideline and require all practitioners to adhere to the required standards stated herein.



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ACKNOWLEDGEMENTS

The Ministry of Health would like to thank all the organizations and persons who contributed to the development and update of these Standard Operating Procedures for Management of Routine Health Information in Rwanda.

This document is a result of the great collaboration that exists between the Ministry of Health and various stakeholders who are dedicated to creating a positive change in the Rwandan health sector. We appreciate all the effort invested in the development and update of the current Standard Operating Procedures. Implementation and monitoring of these guidelines will contribute to the sector's common goal of building a stronger health system that is driven by data.

We give our sincere appreciation to the following institutions and organizations:

- ✓ Rwanda Health Systems Strengthening Activity (RHSSA)
- ✓ The United States Government team in Rwanda including:
  - USAID RWANDA
  - CDC RWANDA
- ✓ College of Medecine and Health Sciences School of Public Health
- ✓ All health facilities (Referral, Provincial, District Hospitals and Health Centers)

ACRONYMNS AND ABBREVIATIONS

ANC	Antenatal Care
ARVs	Anti-Retroviral Treatment
CDC	United States Centers for Disease Control
CHW	Community Health Worker
CMHS-SPH	College of Medecine and Health Sciences School of Public Health
DHIS-2	District Health Information System 2
DQA	Data Quality Audit
HIS	Health Information System
HIV	Human Immunodeficiency Virus
ICD	International Classification of Diseases
IDSR	Integrated Disease Surveillance and Response
MDG	Millennium Development Goals
MOH	Ministry of Health
NCD	Non-Communicable Diseases
PLWA	People Living With HIV/AIDS
PMEBS	Planning, Monitoring & Evaluation and Business Strategies
PMTCT	Prevention of Mother-to-Child Transmission
RBC	Rwanda Biomedical Center
RBC MOPD	Rwanda Biomedical Center and other Palasitics Diseases
R-CD	Ready-only Compact Disc
RHIS	Routine Health Information System
R-HMIS	Rwanda Health Management Information System
RHSSA	Rwanda Health Systems Strengthening Activity
RW-CD	Read-Write Compact Disc
SMM	Senior Management Meeting
SOPs	Standard Operating Procedures
TB	Tuberculosis
USAID	United States Agency for International Development
VCT	Voluntary Counselling and Testing

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CHAPTER I: INTRODUCTION

I.1. Introduction and Purpose

The management, access and use of health data and information is vital in the measurement of utilization and quality of care provided to the population that lead to improved performance measures and outcomes. Therefore health data management, access and use are key strategic functions of health institutions and health research organizations.

The procedures and guidelines contained in this document draw on guidance and advice available from good clinical data management practices, data sharing policy, access to information law, experience of implementation of previous version of this SOP by the Rwanda Ministry of Health and implementing partners. These guidelines and procedures provide a framework for consistent and effective collection, storage, analysis, use and sharing of data that is standards-based and fully integrated with other key information governance work areas. Managers of health sector institutions and organizations in Rwanda need to be able to demonstrate positive progress in enabling staff to conform to these standards, seeking additional resources if required and promoting organizational or systems changes that are required to implement them.

The main reasons for updating the Health Center SoPs are that these facilities are now reporting almost all of their health data directly in the R-HMIS, which is an online based system, there are new procedures for report validation , data analysis and data quality checking.

I.2. Scope and Applicability

These procedures and guidelines apply to management of public health data in Rwanda. All producers and users of data related to public health- in Rwanda, regardless of affiliation and irrespective of whether they access the data from within or outside of the country, should adhere to these guidelines and procedures.

I.2. Definition of Terms

Confidentiality: An ethical principle that ensures non-disclosure of information to unauthorized persons.

Data Access: As defined by the Access to Information Law, “includes the right to examine, to look at, peruse, inspect, take a sample of, copy or procure any information.”

Data Maintenance: the adding, deleting, changing and updating of collected data to ensure long lasting quality. Data can be maintained manually and/or through electronic data processing software.

Data Management: Data management is the process of managing data as a resource that is valuable to an organization or business. A leading data management organization defines data management as the process of developing data architectures (i.e. how data is collected, stored, managed, and used in a system), practices and procedures dealing with data and then executing these aspects on a regular basis.

Data Processing: retrieval, cleaning, storage, classification, analysis, transmition and/or reporting of data in such a way as to generate information.

Data Security: Preservation of confidentiality, integrity and availability of data, including authenticity, accountability, non-repudiation, and reliability.

Data Storage: the organization of data, in physical or electronic space, in a form which permits it to be quickly retrieved by the user for analysis, and permits rapid and accurate updates to be made to the database.

Medical data collection tools: strategies or methodologies and instruments used to collect medical information that enables clinical staff and health partners to determine the relevant and efficient patient care. These include both paper-based and electronic systems.

CHAPTER II: STANDARD OPERATING PROCEDURES FOR DATA COLLECTION

II.1. Purpose

- To enable health professionals and other care providers to use current, consistent data, and care goals to facilitate continuity of care
- To determine responsibility of care providers and to resolve questions or concerns in relation to care required
- To ensure that health professionals and other care providers keep records of their professional practice in accordance with standards of practice of their profession and MOH policies and procedures
- To enable health professionals and other care providers use quality information to reflect on their practice and implement changes based on evidence
- To provide information in relation to clinical interventions, patient outcomes and patient care, essential for accurate research data and evidence based practice

II.2. General Principles

2.2.1 All persons involved in the collection of patient-related information must ensure that standard forms and registers recommended by the Ministry of Health are consistently used for recording of patient data. Any desired changes to the content, format and structure of the MOH standard forms and registers, procedures of data collection, data item definitions and interpretations must be approved by the Senior Management Meeting (SMM) through M&E and Planning Directorate.

2.2.2 Each patient receiving personal health care services must have a medical record initiated using either a patient dossier and/or medical register. Both patient dossier and medical register could be paper-based or electronic.

2.2.3 For any transfer-**IN** patient, the receiving service provider must ensure that relevant health records are obtained from the transferring service unit or facility.

2.2.4 For any transfer-**OUT** patient, the transferring service unit or facility must ensure that all relevant records accompany the patient.

2.2.5 The medical record must be maintained in the health unit (i.e. service delivery site) where services are delivered.

2.2.6 Documentation within the health related record must reflect the continuum of services received by the patient in accordance with the respective clinical procedures and guidelines and should be captured in chronological order. Entries in medical registers should be in a sequential manner without leaving any empty rows.

2.2.7 All notes must be written in blue or black permanent ink (e.g. ballpoint pen). Words and figures must be readable and within the confines (boundaries) of the designated field.

2.2.8 All persons involved in the collection, management and use of patient-related information must ensure that the uses of those data do not "compromise" the confidentiality of data.

II.3. Roles and Responsibilities

2.3.1. Health Centre In-Charge/Titulaire

The Health Centre In-Charge/Titulaire:

- Ensures that nationally approved standard patient forms, registers and other tools used for medical recording, staff files are available at all times in the facility
- Ensures that procedures for data transcription are established and followed
- Assumes overall management and approval for all data collected
- Assigns appropriate staff for data collection tasks
- Ensures staff attend all relevant training

2.3.2. Clinical team leaders

- Supervise data collection in the service unit and provide appropriate support to clinical staff
- Ensure that data collected is complete and accurate for the service unit
- Ensure that all clinical staff are aware of the data collection tools and standards as defined by MOH.

2.3.3. Clinical Staff

- Ensure that all data collection tools being used are up-to-date
- Ensure the complete, accurate and timely recording of patient data into the appropriate data collection tools
- Apply standards and best practices for data collection as defined by MOH
- Alert supervisors promptly on any data collection issues (e.g. stock-out of data collection tools, unusual data)

2.3.4. Data Manager

- Works with the Clinical Staff to ensure that the data collected is complete, accurate and up-to-date
- Assembles and tallies the data necessary to complete all required reports
- Ensures the timely, accurate and complete data entry of records in the computerized systems, as required
- Assists with the mentorship, coaching and training of clinical staff in data collection procedures

2.3.5. Administrative staff

- Ensure that patient registration is complete and up-to-date including any related insurance and billing data.

II.4. Procedures for data collection

2.4.1 A medical record must be opened up for each patient receiving personal health care services at the health center/post or during out-reach activities using either a patient dossier and/or medical register

2.4.2 Entries in the patient dossier and/or medical register must be made as soon as possible after the event to be documented (e.g. change in clinical state, ward round, investigation) and before the relevant staff member goes off duty. If there is a delay, the time of the event and the reason for the delay should be recorded.

a) Where data is not available at the time the medical record was created, for example laboratory examination data or during an admission where the patient is unable to provide their personal details, this must be followed up within 7 days of the event and all records updated accordingly.
b) Where a follow up service or procedure has been received by a patient, the patient dossier and/or medical register must be updated immediately.
c) Author of the entry must ensure that the data is accurate

2.4.3 Where a patient dossier is maintained, transcription of data from patient dossier into medical register must be done immediately after receipt of services by the patient. Provisional diagnoses may be used for unconfirmed cases, but must be updated immediately after confirmation of diagnosis.

2.4.4 The author and date of entry of patient data must be easily identifiable. For data entered by several team members, it should be initialled and dated by the authorized person who made the entry

2.4.5 Standard abbreviations or acronyms must be consistently used when recording patient data (**refer to National terminology standards**). If the appropriate abbreviation or acronym cannot be found

in **National terminology standards** list during the consultation or visit, the author of the entry should clearly write in full.

2.4.6 Disease codes, as provided by MOH in the National terminology standard list, must be consistently used when recording patient data. Clinical coding into patient dossier and/or medical register must be done immediately.

2.4.7 Where a patient is seen at different service unit/department or during outreach, data must be updated in the related patient dossiers and/or registers immediately before the relevant staff member goes off duty.

2.4.8 Any corrections to data items in patient dossier and/or medical register must be made, preferably, by the person who made the entry or by others authorized to do so. A single line must be put through the data item to be corrected (to ensure that original data is possible to read) and the correct value, the date of correction, initials and signature of the person who corrected the data clearly written. White out or any other correcting material should not be used.

CHAPTER III. STANDARD OPERATING PROCEDURES FOR DATA QUALITY ASSURANCE

III.1. Purpose

- To maintain high quality data at all levels of the health system

III.2. Data Quality Standards

The Ministry of Health and partners expect that all data held by the health facility and any other organization must be accurate, complete, up-to-date, consistently corrected and with a high degree of integrity.

This standard operating procedure identifies the following key aspects to good quality data with respect to patient dossiers, medical registers and reports: completeness, accuracy/validity, consistency/reliability, timeliness, precision and integrity. Refer to the Implementation Manual for DQA of health facilities for detailed description.

III.3. General Principles

3.3.1 All health centers and posts are required to annually assess the record keeping and data management practices of their units/departments and supported health centers to give assurance of data quality. The Ministry of Health has developed tools that can be used for internal data quality assessment at the health facility as well as external audit and all services within the health centers and posts are expected to have an annual data quality assessment of patient records (paper or electronic) including storage of records.

3.3.2 This standard operating procedure mandates that every clinical service in the health center/post must perform an internal data quality assessment at least once a quarter. The results of these internal assessments must be summarized in a written report that is provided to the head of the health facility.

3.3.3 This standard operating procedure mandates that every health center and post should participate and coordinate any external data quality assessment required by higher supervisory levels.

3.3.4 Where internal data quality errors or omissions are identified, they must be dealt with and corrected immediately.

3.3.5 Where the health center/post receives queries on data quality from external sources, the queries must be logged and action be taken within 5 days.

3.3.6 This standard operating procedure recommends training on data quality assurance and management for all health center/post staff.

III.4. Roles and Responsibilities

All health center/post staff that collect, manage or use patient data, or have line management responsibility functions and/or staff that handle data, are responsible and accountable for the accuracy of that data.

3.4.1 Health Centre In-Charge/Titulaire

- Ensure that good data quality practices are implemented in all service areas as outlined in this SOP
- Ensure that data management and clinical staff are aware of the importance and value of good quality patient data
- Ensure that their staff have sufficient training and understanding in the use of systems (paper and electronic) used for recording patient data

- Adhere to data quality standards set out in the SOP
- Developing and following up on DQA action plan specific to the health center/post
- Planning, coordinating and conducting of all internal self-assessments and external health center/post data quality assessment activities
- Ensuring that personnel are trained in data quality assurance and data management skills

3.4.2 Clinic Team Leaders

Clinic Team leaders are responsible for monitoring patient and register data quality and for ensuring that their staff:

- are aware of the importance of good quality patient data
- have access to and apply Standard Operating Procedures that set out the standards and procedures for patient data recording
- Ensure that all staff input accurate and complete data in a timely manner
- Ensure that all staff are fully aware of their responsibilities with regard to checking and updating inaccuracies and/or missing data
- Monitor and act on data quality issues using the tools provided

3.4.3 Clinical Staff

- All clinical staff are responsible for ensuring that they record patient data promptly and accurately with reference to the latest procedures and definitions.
- Regularly check (in longitudinal registers or medical files) demographic data (address, age, etc) of service users , updating inaccuracies and/or recording data that has changed or previously been missing
- Monitor and address any data quality issues
- Ensure that all source documents like patient dossiers, registers, and any other reports are available during DQA activities
- Be aware of and comply with policies and procedures around data quality

3.4.4 Data Manager

- Ensure that all source documents like patient dossiers, registers, and any other reports are available during DQA activities
- Actively participate in internal and external data quality assessments
- Ensure timeliness, accuracy and completeness of data collected at the health facility
- Ensure data integrity and respond to questions about the accuracy of data
- Check and correct data inconsistencies
- Document corrections made to data at any stage of data management
- Ensure that personnel are trained in data quality assurance and data management skills

3.4.5. Administrative staff

- Actively participate in DQA activities including discussion of the action plan
- Perform any other data quality assurance duties assigned by the team leader

III. 5. Procedures for data quality assurance

3.5.1 Internal/Self-Assessment of Data Quality

The In-Charge/Titulaire the Health Center Data Manager, Clinical and administrative Staff must:

a) Check for any missing data items in all data sources including any electronic dataset
b) Check for any missing records in all data sources including any electronic dataset
c) Check for any missing patient dossiers, medical registers or data sets
d) Check for inconsistencies or errors across the different data sources including use of appropriate data collection tools, accurate transcription of data from/to appropriate data sources
e) Check for the consistent and appropriate use of MOH standard forms and registers
f) Check for timeliness in generation and submission of daily, weekly, monthly, quarterly and/or annual reports to high reporting levels
g) Check for the accuracy of the daily, weekly, monthly, quarterly and/or annual report(s) by recounting from source documents
h) Check on the filing and storage condition of patient dossiers, registers and health facility reports
i) Review the data entry process at the health facility
j) Follow up on any actions agreed during previous data quality assessments
k) Check for the availability and use of recommended guidelines, procedures and/or protocols
l) If any error within any data source including electronic dataset and monthly report has been identified, it must be immediately corrected as close to the point of entry as possible as per the procedures outlined in 2.4.8. After data set has been locked, correction will be permitted upon request to the higher supervision level. No level of inaccuracy should be viewed as acceptable.

3.5.2 External/Supervisor Data Quality Assessment

The External DQA team together with the health facility team must:

a) Check for any missing data items in all data sources including any electronic dataset
b) Check for any missing records in all data sources including any electronic dataset
c) Check for any missing patient dossiers, medical registers or data sets
d) Check for inconsistencies or errors across the different data sources including use of appropriate data collection tools, accurate transcription of data from/to appropriate data sources
e) Check for the consistent and appropriate use of MOH standard forms and registers
f) Check for timeliness in generation and submission of daily, weekly, monthly, quarterly and/or annual reports to high reporting levels
g) Check for the accuracy of the daily, weekly, monthly, quarterly and/or annual report(s) by recounting from source documents
h) Check on the filing and storage condition of patient dossiers, registers and health facility reports
i) Review the data entry process at the health facility
j) Follow up on any action agreed during previous data quality assessments
k) Check for the availability and use of recommended guidelines, procedures and/or protocols

3.5.3 If any error within any data source including electronic dataset and monthly report has been identified, it must be immediately corrected as close to the point of entry as possible as per the procedures outlined in 2.4.8. After data set has been locked correction will be permitted upon request to the higher supervision level. No level of inaccuracy should be viewed as acceptable.

3.5.4 The error rate should be within ± 5% for data submissions from each service area

3.5.5 Every health center/post must keep a copy of data correction form sent to the high supervisory level for error correction (refer to DQA Implementation Manual)

CHAPTER IV. STANDARD OPERATING PROCEDURES FOR HEALTH RELATED RECORDS STORAGE AND RETENTION

IV.1. Purpose

This SOP has been developed to promote improved records management practices within health facilities so as:

- To ensure that health related records are retained and stored securely in an appropriate manner such that they are available for use as required.
- To ensure confidentiality of health related records
- To assist in identifying records that should be preserved permanently as part of the health facility archives
- To prevent the premature destruction of records that need to be retained for a specified period to satisfy legal, financial and other requirements of public administration
- To provide guidelines for the destruction of those records not required permanently after specified periods.
- To avoid loss of, or missing data and information

IV.2. Type of Records

This SOP identifies and defines the following types of health related records:

Active records: are health related records, regardless of age, that are still actively being used by the health facility or until cutoff date.

Inactive records: are health related records that are no longer referenced or used on a regular basis or are in retention and awaiting final disposition.

Perpetual records: are health related records that do not have a specific cutoff date.E.g. Pre-ART or ART registers.

Electronic records: are health related records that can be stored and processed by computer .

IV.3. General Principles

4.3.1 All health centers/posts are required to have and maintain a records center for keeping inactive records until their cutoff date

4.3.2 Every service delivery area in a health center/post must have folders or files, shelves, filling cabinets, box files and/or lockable cupboards to enable secure active records

4.3.3 Perpetual and/or inactive records must be accurate and appropriately kept .

4.3.4 Whenever there is the possibility of a legal action (or lawsuit), the records and information that are likely to be affected must not be amended or disposed off until the threat of legal action has been removed.

4.3.5 All staff with access to health related records must respect the confidentiality issues as outlined in 2.2.8.

IV.4. Roles and Responsibilities

4.4.1 Health Centre In-Charge/Titulaire

- Ensure that records management practices outlined in this SOP are implemented within the health facility
- Ensure that the different types of health related records are securely and appropriately maintained and stored

- Ensure that inactive or perpetual records are retained for a specified period to satisfy legal, financial and other requirements of public administration
- Ensure that inactive or perpetual records are disposed of in accordance with this SOP
- Ensure that all services maintain a uniform filing system for health related records

4.4.2 Clinic Team Leaders

- Inform the Health Centre In-Charge/Titulaire on all health related records held both manually and electronically in the clinical service area
- Ensure that staff maintain and keep up-to-date active, inactive, perpetual and electronic records according to the principles of this SOP
- Ensure that active, inactive, perpetual and/or electronic records are accessible to only authorized personnel as per this SOP manual
- Ensure that staff comply with the health facility filing system

4.4.3 Clinical Staff

- Maintain and keep up-to-date active, inactive, perpetual and electronic records according to the principles of this SOP
- Ensure that active, inactive, perpetual and/or electronic records are accessible to only authorized personnel as per this SOP manual
- Ensure that health related records accessed are promptly returned to their appropriate storage

4.4.4 Data Manager

- Maintain and update the health related records inventory that contains the types, locations, dates, volumes, equipment, and usage
- Regularly check on the storage of health related records in the records center and at clinical service delivery areas to ensure adherence to this SOP
- Ensure that active, inactive, perpetual and/or electronic records are accessible to only authorized personnel as per this SOP manual
- Ensure that staff at the health center/post have been trained on the health related records filing and storage system

4.4.5 Administrative staff

- Organize safe and secure storage, retention, archive and transfer of health related records in accordance with this SOP
- Ensure that active, inactive, perpetual and/or electronic records are accessible to only authorized personnel and promptly returned to their appropriate storage

IV.5. Procedures for health related records storage and retention

4.5.1 Every health center/post must have an appropriate health related records filing and storage system that is easily understood and efficiently used by staff. The filing and storage system should facilitate easy tracing, retrieval and storage of health related records.

4.5.2 Active records must be stored in a secure location that is locked during non-clinic hours to safeguard against loss, tampering, or use by unauthorized personnel. Care should be given to assure that the area containing active records is secured during clinic hours from patient or visitor access and that records are sufficiently distant from patient or visitor accessible areas to prevent viewing names or medical information

4.5.3 Computers containing electronic records must be password protected including password protection of folders. Unattended computers should be logged off, locked, or otherwise made inaccessible to individuals without access rights

4.5.4 For the systems where a backup is not done at higher supervisory level, a backup of electronic records must be maintained by every health facility and updated every day. The SOP advises that the facility maintains two backup copies kept in different secure locations.

4.5.5 Inactive records shall not be destroyed before thirty (30) years haveelapsed.

4.5.6 When inactive or perpetual records identified for disposal are destroyed, a register with enough details of such records must be kept.

CHAPTER V. STANDARD OPERATING PROCEDURES FOR DATA REPORTING

V.1. Purpose

- To establish a process to be followed by health facilities in reporting program progress and achievements
- To provide guidelines on reporting timelines and roles and responsibilities of key stakeholders in the reporting process

V.2. General Practices

5.2.1 All persons involved in the generation and compilation of health facility report(s) must ensure that standard report formats and procedures recommended by the Ministry of Health are consistently used. Any desired changes to the content, format and structure of the MOH standard reporting forms and procedures of reporting must be approved by the SMM through HIS Unit

5.2.2 Supervisors to the health facility must routinely check for the completeness, accuracy and timely submission of all daily, weekly, monthly, quarterly and/or annual reports. If a report has not been submitted on time or has errors, the supervisor is required to take action and indicate in the supervisory report.

5.2.3 Every health center/post must report immediately any identified outbreak or epidemic to the higher levels.

5.2.4 Data managers should be on site during the reporting period.

V.3. Roles and Responsibilities

5.3.1 Health Centre In-Charge/Titulaire

- Assign and provide guidance and support to appropriate personnel to generate and compile the required reports
- Ensure the accuracy, consistency, completeness, integrity, precision, and timeliness of the reports generated by the health facility
- Ensure that staff have up-to-date reporting tools and respect the reporting schedules
- Approve the various reports generated by the health center, supported health posts and other reporting units
- Maintain archives of all reports submitted and feedbacks provided
- Provide feedback to staff regarding reporting issues

5.3.2 Clinical Team Leaders

- Ensure that the relevant sections of the report for the units under supervision are complete, accurate, timely and consistent with the reporting requirements
- Ensure that data are collated from all units which they are supervising
- Verify the accuracy, integrity and completeness of the data from all units before transmitting to the Health Center In-Charge/Titulaire

5.3.3 Clinical Staff

- Tally daily encounters and cases for the daily, weekly or monthly health facility report(s)
- Record properly and in a timely manner all required information in appropriate data sources. (e.g:Registers,patients,files).
- Ensure that the relevant sections of the health facility report for the unit have been compiled with the reporting timeframe and are complete, accurate and consistent with the reporting requirements
- Ensure the integrity, precision, completeness, timeliness and accuracy of data generated and compiled for their relevant sections of health facility report

5.3.4 Data Manager

- Compile the health center/post report from all service units and supported health centers
- Ensure the accuracy, consistency, completeness, integrity, precision, and timeliness of the reports generated by the health facility before submission to the Health Centre In-Charge/Titulaire
- Remind each service unit within the health center/post on the reporting deadlines
- Maintain archives of all reports submitted and feedbacks provided
- Ensure that staff at the health center/post have been trained on the data reporting tools and other reporting requirements

V.4. Procedures for data reporting

5.4.1 Every health center/post must submit to the central level their electronic monthly report for the previous month's activities within the required timeframe (see reporting schedule table below)

5.4.2 Every health center/post must submit an immediate surveillance report for specific epidemic diseases to the central level

5.4.3 Every health center/post must ensure that the weekly surveillance reports is submitted on time to the central level every Monday no later than Midday (12:00 noon).

5.4.4 Health Centre In-Charge/Titulaire has the responsibility to monitor the timeliness, accuracy and completeness of the report from the electronic system website.

5.4.5 The Health Centre In-Charge/Titulaire must ensure that the monthly report has been reviewed for completeness, accuracy, consistency and integrity before submission

5.4.6 In the event that the health center/post has omitted or erroneously reported data, the data should be updated with submittal of an amended report as per the outlined procedures in 3.5.4 and 3.5.5

V.4. MOH Recommended Reporting Schedules

Type of Report	Responsibility	Reporting level	Timeframe
Immediate report	Data Manager	Central (web)	Immediate
Weekly disease surveillance report	Data Manager	Central (web)	Every Monday no later than Midday (12:00 noon)
Monthly report (all health center/post service units)	Data Manager	Central(web)	By 5th day of month
Death audit reports (maternal and child)	Health Centre In-Charge/Titulaire	Central (web)	Within 5 Days after death
Quarterly TB report	Data manager	Central (web)	By 5th day of month
Annual HMIS report	Data manager	Central (web)	By end of January

V.5 Time table for monthly reporting form

Days of month	Activity	Responsible
1st -5th	Data collection, local verification and data entry	Health Facility data managers Head of health facilities
5th – 10th	Review and cleaning of data	Data managers District Hospital M&E officers and central program staff
10th	Deadline for District M&E officer to approve and lock data sets	District Hospital M&E officers
After 11th	Any changes must be reported to central HMIS unit using the official email (hmisinfo@moh.gov.rw). If the change request is granted, the HMIS team will unlock the data set for the facility in question so that the change can be made before it is locked again. Changes must be logged in the correction register at the health facility (see copy in annex)	HMIS staff and Health Center Data managers

CHAPTER VI. STANDARD OPERATING PROCEDURES FOR HEALTH RELATED DATA ACCESS, SHARING AND RELEASE

VI.1. Purpose

- To ensure that health related data collected and stored at the health centre are easily available to health professionals and partners without compromising privacy and confidentiality principles, proprietary and facility interests, or information law enforcement activities.
- To ensure that health related data access, release and/or sharing adheres to guidelines and standards.
- To define the process of granting access to, sharing and release of health related data to individuals, organizations or the public.

VI.2. General Principles

6.2.1 All health centers/posts must compile service delivery indicators as requested and share the data with members of the facility management committee, all concerned stakeholders and partners at their level of service

6.2.2 All health related records must be regarded as confidential

6.2.3 Access to health related records at any service delivery level must be acknowledged and the period for which the data was accessed, the date accessed must be quoted and make sure data sharing form has been completed before.

6.2.4 Aggregated data, where specific individuals are not identified, should generally be made accessible to the public

6.2.5 Any data where an individual subject can be identified should be classified as either “restricted” or “sensitive” and only made available to authorized personnel.

VI.3. Roles and Responsibilities

6.3.1 Health Centre In-Charge/Titulaire

- Ensure that staff are aware of the procedures for health related data access, sharing and release
- Review and approve requests to access, share and release health related data
- Ensure that health related data classified as “public” is easily accessible and provided on time. Ensure that health related data classified as “restricted” or “sensitive” are made available only to authorized parties
- Monitor data access, sharing , and release processes
- Serve as the Public Communication Officer for health facility related data or designate a staff

6.3.2 Clinic Team Leaders

- Ensure that only clinical staff and authorized individuals have access to data
- Respond to requests for health related data access, sharing and release
- Ensure the security and safety of data kept at their services units
- Mentor new staff to comply to data access, sharing, and release SOP

6.3.3 Clinical Staff

- Ensure the confidentiality and security of health related data
- Respond to requests for health related data access, sharing and release

6.3.4 Data Manager

- Prepare health related data for easy accessibility and sharing
- Ensure that data accessed is complete, accurate, timely and of high integrity
- Respond to requests for health related data access, sharing and release

- Ensure the confidentiality and security of health related data

6.3.5 Administrative staff

- Ensure the confidentiality and security of administrative filed data
- Validate administrative data before it is shared or released

6.3.6 Public Relations and Protocol Officer

- Respond to requests for health related data access, sharing and release
- Ensure the confidentiality and security of health related data

VI.4. Proceduresfor data access, sharing and release

6.4.1 Only the treating medical personnel and other authorized personnel have access to individual medical records.

6.4.2 Requests to access individual patient data by person(s) outside the health facility must be expressed to the Health Centre In-Charge/Titulaire or MOH designated personnel in writing and complete Rwanda-Ministry-of-Health-Request-for-Access-to-Health-Data form and should include the following:

a. The person/institution requesting the data
b. The reason why data is being requested (e.g. for monitoring, production of report, research etc)
c. The data variables required and the period of coverage for the data
d. How the data will be used
e. How the data will be secured to ensure privacy and confidentiality

6.4.3 Access to individual patient data by any person, upon approved request, must be granted under the following conditions

a. That the request to access individual patient data is to facilitate decisions and planning on clientele services and for data quality assurance purposes
b. That the request to access individual patient data is to address any health and safety issues
c. That the request is part of a research study that has been approved by the National Research Ethics Committee
d. That the request to access individual patient data is to prepare administrative, programme or research reports and publications
e. That the data is to be used in a form in which the individual concerned is not identified
f. That the request to access individual patient data is required for the purposes of a professionally recognized accreditation of a health service and the publication of the information will not identify the individual patient(s)
g. That the request to access individual patient data is required for a professionally recognized internal or external quality assurance activity and the publication of the information will not identify the individual(s) concerned

6.4.4 Health related records accessed by data users outside the health facility must be anonymized, unless authorization and approval was obtained from the Health Centre In-Charge/Titulaire or MOH designated personnel.

6.4.5 Person(s) accessing individual patient data must ensure that the uses of patient data do not "compromise" the privacy of the individual patient(s). If a potential breach of confidentiality and privacy arises, designated personnel shall be informed within 24 hours.

CHAPTER VII. STANDARD OPERATING PROCEDURES FOR HEALTH RELATED DATA ANALYSIS, USE AND DISSEMINATION

VII.1. Purpose

- To describe procedures for health related data analysis and dissemination including its interpretation and use

VII.2. General Principles

7.2.1 Every health facility must have notice boards updated on a Monthly basis addressing health related trends

7.2.2 Data managers must work with the Titulaire and heads of clinical departments to design electronic dashboards in the RHMIS and other routine information systems that are tailored to meet their routine data requirements.

7.2.3 Every health facility data collection, analysis, use and reporting activities must protect the privacy and confidentiality of the individual patient(s).

7.2.4 Data should only be used for the purposes it was intended for and consistent with relevant guidelines.

7.2.5 All clinical and administrative staff should have training on how to interpret and use health related data.

7.2.6 When analyzing data, care must be taken to ensure that appropriate clinically and epidemiologically informed statistical and presentational techniques are employed so that accurate conclusions can be drawn. If not available within the health facility, competent statistical and analytical advice should be sought when new analyses are undertaken.

7.2.7 Feedback from national and district levels must be shared horizontally and vertically within the health facility and other levels.

7.2.8 Every health facility is encouraged to prepare annual reports that will summarize key health trends in the catchment area as well as serviceoutputs and inputs and share these reports widely with stakeholders at all levels.

7.2.9 For communicable diseases and other issues that require immediate action, such must be reported without delay using the appropriate tools and channels (for example using IDSR module for epidemic prone diseases).

7.2.10 The titualire of the health center must dedicate time during periodic staff meetings to review and discuss trends in morbidity, service delivery and health facility resources using data from the various information systems used at the facility. The analyses of these trends should be prepared by the data manager and relevant department heads. The frequency of these meetings should be at least once a quarter.

VII.3. Roles and Responsibilities

7.3.1 Health Centre In-Charge/Titulaire

- Ensure that staff are aware of the procedures for data analysis, interpretation, use and dissemination
- Review and approve analyzed data for the health facility before dissemination
- Promote the utilization of data to inform the decision-making process at the health facility and corresponding levels
- Plan and implement disease surveillance and response
- Lead in the implementation of specific assessment such as facility surveys, rapid assessments, causal analysis, analysis of facility data etc
- Organise monthly meeting to discuss on reported data
- Transmit key analysis findings relating to health problems to local leaders on monthly basis.

7.3.2 Clinic Team Leaders

- Ensure that clinical staff regularly analyse and use patient data to identify and resolve patient care problems
- Act as a resource person in the clinical service area for data analysis, usage and interpretation
- Keep up-to-date the health facility notice board with complete, accurate and timely analyses
- Participate in monthly meeting to discuss on health data

7.3.3 Clinical Staff

- Regularly analyze and use patient data to formulate appropriate plans of care
- Participate in monthly meeting to discuss on health data

7.3.4 Data Manager

- Ensure that the health facility notice board is kept up-to-date with complete, accurate and timely data outputs
- Ensure that data is available in format(s) that will facilitate easy analysis and usage
- Provide support to specific assessments such as facility surveys, rapid assessments, causal analysis, analysis of facility data
- Provide support to the clinical staff in data analysis, usage, interpretation and dissemination
- Help the titulaire and clinical staff to create dashboards of routinely used indicators in the RHMIS or other relevant computerized systems used in the facility.
- Provide training to clinical staff in data analysis, interpretation and dissemination
- Prepare data analysis on monthly basis

VII.4. Procedures for data analysis

7.4.1 Data for analysis and use must be complete (above 95%) and accurate (error rate ±5%)

7.4.2 Tables and charts must indicate the unit of measure and the population being examined, and all internal labels (column headings, row stubs, and panel headings) must accurately describe the information they contain.

7.4.3 When analyzing aggregated data, statistical significance must be considered in evaluating the difference between groups and the difference of results from a particular level. If groups are not statistically different, they should not be interpreted as being different. Even when analyses do show statistical significance, the clinical significance should also be considered.

7.4.4 For samples of less than 30, many statistical techniques may become unstable or imprecise. These difficulties can sometimes be overcome by combining multiple years of data, collapsing data categories, or expanding the geographic area under consideration. All statistical techniques must be used appropriately.

7.4.5 Data must not be aggregated and reported when working with very small numbers due to confidentiality issues in small populations and the lack of data reliability associated with a small number of events.

7.4.6 Precaution must be taken when analysing and reporting on sensitive data items.

7.4.7 Interpretation of data must consider all relevant contextual factors such as socioeconomic factors and data should be adjusted for these factors.

7.4.8 Data Analysts must avoid discussions of differences due to underlying traits or other explanations without clear evidence of such.

VII.5. Required Analyses

✓ **Community level**

- % of children with fever treated within 24 hours
- # of children <5 seen by the CHW
- # of cases of diarrhea treated
- # of cases of pneumonia treated
- # of children monitored for growth in the red zone (malnourished)
- # of children who aren't completely vaccinated
- # of women accompanied to the health facility for deliveries
- # of essential drugs for which the remaining stock is less than one month's utilization

Frequency: Monthly

✓ **Health facility Level**

- Morbidity: 10 major causes of morbidity; Total outpatient consultations new cases
- Hospitalisation : 10 major cause of hospitalization and death ; bed occupancy rate ; # of deaths
- HIV : Male uptake (%): Pregnant women partners tested for HIV divide by Women presenting for first antenatal care consultation
- HIV: Positivity rate through HTC (%): HIV positive tested through HTC divide by Clients counselled and tested for HIV through HTC
- HIV: PMTCT (%): Infants born from HIV positive mothers tested at 6 weeks with PCR divide by Infants born from HIV positive mothers who are 6 weeks of age
- IDSR: % of health facilities submitting weekly surveillance reports on time (timeliness of the weekly reports)
- IDSR: # of health facilities submitting weekly surveillance reports (completeness of the weekly reports)
- IDSR: % of health facilities submitting immediate surveillance reports on time (timeliness of immediate reports)
- NCD: Rate of screening for breast cancer
- NCD: Rate of Screening for cervical cancer
- NCD: Hypertension follow up coverage, Diabetes follow up coverage, Asthma follow up coverage
- NCD: Cataract surgical rate

- Road traffic accident death rate
- ANC : # of women with 4 standard visits; # of women registered for ANC
- Deliveries : ; # of maternal deaths at the maternity repoted by Facility
- Vaccination : Measles immunization coverage rate ; # of children 0-11months vaccinated for measles :
-
- Family Planning : family planning utilisation rate; # of new acceptors of family planning methods, # of users at the end of the month
- Lab : # of positive malaria blood smears ; # of malaria blood smears tested
- Pharmacy : list of products with stockout, # of days of stockout by product
- Finance: financial viability ratio : Total receipts ; Total expenses

Frequency: Monthly

- Nutrition surveillance coverage rate
- Assisted deliveries coverage rate
- % of children with fever treated within 24 hours
- TB: Treatment success rate for bacteriologically confirmed new and relapse TB cases
- Notification rate of all TB cases (all forms)

Frequency: Quarterly

✓ **Administrative District Level**

- MDG indicator analysis: Assisted deliveries in health centers ; Maternal mortality ; Under 5 mortality ; Malnutrition ; Family planning coverage rate ; Vaccination coverage rate.
- Staffing analysis : Number of health workers by category; Staff movements

Frequency: Quarterly

✓ **National and District—Special analyses**

- Annual and Semi-Annual Health Statistics Bulletin
- Health program annual Report (special programs - HIV, Malaria, MCH, TB, NCD, etc)
- Weekly epidemiological bulletin.

Frequency: weekly,, Semi-Annual and annually

✓ **Staff Information**

- Number of workers per Health facility.
- Number of workers per Position.
- Number of qualified workers per Health facility.
- Number of workers who updated their identification.
- Workers per level of education.
- Workers per domain of education.
- Number of partners providing staff salaries per Health facility.
- Duration of available salaries for every worker.
- Number of qualified workers in every domain (eg: Nurses).

GLOSSARY

Availability: The reliability and accessibility of data and resources to authorized individuals in a timely manner.

Clinical team leader: is head of clinical service unit (e.g. OPD or maternity unit) and provides coordination, direction, mentorship and management to clinical staff assigned to the clinical service unit.

Clinical staff: are medical doctors, nurses, laboratory staff, allied health professionals involved in the provision of clinical patient care services

Data Manager: Health sector staff who have operational-level responsibility for data management activities related to the capture, maintenance, and dissemination of data are considered data managers

Data Users: Individuals who need and use health sector data as part of their assigned duties or in fulfilment of their role in the health sector planning or decision making process.

Data Producers: A person or group of people with authority for specified information and responsibility for establishing the controls for its generation, collection, processing, dissemination, and disposal.

Data Integrity: A measure of the trustworthiness of information and systems. A security principle that makes sure that information and systems are not modified maliciously or accidentally.

Information: As defined by the Access to Information Law, "any material in any form, including records, documents, memos, e-mails, opinions, advices, press releases, circulars, orders, logbooks, contracts, reports, papers, samples, models, data material held in any electronic form and information relating to any private body which can be accessed by a public authority under any Law for the time being in force."

Record: As defined by the Access to Information Law, "includes any recorded information, regardless of its form, source, date of creation, or official status, whether or not it was created by the body that holds it and whether or not it is classified".

Sensitive Information: Any information, the loss or misuse of which could adversely affect the privacy to which individuals are entitled.