District Health Management Information System (DHMIS)

Standard Operating Procedures:
Facility Level

November 2012

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

A Long and Healthy Life for All South Africans

FOREWORD BY THE DIRECTOR-GENERAL

In July 2011, I approved the District Health Management Information Systems (DHMIS) Policy for South Africa, which is aimed at ensuring uniformity in the implementation of the DHMIS across the country. I also indicated then, that a need exists for the development of Standard Operating Procedures (SOPs), to guide the implementation of the policy.

This document sets out SOPs for the DHMIS policy, for use by health facilities, which are the first level of interaction between community members and health services. Health facilities are therefore the first point of data collection and the level at which data quality must first be improved. Health facility SOPs have thus been prioritised for publication. These SOPs seek to achieve standardisation in data collection, capturing, collation, storage, analysis and transmission to other levels of the health system. Related SOPs have been produced for other levels of the public health sector namely: Health sub-districts; districts; provinces and the National DoH.

These SOPs present basic and practical steps to be followed by health care providers and health information management personnel to ensure that data is appropriately handled and used to improve service delivery at local level, prior to submission to the next level of the health system, within the specified time frames. An E-Tool has also been developed to facilitate daily capturing and collation of data, which avoids the "month-end rush" for submission of health facility data.

The long-term vision of the National DoH is the creation of a national integrated patient-based information system, which will require implementation of electronic systems for data management at all levels of the health system. This will eliminate most of the challenges that emanate from manual data management systems, including discrepancies. Notwithstanding this, the need for policies and SOPs will exist even in an environment of automation and electronic information systems.
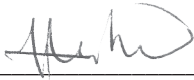
All health facility managers in the public health sector should ensure implementation of these SOPs. They must be assisted in this role by information officers from health sub-districts; districts; provinces and the National DoH.

I wish to acknowledge the pivotal role of the Health Information Task Team of the National DoH, which I established in August 2010, in effectively facilitating and co-ordinating the development of these SOPs. This team consists of officials from the Health Information Management and Monitoring and Evaluation (HIMME) Cluster of the National DoH; provincial Departments of Health, our development partners, as well as non-governmental organisations (NGOs) working in the health sector.

The immense technical support provided by the John Snow Incorporated/Enhancing

Strategic Information (JSI/ESI) Project; Health Information Systems Programme (HISP) and the Health Systems Trust (HST) is acknowledged with gratitude.

I anticipate major improvements in the quality of DHIS data as a result of effective use of these SOPs.

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MS. MP MATSOSO
DIRECTOR-GENERAL
NATIONAL DEPARTMENT OF HEALTH
DATE: 19.11.12

LIST OF ABBREVIATIONS

ART   Antiretroviral Therapy
CHC   Community Health Centre
DG   Director-General
DHER   District Health Expenditure Review
DHIS   District Health Information System
DHMIS   District Health Management Information System
DHP   District Health Plan
DoH   Department of Health
ETR   Electronic Tuberculosis Register
HIS   Health Information System
HOD   Head of Department
ICT   Information and Communication Technology
IT   Information Technology
M&E   Monitoring and Evaluation
NDoH   National Department of Health
NHISSA   National Health Information Systems Committee of South Africa
NIDS   National Indicator Data Set
OPD   Outpatient Department
PHC   Primary Health Care
PIDS   Provincial Indicator Data Set
PQRS   Provincial Quarterly Reporting System
QRS   Quarterly Reporting System
SOP   Standard Operating Procedure

DEFINITIONS

TERMINOLOGY	OPERATIONAL DEFINITION
Accuracy	Also known as validity. Data is measured against a referenced source and found to be correct. Accurate data minimize error (e.g. transcription error) to a point of being negligible
Completeness	Data are present and usable and represent the complete list of eligible sources and not just a fraction of it
Confidentiality	Assurance that data will not be disclosed inappropriately and treated with appropriate levels of security
Data	Raw, unprocessed numbers
Data collation	The process where data for a data element from various service points are added together. It is very important to ensure that during this process the responsible person add the data correctly together and avoid arithmetic errors
Data input forms	This refers to the final form which will be used to enter the data into the relevant database
Data sign off	Data sign off refers to the process where the person with the required authority agree to the correctness and validity of the data and commits him or herself to submit data in accordance with data flow guidelines
Indicator	A quantitative or qualitative variable that provides a simple and reliable measurement of one aspect of performance, achievement or change in a program or project
Information	Processed or analysed data that adds context through relationships between data to allow for interpretation and use
Integrity	System used to generate data is protected from deliberate bias or manipulation or loss of
Precision	Data has sufficient detail and is free as far as possible of error in terms of under and/or over reporting
Reliability	Data generated by an information system is based on protocols and procedures that do not change according to who is using them or how often they are used. Data is measured and collected consistently
Service point	Reporting units within a facility e.g. consultation rooms, services within facility (OrgU6)
Source point	Facility level e.g. hospital, PHC clinic, delivery facility (OrgU5 levels)
Timeliness	Data and information is available on time for meeting budgeting, monitoring, decision making and reporting requirements
Users of data	Stakeholders who are authorised to access and use data in DHIS for monitoring, evaluation, research and reporting purposes

CONTENTS

1. INTRODUCTION

1.1 Purpose

This document provides Standard Operating Procedures (SOPs) to ensure appropriate data and information management at health facilities.

1.2 Scope

These Standard Operating Procedures are mandatory and shall be implemented by all employees and contractors when engaging in health information related activities for Department of Health facilities. These SOPs must be used in conjunction with the following:

- DHMIS Policy 2011
- National Indicator Dataset (NIDS)
- Reference Documents listed in page 20

1.3 Training

The Facility Manager must ensure that team members who follow these procedures understand these Standard Operating Procedures' objectives and other inter-related activities.

Facility Manager must ensure that team members sign that they have read and understand these SOPs.

1.4 Background

In terms of the National Health Act (Act 61 of 2003) the National Department of Health (NDoH) is required to facilitate and coordinate the establishment, implementation and maintenance of health information systems at all levels. The District Health Management Information System (DHMIS) Policy 2011 defines the requirements and expectations to provide comprehensive, timely, reliable and good quality routine evidence for tracking and improving health service delivery. The strategic objectives of the policy are to strengthen monitoring and evaluation (M&E) **through standardization of data management activities** and to **clarify the main roles and responsibilities at each level for each category of staff to optimize completeness, quality, use, ownership, security and integrity of data.**

In 2000 the District Health Information System (DHIS) was adopted as the official South African routine health information system for managing aggregated routine health service based information. These Standard Operating Procedures aim to clarify the responsibilities and procedures for effective management of aggregated routine health service data.

In October 2012 the DHIS eTool for daily data capturing at health facility level was implemented to reduce professional time spent on manual calculations and human error. Facilities where daily health service data is captured, continue to capture data for some aspects such as supervisor visits, drug stock-outs and clinical work load monthly.

Activities specific to daily health service data capturing are displayed in green text where relevant in the document

1.5 Principles
The following principles should be kept in mind when these SOPS are implemented:
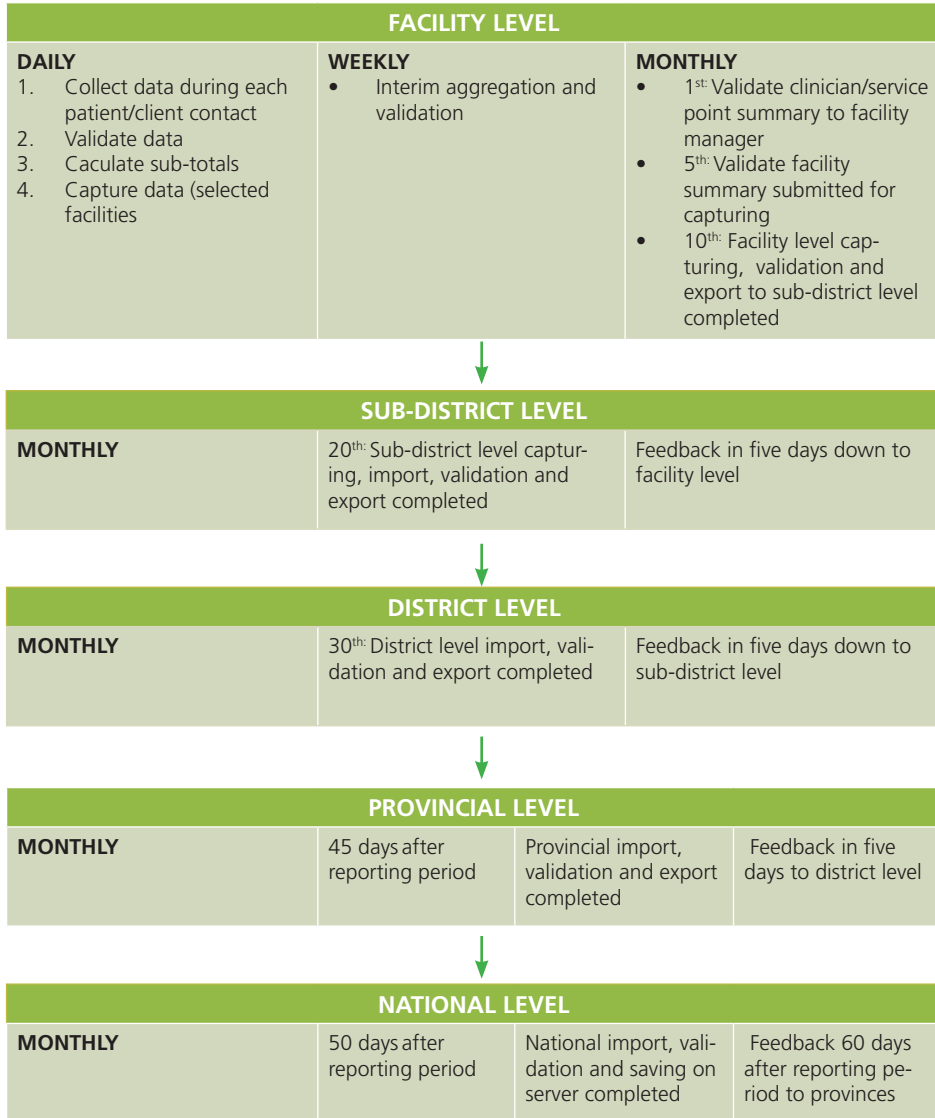
1. Health service data to be captured into the DHIS are collected by means of bound Tick Registers. The cover page of each Tick Register should have space for the following:
   - Facility name (as in DHIS), year and register number (Tick Register number starts on 1 April and ends on 31 March of the following year)
   - Start date of register
   - End date of register
   - Register pages must be numbered
2. Facilities using Reception Headcount Tick Registers should use these headcount figures to verify headcount figures collated from the Health Care Provider Tick Registers.
3. Data collection tools and processes for mobile and satellite clinics as well as health posts and outreach teams must be managed in the same manner as those for fixed facilities. Summary forms must be submitted to the manager of the 'parent' fixed facility to be captured into the DHIS as level 6 organisational units where applicable.
4. Some facilities employ data capturers to enter data into electronic patient based monitoring tools as those for ART and TB. Specific SOPS have been developed to guide data capturing into each of these systems and are therefore not covered in this document. Facilities capturing data into these systems must have copies of these SOPS and adhere to them.
5. The following are crucial for monitoring and optimising data quality:
   - Standardised activation of relevant data elements of each health care facility
   - Standardised use of 0 (zero) reporting irrespective of the DHIS capturing level (facility or sub-district) or frequency (daily or monthly)
   - Audit readiness
6. All patient clinical records, data collection and collation tools must be stored in a secure facility on a daily basis

2. DATA/INFORMATION MANAGEMENT

This data flow diagram provides the timelines to ensure that the 45 day deadlines for routine data submission to NDoH is met.

MONTHLY ROUTINE DATA REPORTING FLOW DIAGRAM

FACILITY LEVEL		
DAILY 1. Collect data during each patient/client contact 2. Validate data 3. Caculate sub-totals 4. Capture data (selected facilities	**WEEKLY** • Interim aggregation and validation	**MONTHLY** • 1st. Validate clinician/service point summary to facility manager • 5th. Validate facility summary submitted for capturing • 10th. Facility level capturing, validation and export to sub-district level completed

SUB-DISTRICT LEVEL		
MONTHLY	20th. Sub-district level capturing, import, validation and export completed	Feedback in five days down to facility level

DISTRICT LEVEL		
MONTHLY	30th. District level import, validation and export completed	Feedback in five days down to sub-district level

PROVINCIAL LEVEL			
MONTHLY	45 days after reporting period	Provincial import, validation and export completed	Feedback in five days to district level

NATIONAL LEVEL			
MONTHLY	50 days after reporting period	National import, validation and saving on server completed	Feedback 60 days after reporting period to provinces

2.1 Responsibility

2.1.1 Health Facility Receptionist/Patient Registration Staff Responsibilities

Some large facilities have dedicated reception staff, but all staff providing a service to patients is responsible for the procedures relevant to patient clinical records and facility headcounts.

2.1.1.1 Procedure: Health Facility Receptionist/Patient Registration Staff

Step	Action
ON A DAILY BASIS THE HEALTH FACILITY RECEPTIONIST/PATIENT REGISTRATION STAFF IS ACCOUNTABLE FOR THE FOLLOWING:	
1	Each facility should have an identified area where patients are received and patient clinical records are filed and issued Draw patient clinical records from the filing facility or issue new patient clinical record
2	Double check whether a clinical patient record is available before a patient is registered as a new patient to prevent duplicate patient records from being issued
3	No patient should be seen by a health care provider without a clinical record except in emergencies The clinical record must be issued as soon as possible in these exceptional cases
4	Record the visit as a headcount each time a patient presents to the facility for any service in the Reception Headcount Tick sheet (reflected in Annexure 4.1) before the patient clinical record is handed to health care provider
5	Count each patient as a headcount once each day, regardless of the number of services provided to the individual at the facility
6	Start each day with a new page of the Reception Headcount Tick Register In small facilities where not many patients are seen, one line in the Reception Headcount Tick Register can be left open after totalling that day's headcount The new date can be written in the middle of the next row
7	Ensure that no patient clinical record leave the facility If a patient is transferred to another facility a letter of transfer and copies of relevant records should accompany the patient to the referred facility The original patient clinical record remains in the referral facility
8	Make follow up appointments for patients and provide appointment cards or dates
9	Adding and double checking sub-totals at the bottom of each Reception Headcount Tick Register Storing the Tick Register in a locked facility

Step	Action
ON A WEEKLY BASIS THE HEALTH FACILITY RECEPTIONIST/PATIENT REGISTRATION STAFF IS ACCOUNTABLE FOR THE FOLLOWING:	
10	Completing and double checking the weekly Reception Headcount summary sheet (reflected in Annexure 4.2)
11	Entering the daily totals of the Reception Headcount Tick Sheet into the weekly Reception Headcount summary sheet. Add and double check the weekly Reception Headcount summary sheet
ON A MONTHLY BASIS THE HEALTH FACILITY RECEPTIONIST/PATIENT REGISTRATION STAFF IS ACCOUNTABLE FOR THE FOLLOWING:	
12	Entering the weekly totals of the weekly Reception Headcount summary Sheet into the monthly Reception Headcount summary sheet. Add and double check the monthly Reception Headcount summary sheet and submit to the facility manager on the 1st day of each month
13	Filing and storing the daily Reception Headcount Tick Register, weekly and monthly summary sheets and a copy of the Data Input Form completed by facility manager, in a locked facility for monitoring and auditing purposes
	Filing should be done on the same day as when Tick Register and input forms have been completed to prevent loss of records, data collection tools and information
	The day, month and year must be clearly written on each Tick Register and filed in order from the latest date on top

2.1.2 Health Care Provider Responsibilities

Health care providers (nurses, doctors and other health professionals) are responsible and accountable for ensuring high quality data in individual patient clinical records and on their own routine data collection and collation tools. These data collection tools are mainly DHIS-generated Tick Register and standardised registers.

It is essential that all health care providers write clearly and legibly on all data collection tools

2.1.2.1   Procedure: Health Care Provider

Step	Action
1	RECORDING OF DATA ON DATA COLLECTION TOOLS:
ON A DAILY BASIS THE HEALTH CARE PROVIDER IS ACCOUNTABLE FOR THE FOLLOWING:	
1.1	Record individual patient data in the facility retained clinical records and if relevant, in the patient retained records (e.g. Antenatal cards and Road to Health charts) during or directly after each patient contact. A copy of patient retained records must be retained in the health facility
	Use only standardised abbreviations in clinical patient records

Step	Action
1.2	Record required data in line with NIDS definitions in the standardised Tick Register during or directly after each patient contact
1.3	Indicate the patient file number clearly on the standardised Tick Register for patient follow- up and auditing purposes
1.4	Double check that all the correct data elements and the correct columns were ticked for health care interventions provided to patients
1.5	In the absence of dedicated data capturers, patient data from clinical record must be transferred into program –specific longitudinal registers such as the ART and TB registers at least by the end of each day
2	COLLATION OF DATA ON TICK REGISTER
2.1	Calculate, capture and sign daily sub-totals clearly DAILY CAPTURING: Submit for daily DHIS capturing in relevant facilities File and store Tick Register in a locked facility (if there is no data capturer who can collect it)
ON A WEEKLY BASIS THE HEALTH CARE PROVIDER IS ACCOUNTABLE FOR THE FOLLOWING:	
2.2	Complete and sign the weekly Tick Register summary form File and store weekly Tick Register summary in a locked facility
ON A MONTHLY BASIS THE HEALTH CARE PROVIDER IS ACCOUNTABLE FOR THE FOLLOWING:	
3	COLLATION OF DATA IN THE STANDARD REGISTERS
3.1	The manager of the service point or a designated person must add the totals for each data element in the standard registers on the first day of each month to get a monthly total for the previous month DAILY CAPTURING: Verify and sign monthly service point summary extracted from the DHIS and submit to the facility manager
3.2	A line must be drawn after the totals for the month to indicate clearly when it was totalled
3.3	Copy the totals in the registers onto the Tick Register summary form (reflected in Annexure 4.3) to be submitted to the facility manager on the 1st day of each month

2.1.3 Data Capturers Responsibilities

Data capturers, also referred to as data officers, are responsible for capturing data and then forwarding the data to the next level.

Data capturers must spend 100% of their work time on the data-related responsibilities stipulated below.

2.1.3.1 Procedure: Data Capturer

Step	Action
— ON A DAILY BASIS THE DATA CAPTURER IS ACCOUNTABLE FOR THE FOLLOWING:	
1	COLLATION OF DATA
1.1	DAILY DATA CAPTURING: Collect Tick Register completed by health care providers per service point and capture into the DHIS Conduct rapid data quality assessment on Tick Register before capturing – indicate capturing date and sign Run absolute validation per service point and verify data with health care provider Follow up any discrepancies with relevant service point / health care provider Please note:If daily capturing on DHIS is implemented it is not required to collate data on weekly basis
1.2	If data cannot be captured into DHIS at the facility the Tick Register must be collected and summarised Follow up any discrepancies with service point Store Tick Register in locked facility
ON A WEEKLY BASIS THE DATA CAPTURER IS ACCOUNTABLE FOR THE FOLLOWING:	
1.3	Complete and sign the weekly Tick Register summary form (reflected in Annexure 4.3) Store weekly Tick Register summary form in a locked facility
ON A MONTHLY BASIS THE DATA CAPTURER IS ACCOUNTABLE FOR THE FOLLOWING:	
1.4	Complete and sign monthly Tick Register collation form and submit to facility manager on the 1st day of each month DAILY DATA CAPTURING: Extract monthly summary from DHIS and submit to facility manager for sign off
1.5	File the daily, weekly, monthly Tick Register summary forms together with a copy of the Data Input form (reflected in Annexure 4.4) completed by the facility manager in a locked facility
2	CAPTURING OF DATA INTO DHIS

Step	Action
2.1	Obtain validated Data Input forms from the facility manager on all data sets on the 7th of each month if data is provided on hard copies (paper based): • Monthly data capturing: Conduct a rapid data quality assessment of data on data input forms – must be 100% complete and should contain no gaps or outliers without comments • Capture monthly data into the DHIS • Indicate date of capturing on each monthly data input form and sign • Run Min/Max range violations, Absolute validation and Statistical Validation reports on data • Run Standard Reports on data for outstanding input forms, routine raw data reports and ad hoc reports • Follow up any discrepancies found in data with facility manager and keep record of follow up date and person • Verify that facility manager made the appropriate corrections on the data input form. A line should be drawn through the incorrect value and the new value should be written. Changes are to be initialled and dated. No correction fluid is to be used. The entire data trail back to the initial service point must be corrected • On receiving feedback from the facility manager, correct the values in DHIS and send updated reports and pivot tables to the facility manager to sign off the data • Export data to Data Mart and refresh pivot tables – compare data in pivot tables with that on summary forms. The following is crucial in this process: o Save existing standard pivot tables with a different name(for example add date) before exporting to Data Mart o Empty the Data Mart, do a full export to Data Mart and then refresh the standard pivot tables • Obtain sign-off from the Facility Manager of the data • Attach following DHIS reports to sign-off form as proof of data quality: o Data entry validation report o Min/Max violations o Outstanding input forms o Pivot table of raw data • Export data on all NIDS data elements and send export file to sub-district or district level (as relevant) before the 10th of each month • Ensure that back-ups are made every time data is changed • File records needed to meet monitoring and audit requirements and store safely in a locked facility

2.1.4 Health information officer responsibilities

Health Information officers should be progressively appointed at fixed facilities (clinics, community health centres and hospitals). They are responsible for data quality assurance and encouraging local use of information.

If there are no data capturers at the facility the health information officer is responsible for the same procedures as relevant for data capturers.

Information officers/managers must spend 100% of their time on the data/information-related activities stipulated below.

2.1.4.1 Procedure: Health Information Officer

Step	Action
1	Develop a health information plan specifying: • Information needs of all stakeholders at service points • Reporting processes • Areas for improvement
2	Provide DHIS generated data collection tools (Tick Register) and collation/monthly summary forms for different service points to optimise data quality and minimise data errors
3	Monitor standardised use of 0 (zero) reporting STANDARDISED USE OF ZERO (0) • Only NIDS (and standardised province or district-specific) data elements, for which services/interventions are provided routinely at a specific facility, should be activated for capturing into the DHIS. DHIS auto-generated Tick Registers and Monthly Summary forms will then contain only the relevant data elements for collection, collation and capturing. For example, the data element delivery in a PHC facility should not be activated for mobile and satellite clinics and should therefore not appear on the data collection and collation forms for these types of facilities. – Allocation of elements to facilities should be standardised as far as possible – Only information officers/managers with administrative rights should be allowed to activate/change activation of elements for capturing – Allocation/activation of data elements should be exported to sub-district or district levels as relevant to the facility • A 0 (zero) should be captured for all activated elements if no activities/interventions for the specific element took place during the reporting month. • If a specific routine activity did not take place due to a specific reason (for example children were not weighed because the scale was broken) capture a 0 (zero) with a comment. • If a PHC facility has not functioned at all during a specific month, capture a 0 (zero) for PHC headcount and add a comment explaining the reason why no services were provided (for example mobile broken, the only Professional nurse was sick etc.) • If a delivery facility has not functioned at all during a specific month, capture a 0 (zero) for delivery in facility and add a comment explaining the reason why no services were provided (for example renovation etc.) • NO BLANKS should be left on the monthly summary form or data capturing screen without a tick and a comment. • Information officers must monitor data elements to be de-activated to minimise the capturing of 0 (zero) • Inappropriate 0 (zero) must be corrected at data capturing level like all other data value changes. • Hospitals that do not provide caesarean sections every month should be reclassified in the DHIS (for data management and monitoring purposes) as CHCs and the data element caesarean section in facility should be de-activated for capturing. If a hospital is not doing caesarean sections temporary (for example if there was no doctors for a specific month or the theatre is renovated) a 0 should be captured with a comment indicating the reasons.

Step	Action
3	**Data elements that should not be activated for capturing**
	The following data elements should not be activated for capturing because services are not routinely provided and/or specific incidences (such as deaths) do not occur in these facilities regularly.
	• **Mobiles, Satellite clinics and health posts**
	o Delivery-related
	o Mortality/death-related
	o Inpatient and OPD-related
	o ART treatment-related EXCEPT if the facility is an approved ART site
	o Doctor clinical work days EXCEPT if the facility is routinely visited by a doctor at least once a month
	• **Clinics**
	o Delivery-related EXCEPT if the clinic provides daily delivery services
	o Mortality/death-related
	o Inpatient and OPD-related
	o ART treatment-related EXCEPT if the facility is an approved ART site
	o Doctor clinical work days EXCEPT if the facility is routinely visited by a doctor at least once a month
	• **Community Health Centres**
	o Mortality/death-related EXCEPT:
	▪ Still births, early and late neonatal deaths, deaths under 1 and deaths under 5
	▪ Maternal deaths, if they do more than 100 deliveries a month. Because small delivery facilities do not often have maternal deaths, the element should only be
	activated when a maternal death occurred
	o ART treatment-related EXCEPT if the facility is an approved ART site
	• **Hospitals**
	It should be kept in mind that most OPDs provide ambulatory services similar to PHC facilities and must report on most PHC/ambulatory NIDS elements.
	Data elements that may cause confusion
	• Supervisor visit this month – capture only a 1 if one or more documented supervisor visits took place during the reporting month (which means yes) or a 0 (zero) in case of no documented visits (which means no)
4	Provide staff who collect data with training on data elements to be collected and tools to be used to collect data as well on how to analyse their own data
5	Check quality of data captured by data capturers
6	Discuss discrepancies in captured service point data with manager
7	Provide feedback on data quality and performance to all service points
8	Presentation of analysed facility information to management team meetings
9	Identify data quality problems and develop data quality improvement plan to address identified problems
10	Recalculate min/max values after the last month of the financial year's data is in the DHIS system to establish the values relevant for the next financial year in consultation with facility manager and service point managers

Step	Action
11	Import DHIS files from service points on relevant d-date according to data flow diagram if data is captured on DHIS at that level • Check whether all DHIS datasets have been received and follow up outstanding export files • Import data from electronic patient-based registers/systems such as ETR.net and TIER.net • Conduct import validations • Ensure that detail is correct when updating existing records, accepting new records and matching records • Ensure that back-ups of the data are made every time it is changed • File records needed to meet monitoring and audit requirements and store safely in a locked facility
12	Make **pivot tables** available to relevant service point managers at facility by means of hard copies, emails or intranet.
13	Prepare Data Quality Pivot tables and reports on quarterly basis and make available to relevant service point managers at facility level
14	Keep submission logs for monitoring adherence to reporting timeframes and identification of bottlenecks for remedial action
15	Analyze DHIS data and provide feedback: • **monthly feedback within 5 days** after the export date to facility manager and service points by means of updated graphs on selected indicators and display it in the facility • **quarterly** input to facility review meetings on data quality (emphasising timeliness and completeness) and program performance with recommendations to optimise data quality
16	Update antivirus software daily or at least weekly (crucial for data security purposes)

2.1.5 Facility Manager's responsibilities

The provider-patient interaction at the health facility is the foundation for effective and efficient routine health information management. If health facility data submitted for capturing into the DHIS is of poor quality, evidence-based management decisions are compromised at all levels.

The health information management, monitoring and reporting responsibilities of health facility managers are similar at all types of facilities and these focus on the management of high quality information that must be used to:

• optimise patient care
• optimise public health and the health status of the population
• optimise performance of health programs and the healthcare system
• improve data quality
• monitor, evaluate and report on performance against all legislated plans in the health sector

2.1.5.1 Procedure: Facility Manager

Step	Action
1	Provide sufficient resources for routine health information management: • Stationery such pens, rulers, carbon paper, calculators and staplers • Filing cabinets, files and an effective filing system • Telephones and fax machines • Up-to-date pivot tables, graphs and reports on data quality and program performance • Definitions of data elements and indicators • Data collection tools (Tick Register, standardised registers, summary forms and Data Input forms Mobilise for further resources (staff, hardware and software, email and internet connections) according to national guidelines as outlined in Generic Standardised Operating Procedures
2	Include data management, monitoring and reporting in performance contracts and job descriptions of all managers
3	Ensure training on data elements, data quality assessment and data use for all staff responsible for data collection and collation and managing service points Ensure that all new staff are orientated on health information management system in the facility
4	Compile a patient and data flow plan for the facility indicating where patients are received and headcounts are done and where service points are
5	Oversee, lead and support effective and efficient data collection, management and use on: • Patient visits and care/interventions provided • Clinical work days and supervision visits • Stock and equipment

Step	Action

6	**Optimise DHIS data quality and use** by means of:
	
	• Spot checks **weekly** on:
	   o Patient clinical record reviews (10 records per month)
	   o Verification that data in registers and on summary forms correlate
	   o Filing practices for clinical records and data collection tools as required for data verification and audits
	• Keep dated and signed records on spot checks done
	• Hard copies of data collection tools kept for a minimum of three (3) years
	• Establish an information committee/team for the facility to discuss data before it is send to the next level, assess data quality and promote an information culture in the facility
	• Complete monthly facility Data Input form (refer Annexure 4.4) in duplicate by the 7th of the month for data to be captured into DHIS
	• Validate data on monthly Data Input form before submitting it for capturing
	• Ensure that data quality report and pivot table of raw data is received from health information officer or data capturer
	• Follow up on feedback from the health information officer/data capturer and make corrections. If changes to the data are required it should be made on all the sheets to indicate that the totals have changed. Draw a line through the incorrect value, write in the new value. These changes are to be initialled and dated. No correction fluid is to be used. Ensure the entire data trail back to the initial collection point is corrected
	• Ensure that the validation rules that were violated are corrected or commented on and that feedback on violations are given to the sub-district/sub-structure/district office
	• Ensure that outliers are commented on
	• Ensure that updated data quality reports and pivot table of raw data is received from the health information officer/data capturer after corrections were made in the DHIS
	• Submit corrected signed-off Data Input form to health information officer/data capturer and ensure that a duplicate is filed in the facility

7	**Provide monthly feedback** to facility staff with regard to: • Data quality – timeliness, completeness and accuracy of data • Program-related indicators highlighting good performance and service delivery shortcomings
8	**Analyze, interpret and use information** for remedial interventions to optimise patient care and facility performance Develop action plans in collaboration with facility staff for indicators that reflect poor performance
9	Sign off on additional indicators and data elements collected for purely local use using Facility Data Sign-off form (reflected in Annexure 4.5)
10	Ensure that facility is ready for an audit at all times

A facility is ready for an audit when:

- All internal policies and procedures documents are available and are implemented
- Each patient has only one patient folder/clinical record and file is available in the facility at all times (proper filing system)
- Information recorded on data collection tool (Tick Register, standard register or patient based software application) are consistent with patient folder and supporting documentation
- Where applicable all patient records are captured on electronic databases, e.g.ETR. net, TIER.net,
- Information recorded in DHIS is consistent with data input forms
- All data input forms applicable to the facility have data collected for and are captured in the DHIS
- All data collection tools used for collection of data by institution have been reviewed for quality and have been signed off by the health care provider who collected the data
- All registers must be reviewed for quality and have been signed off by the facility manager
- All validation errors are corrected or explained
- All outliers are explained
- Processing of data updates is done correctly
- All sign off forms are properly completed and signed off by the facility manager

3. REFERENCE DOCUMENTS

Individuals using these procedures should become familiar with the following documents:

3.1   DHMIS Policy, National Department of Health, 2011.

3.2   National Health Act (Act 61 of 2003): Commencement Section 53 of the National Health Act, 2003.

3.3   PHC Supervisory Manual, National Department of Health, October 2009

3.4   Promotion of Access to Information Act (Act 2 of 2000): GN 585, Government Gazette 26332, 14 May 2004.

3.5   Public Audit Act of 2004 (Act 25 of 2004): Government Gazette Vol 474, Cape Town, 20 December 2004 No. 27121.

3.6   Public Finance Management Act (Act 1 of 1999): Public Finance Management Amendment Act (Act No. 29 of 1999).

3.7   Statistics Act (Act 6 of 1999): Government Gazette Vol. 406, Cape Town 21 April 1999. No. 19957.

3.8   Treasury Regulations: Government Gazette, Vol. 500, Pretoria, 20 February 2008, No. 29644.

4. ANNEXURES

4.1 Facility Headcount Tick Register

This form must be completed by each Reception point or areas where patients bypass reception eg pharmacy			

FACILITY: **Headcount point :**

Page   **of**   **Week start**   **Week End**

COMPLETED BY: **Date:** DD MM YR   **CONTACT NUMBER:**

	Name Surname Folder Number	PHC headcount < 5 years	PHC headcount 5 years and >		Name Surname Folder Number	PHC headcount < 5 years	PHC headcount 5 years and >
1				26			
2				27			
3				28			
4				29			
5				30			
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			
12				37			
13				38			
14				39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45			
21				46			
22				47			

TOTAL Headcounts: **Headcount under 5 years:**   **Headcount 5 years and older:**

4.2 Reception Headcount Tick Register Summary Form

RECEPTION TICK SHEET SUMMARY

DEPARTMENT OF HEALTH:

This form must be completed by the following points: Reception, Pharmacy, TB

FACILITY:

PERIOD (Month/Year):

COMPLETED BY: SERVICE POINT / WORKSTATION:

CONTACT NUMBER: DATE: DD / MM / YYYY

NO	ELEMENT	WEEK1	WEEK2	WEEK3	WEEK4	WEEK5	TOTAL	COMMENT
	Headcount PHC (Utilisation)							
DAY	PHC headcount under 5 years (C)							
DAY	PHC headcount 5 years and older (D)							
TOTAL	PHC headcount under 5 years (A+C)							
TOTAL	PHC headcount 5 years and older (B+D)							

DATA QUALITY CHECK

All fields completed?	**YES/NO** (If NO please provide a reason)	REASON:

INFOWHIZZ CHECK! Make sure that Weeks 1 to 5 adds up to your Total column in all cases.

SIGNATURE: DATE: DD / MM / YYYY

4.3 Data Summary Form (Daily, Weekly Or Monthly)

DEPARTMENT OF HEALTH
Primary Health Care Data Facility Collation Form

Name of service: _____

	Name of PNs	TOTAL
1. PHC HEADCOUNT		
PHC headcount under 5 years		0
PHC headcount 5 years and older		0
PHC TOTAL HEADCOUNT		0
5. IMMUNISATION		
12 BCG doses to children under 1 year		0
6 Weeks		
13 OPV 1st dose		0
14 RV 1st dose		0
15 DTaP-IPV/Hib 1st dose		0
16 HepB 1st dose		0
17 PCV7 1st dose		0
14 Weeks		
18 RV 2nd dose		0
19 DTaP-IPV/Hib 3rd dose		0
20 HepB 3rd dose		0
9 Months		
PCV7 3rd dose		0
Measles 1st dose under 1 year		0
Immunised fully under 1 year - new		0
18 Months		
DTaP-IPV/Hib 4th dose		0
Measles 2nd dose		0
Other		
Td dose at 6 years		0
Td dose at 12 years		0
6. NUTRITION		
Vitamin A supplement to 6-11 months infant		0
Vitamin A supplement to 12-59 months child		0

4.4 Monthly Data Input Form

DEPARTMENT OF HEALTH

ROUTINE MONTHLY DATA INPUT FORM

Sub-district: _____

Facility: _____

Completed by: _____ _(Print name)_

Month: _____

Verified by: Sign: _____

(Sign)   Tel no.: _____

NAME OF DATA ELEMENT GROUP:

No	Data Element	Value	Comment
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

TOTAL FOR DATA ELEMENT GROUP

4.5 Facility Data Sign-off form

FACILITY DATA SIGN OFF FORM

This form is to be completed by the facility manager and submitted to the Sub District/Sub Structure Office by the 7th of the month

Facility Name: _____   Facility Manager Name: _____

Period (month\year): _____   Contact Number: _____

Data quality check to be performed

Mark with ✔ where applicable

Datasets	All Forms Received			All Elements Completed		Outliers Corrected or Commented on		Validations Corrected		Comments
	Y	N	N/A	Y	N	Y	N	Y	N	
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N			Y	N	
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					
	Y	N	N/A	Y	N					

Facility Manager: _____ _____
Signature   Date

Sub-district/Sub-structure IO: _____ _____ **Facility IO/DC:** _____
Signature   Date   Signature   Date

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