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Ministry of Health

Health Management Information System User Protocol

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PREFACE

The Health Management Information System captures health data from all public health facilities in Cambodia, which can be used for evidence based decision making in health. Accurate health information will be used as reference to create guidelines, protocols or policies which lead to effective management of health programs and to improve the development of health sector.

In 2010, Cambodia HMIS has been transformed from a paper based reporting system to a web based application with the purpose of reducing the administrative workload and reporting timeline and of capturing accurate and timely data from all health facilities. The web base application is helping users to do not only capture their data but also produce all indicator report in HMIS that can be used for many purposes in program implementation.

The web based HIS application has seen many revisions and was further developed alongside the feedback from the users. Therefore the MOH decided that the HMIS user protocol had to be updated in line with the latest version HIS 3.0.

The Ministry of Health believes that this HIS3.0 user protocol will serve as fundamental tool in the health sector in monitoring and evaluation of the health performances, preparing work plans and support the management of health programs in a successful manner.

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ABBREVIATION

CB	Capacity Building
CDC	Communicable Disease Control Department
CDHS	Cambodian Demographic and Health Survey
DPHI	Department of Planning and Health Information
HC	Health Center
HC1	Monthly Report Format for HC
HF	Health Facility
HCP	Health Coverage Plan
HIS	Health Information System
HISB	Health Information Systems Bureau
HIPA	Health Information, Policy and Advocacy
HMIS	Health Management Information System
HO2	Monthly Report Format for Hospital
HSP	Health Strategic Plan
ICT	Information, Communication and Technologies
IS	Information System
IT	Information Technology
MDSR	Maternal Death Surveillance and Response
MOH	Ministry of Health
MOP	Ministry of Planning
NH	National Hospital
NIS	National Institute of Statistics
OD	Operational District
PH	Provincial Hospital
PHD	Provincial Health Department
PMRS	Patient Management and Registration System
PMTCT	Protection from Maternal to Child Transmission
RH	Referral Hospital
TB	Tuberculosis

CHAPTER I - INTRODUCTION

1. Background

The use of health information is very critical in the development and provision of health care services in Cambodia. As such, the national Health Information System (NHIS) is regarded as one of the Ministry of Health's priority programs. The HIS was first launched in 1992 when the Ministry of Health began to develop a new information system to serve its needs, with technical and financial support from UNICEF. It was gradually scaled up through implementation in a few provinces starting in May 1994. Complete nationwide coverage was achieved by February 1995.

There were several revisions of the HIS since its inception, in 1996, 1999, 2003 for paper based reporting systems. The 1996 revision was required to make adjustments to the HIS on the basis of the newly introduced health coverage plan, which defined the services to be delivered by each health facility on a geographic and population basis. The 2003 revision was carried out to identify additional indicators required for monitoring and evaluation by health facilities and the national programs. A hallmark of both the 1996 and 2003 revisions was the consultative and participatory approaches to revise the system, involving all key stakeholders.

In 2009, the MOH DPHI, with support from a USAID project, has developed a new HIS web based system, using the same data points as the previous MS Access HIS database which first developed in 2006. This new version of HIS web based database application was introduced in 2010. The system was upgraded from version 1.0 to 2.0 in 2014 due to the revision of HIS reporting formats HC1 and HO2 having integrated a substantial part of the vertical programs' indicators. Version 2.0 was not a comprehensive system as some of its parts were not accurate enough, some were not yet developed, some not yet include, etc. so that there must be another version (3.0) to complete the functionalities of those in version 2.0 for use.

The current HIS 3.0 web-based system allows health staff at Health Centre (HC), Hospitals[1] and Operational District (OD) level (where have computer and can access to internet) to enter their monthly activity data directly into the HIS. Contrastingly, for those who do not have computer, at the end of each month, data are recorded into reporting templates at health facility level (paper-based formats) and then send to OD level for entering into the HIS application. Those data will synchronize to central level just minutes after they are entered.

2. Institutional Structures and Roles of Public Health System

2.1. Structure of Department of Planning and Health Information (DPHI)

DPHI is a department under the Directorate General for Health of the MOH.

The department consists of three technical bureaus including i) Health Information System (HISB), ii) Policy, Planning and Health Sector Reform, and iii) Health Economics and Financing. The HISB is led by a chief and two vice chiefs.

2.2. Roles of DPHI

2.2.1. Specific roles and functions of DPHI related to HMIS

The Department of Planning and Health Information with its HIS bureau is responsible the overall management of HMIS all levels of health care system including

- Leading the development and the use of all standardized clinical registers with production of monthly health information report,
- Managing and filling all health information using web based system,
- Prepare and disseminate national guidelines and protocols of HMIS,
- Training on data use for planning, monitoring and evaluation of the health performances,

[1] Hospitals include Referral Hospital (RH), Provincial Hospital (PH) and National Hospital (NH).

- Training and implementation of the data quality assurance,
- Chairing the meeting of HMIS technical working group,
- Prepare annual reports and technical documents for Health Sector Congress
- Cooperate and facilitate with departments, national programs within MOH and other relevant ministries in collecting and using the HIS data including private health sector.

2.2.2. Role of HIS Bureau (HISB)

1. Ensure high quality of HMIS data and effective use for evidence based decision making.
2. Provide guidelines and support sub-national level for the HMIS functioning
3. Develop, update, manage and maintain the HMIS web based applications
4. Provide training on HMIS web based applications (HIS, PMRS, MDSR, HCP, PMTCT, etc.)
5. Conduct HMIS data quality assessments and provide technical support on DQA to public health facilities
6. Involve in survey/research regarding health related problems
7. Prepare annual health statistics report
8. Provide ICT assistance in relation with HMIS applications to all levels of the system
9. Cooperate and facilitate with departments, national programs within MOH and other relevant stakeholders in collecting and using the health information.

2.3. Roles and responsibilities of Sub-National Health Structures

2.3.1. The Provincial Health Department (PHD)

Provincial health departments are further assigned with ensuring a high quality and effective use of HMIS data for evidence based decision making throughout the province. PHD is also responsible for ensuring the accuracy and reliability of all related HMIS data reported from its entire supervisees (ODs and HFs). Regularly provides technical support including training (CB), supervision, ICT equipment supplies, etc. and provides constructive feedback on HMIS related data to its public health facilities. PHD has been promoting and enforcing the use of HMIS by private health sector.

2.3.2. The Operational District (OD) office

- Responsible to capture all HMIS monthly data from its public health facilities and enter/edit them into the HMIS web based applications in case that HFs have no access to that application or lack ICT equipment (computer and internet access).
- Ensure the appropriate and effective use of HMIS data for evidence based decision making for planning, budgeting and monitoring.
- Ensure the high quality of HMIS data through a varieties of activities including training, coaching/on-the-job training, supervision, routine data verification etc.
- Regularly provide constructive feedback on HMIS related data to its public health facilities.
- Participate in any HMIS related activities such as supervision, meeting, training, conference and workshop upon invitation or designation from its supervisors (PHD, DPHI).

2.3.3. The Public Health Facilities (Hospital and Health Center)

- Ensure daily, timely, proper and accurate record of clients' information into the relevant registers of health facility
- Regularly, timely and accurately report HIS data from all registers into either HIS paper based formats (HC1 or HO2) or HMIS web based applications.
- Ensure the appropriate and effective use of HIS data for evidence based decision making for planning, budgeting and monitoring.
- Participate in any HIS related activities such as meeting, workshop, conference, and training, upon invitation or designation from its supervisors (PHD, OD).

2.3.4. The National Programs

- Ensure key indicator information is provided to HMIS web based applications either through direct data entry or via data exchange protocol (interoperability),
- Cooperate with DPHI to implement the Master Plan for Strategic Information.

3. The Health Management Information System

The HMIS primarily aims at providing reliable, relevant, up-to-date, adequate, timely, and reasonably complete information on health needs, delivery of services, availability and use of resources, and effectiveness of services for health managers at the facility, sub-national, and national levels. Information plays a central role in supporting strategic goals and in underpinning the principles of the Health Strategic Plan.
The current HIS 3.0 consists of three main components, including supporting tools (e.g. tally sheet, registers) for data collection.

I. **Register forms** to support data collection on a daily basis at the health facilities. These contain the raw data relating to outpatient consultations, antenatal care, deliveries, birth spacing, immunization, hospitalization, etc.

II. **Monthly routine reports** cover major health problems and the activities of health services and consist of two standardized forms:
(i) HC1: for health centers and former district hospitals
(ii) HO2: for national, provincial and referral hospitals

A schematic representation of the flow of information upwards, along with the approved schedule, is presented on the next page for ease of comprehension.

III. **Private/NGO health service providers**
Since the introduction of HIS web based database in 2010 (version 1.0), the registered private/NGO health service providers were required by MOH to regularly report their aggregated health data into the web based system. From 12 June 2015 on the private health providers will also report in HIS 3.0 though with their usual HIS 3.0 data entry interface.

CHAPTER II – HIS REPORTING FLOWS

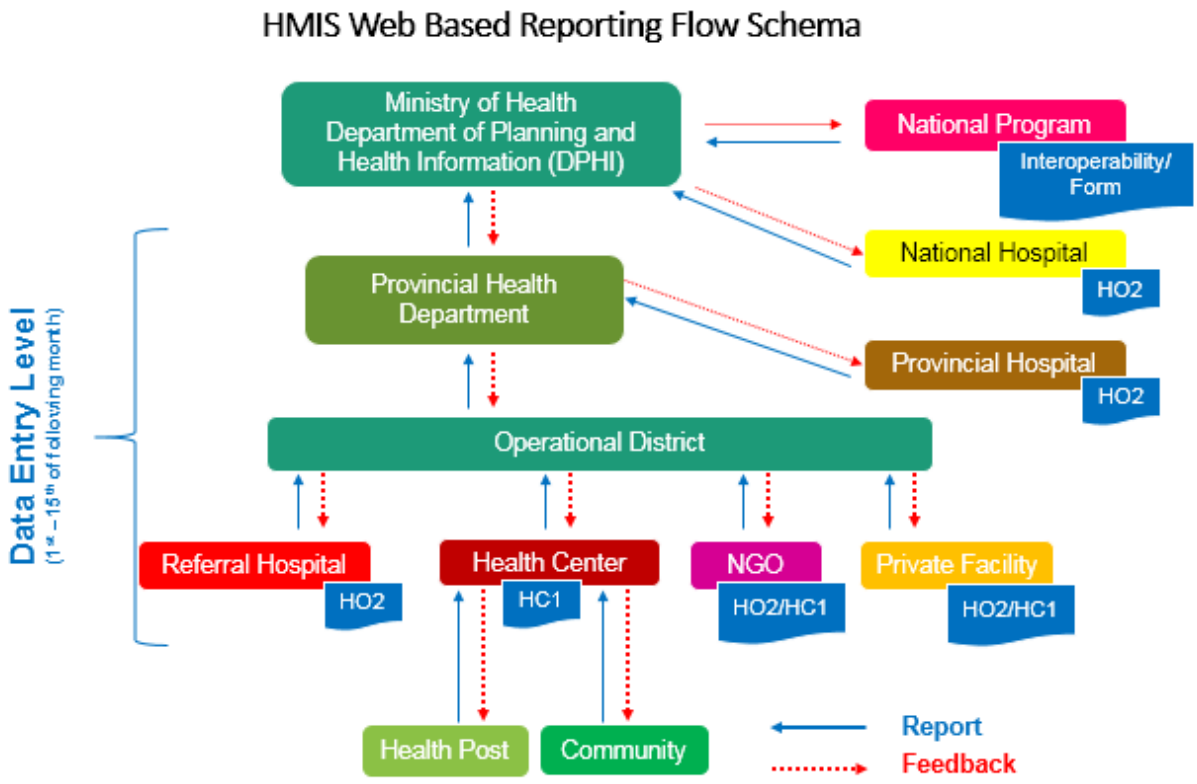
1. Reporting flow for paper based system

Due to the limited coverage of HMIS web based applications, the health facility that cannot access to HIS 3.0 must send the hardcopy of monthly report (HC1 or HO2) to OD within 5 days after the end of reporting month. The HIS OD officer is responsible to enter/edit the monthly data of those facility following the HIS reporting period described in Chapter III below.

2. Users of HIS Web Based Database

The Health Management Information System Web Based Database was developed in mid-2010 by MOH, Cambodia to enable electronic data capture and reporting by the health facilities through web-based forms over internet. The web-based HIS permits health managers, health staff and officers direct data capture at source and thus avoiding many of the delays and errors arising from paper forms, data transmission and multiple data entry. In addition, real-time data collection permits automatic consolidation, reporting and enhanced ability to use the available data for analysis and decision making thus improving project co-ordination, planning and participation.[2]

Diagram 1 – Reporting Flow for HIS



Source: http://hiscambodia.org/public/homepage_en.php?m=1

[2] Source: http://hismohcambodia.org/public/homepage_en.php?m=1

CHAPTER III – HIS REPORTING PERIOD

In mid-2015, HIS application was updated from 2.0 to 3.0 based on the revision of reporting formats (HC1 and HO2). These latest formats incorporate more indicators from various vertical programs including reproductive health, immunization, nutrition, malaria, tuberculosis, HIV/AIDS, etc. to become a more comprehensive HIS database for evidence based decision making. The introduction of ICD-10 was also integrated into this latest version 2.0 of HIS application.

While developing the user-friendly interfaces for data capture, DPHI has decided the following guidance with the objective of improving the quality of data as well as to strengthen the assess control of the system.

To request for editing the below mentioned data (HIS, population and beds), the users will log-in to "Utility" located in the HIS website to pop-up their requests submitted to DPHI administrator. After approval from DPHI director or designated staff member, using the same channel, DPHI administrator will reply to the requestors and the replied messages pops up at user's interface.

1. HC1 and HO2 Data Entry and Edit:

- The monthly data entry is allowed up to 15th of succeeding month (e.g. January data to be reported by 15th Feb.), thereafter the monthly data entry will be automatically blocked by HIS.
- Corrections by OD or HFs HIS officers are allowed from 16th to the end of succeeding month (for e.g. January's report, corrections are allowed up to 28th Feb.) upon request by the respective PHD HIS officer in-charge with reasonable and acceptable reasons addressed to DPHI administrator.
- Beyond this period (e.g. 28th Feb.) until end of next month (e.g. March), the data can only be corrected at central level upon written request by the respective PHD HIS officer in-charge with reasonable and acceptable reasons addressed to DPHI administrator.

2. Population Rate and Population Data Entry and Edit:

- HIS allows entering the annual population data of all health centers during the first month of every year (e.g. for 2015, the data entry can be done only in January, 2015), thereafter the HIS will automatically block the entry of population data
- Beyond this period (January 31st), until the end of February, the population data can only be corrected at central level upon written request by the respective PHD HIS officer in-charge with reasonable and acceptable reasons addressed to DPHI administrator.

3. Number of Beds Data Entry and Edit:

- The data entry of number of beds is allowed only in the month of January every year. This data is reported along with the data entry of HC1 and HO2 for January up to 15th February, thereafter the number of beds entry will be automatically blocked by the HIS.
- Corrections by OD are allowed from 16th February to the end of February upon request by the respective PHD HIS officer in-charge with reasonable and acceptable reasons addressed to DPHI administrator.
- Beyond this period until end of March, the data can only be corrected at central level upon written request by the respective PHD HIS officer in-charge with reasonable and acceptable reasons addressed to DPHI administrator.

CHAPTER IV – QUALITY OF HMIS DATA

The Health sector performance in Cambodia is assessed on an annual basis through the Joint Annual Performance Review and National Health Congress. Monitoring of health sector progress and performance towards HSP2 targets should be based on sound and reliable data. A number of different data sources exist for monitoring progress, such as population-based and facility-based surveys, administrative data, census data, and health facility reporting. Population-based surveys are conducted only once every three to five years and collect retrospective information. Thus surveys are not necessarily a reliable reflection of the current health situation of the population. In contrast, health facility data are collected and aggregated on a continuous basis and provide an important source of information, especially to monitor annual and subnational performance.

All health data are imperfect in some way. Data quality assessment should always be undertaken to understand how much confidence can be placed in the health data used to assess health sector performance. Population-based surveys use standard methods to assess data quality and make adjustments as needed to address problems of bias or missing values. These adjustments are carefully documented. However, such rigorous quality control mechanisms are rarely applied to routinely-collected administrative and health facility data. Yet these data are often the basis for annual monitoring; decision makers using them need assurance of their reliability and soundness.

Health facility data are a critical input into assessing national progress and performance on an annual basis and they provide the basis for subnational/district performance assessment. The quality of HMIS data consists of four main dimensions and within each dimension, several indicators are used to track progress and assess the quality of the facility data generated by the HIS, for both national level and for provinces.[3]

1. Completeness of reporting - To be able to compute accurate population coverage rates from facility data, it is necessary that a high proportion of events (e.g. immunizations) be counted and reported through the health facility reporting system, including events occurring at public and private facilities. The completeness of reporting is analyzed to determine whether there are significant gaps in the figures reported through the HIS. This dimension requires health facility to report all indicators either have or have not the client (zero report). HIS supervisors (HISB, PHD and OD) have to control and verify those monthly data using the inventory report tool in the HIS 3.0.
2. Internal consistency of the reported data – A number of consistency checks can be applied for reported data (numerators/number of events), such as identifying outliers or checking that the number of events shows consistent trends over time. Data points flagged for inconsistencies should be investigated further and any errors identified should be fixed. HIS supervisors have the role to control this dimension beyond alerting messages in the system happening while entering or editing the data (for selected variables) through indicator report tool (data quality index).
3. Consistency of population denominators – To obtain accurate coverage rates, it is also necessary to have accurate estimates of target populations such as total population, number of pregnant women, and number of children under five years of age. Under-estimated population estimates will result in over-estimation of coverage rates, and vice-versa. Estimates of target populations are not collected through the HIS, but are extensively used by the system to compute coverage rates; thus any issues with target population estimates should be identified and adjusted for if possible.
4. External comparison of coverage rates – Population coverage rates computed from facility data should be compared to coverage rates obtained from independent data sources, such as household surveys. A high consistency between coverage rates from different sources would indicate greater reliability of the HIS coverage rates, whereas highly disparate results would indicate the need for further investigation to determine why these disparities occur.

In addition to the above mentioned four dimensions, a regular HIS supervision/spot check from national level or PHD to OD and HFs in order to improve the quality of health care data needs to be conducted.

[3] Assessment of health facility data quality: Data quality report card – WHO-MOH Cambodia, 2012

CHAPTER V – USER ACCOUNT MANAGEMENT

5.1. Purpose

This procedure provides guidance on how user accounts are to be created, maintained and terminated in the HIS application at the Department of Planning and Health Information (DPHI), Ministry of Health (MOH), Cambodia.

5.2. Scope

This procedure applies for the account management in web-based HIS application with accessible from the URL link www.hismohcambodia.org. This procedure pertains to all HIS user accounts that are used to input aggregated health indicators in the HC1 and HO2 data collections forms of public health facilities. It also collects data from registered private health facilities in the whole country.

5.3. Request for creating or deleting account

a) Creating HIS account

To request for creating an account, all requestors can make a request through PHD or OD who already have user account that can log-in to HIS 3.0 www.hismohcambodia.org where the request's page located in "Utility" menu.

The requestor has to fulfill the following information in an individual request:

(1) Name of Requestor
(2) Requestor's Institution
(3) Name of User
(4) Sex
(5) Title
(6) Name of Institution
(7) Telephone
(8) E-mail address (if any)
(9) Date of request
(10) User Level
(11) Reason for request

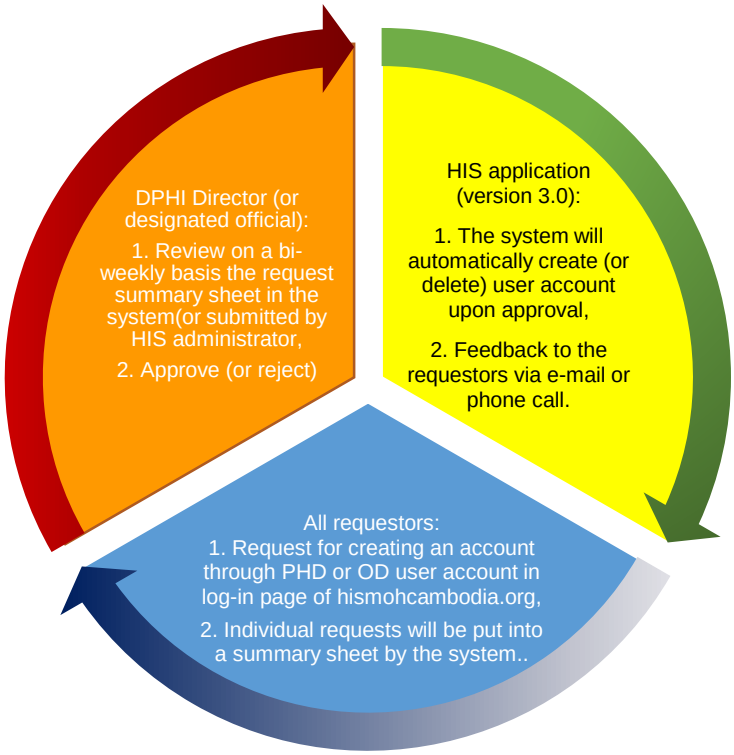
After completed the above needed information, the requester needs to press "Submit" button then all individual requests will be listed in a summary sheet which can be found in "Utility" menu in HIS 3.0 log-in interface for administrator only. The DPHI director can access to that summary sheet (or submitted by HIS administrator) for reviewing and approval (or rejection). Upon the approval in the system the username and password will automatically be generated along with that summary sheet. The summary sheet records if a request has been processed or not yet. In case that approval made on a hardcopy by the director, the HIS administrator needs to copy it into the summary sheet in the system for establishing automatic username and password. The requestor will be informed through e-mail (or phone call) with user name and password. See flow diagram below.

b) Deleting HIS account

To request for deleting an account, it can be done through "Utility" menu in the log-in page of HIS 3.0. There are two processes to request for deleting account:

1. User account holder, in case s/he will not use it anymore because of any reason, s/he shall go to "Utility" and request for deleting the User account. MOH institutions, PHDs and ODs, on behalf of HIS account holder, can also request for deleting in case they knew that the account will not be used anymore.
2. The system will automatically delete any account that did not access to HIS 3.0 for one year and the user will be informed by email. Deleted account holder can contact HIS administrator for more information.

Diagram 2: Request for creating an HIS account



5.4. Account denial

DPHI director or designated staff, assigned by DPHI director has the right to reject the account request with reasoned decision.

5.5. Creating accounts (include passwords etc.)

When account request is approved, the system shall automatically and immediately perform the account creation. The system shall assign an account name that follows a certain standard. A combination of health facility code with the user name should be applied for user at the facility level i.e. 030101_chalna. The system will also assign a password that the user will be required to change on first login.

All passwords should be strong passwords and should follow the below guidelines.

1. All passwords must meet the following guidelines:
   - Must contain at least eight alphanumeric characters.
   - Must contain at least two non-alphabetic characters and least three alphabetic characters.
   - At least one alphabetic character must be upper-case and at least one must be lower-case.
   - Passwords cannot consist of a single word in any dictionary, language, slang, dialect, jargon, etc.
   - Passwords cannot consist of easily guessed or obtained personal information, names of family members, pets, etc.
   - Passphrases consisting of three or more dictionary words combined with non-alphabetic characters are acceptable. The words chosen should have some identifiable relationship for the user to help them remember the passphrase without the need to write it down. An example of such a passphrase might be: C@mb0d!@2015#H!s
2. Passwords should not be shared with anyone who is not authorized to access the HIS. The user should not write the password in any easily accessible location or inserted into email messages or other forms of communication.

3. It is recommended that passwords be changed at least every six months by the user or the system alerts the user to change the password.
4. Passwords should not be shared with anyone, including administrative assistants or IT administrators. Necessary exceptions may be allowed with the written consent of the DPHI director and must have a primary responsible contact person.
5. If a password is suspected of being compromised, it should be changed immediately and the incident reported to the designated Help Desk.
6. The system blocks the user after 10 consecutive failed attempts to log-in. In such cases, the user would need to submit a written request to DPHI Director to reset the password and unblock the access.
7. Password cracking or guessing may be performed on a periodic or random basis by system administrator. If a password is guessed or cracked during one of these scans, the password owner will be required to change it immediately.

5.6. Changes to accounts and access

Changes are considered to be access or attribute changes to the existing accounts. Changes to account are requested via e-mail or letter of request to DPHI director. In this case, DPHI director has full-right to assign a designated staff or system administrator to perform the changes.

5.7. Termination of accounts

Account is to be terminated when that account is no longer required to perform one's role at the current health system. In this case the PHD, OD HIS officer or concerned person informs the DPHI director or designated staff or through "Utility" in log-in page of HIS 3.0

5.8. Restoration of accounts

After an account has been deleted, there may be a need to restore the account at a later time. Restorations are handled as new account creations and require the same process to be followed.

5.9. Exception and temporary accounts

To meet the exceptional needs, a system administrator may create a temporary account that can be used for a pre-defined duration and access permissions e.g. the prime user account holder not available and deadline for data reporting approaching. The account creation and justification must be documented and submitted to DPHI director within three days. DPHI director must be notified in writing or email when the account has been deleted or locked out. If the account is needed for more than 30 days, a formal account request must be made accordingly.

5.10. Locking/Disabling of accounts

When the password expires, the user will be prompted to change the password on the next login. In case the account is locked due to multiple unsuccessful attempts to login, the user will need to send an email to the system administrator and copy to DPHI director or designated staff to request to gain the access again.

Banner Accounts: Banner accounts are in dormant (unusable) state after 120 days of non-use. Once a banner account becomes dormant, the existing password is disabled. They can be reactivated by DPHI director's approval or designated staff. The request of reactivation should be made via email or written letter.

Suspension of Accounts: User accounts may be suspended by system administrator if the account is involved in an incident. All or selected access rights may be suspended depending on the scope of incident. Suspension will only be lifted with the approval of DPHI director or a designated staff.

5.11. Quality controls/Audit

At least annually, system administrator should prepare a report of user who access to the system which also includes (1) number of new user accounts created (2) number of accounts disabled or locked out (3) number of accounts with suspect of compromise. The system administrator must review and examine whether user accounts have exceeded the level of access to the system.

5.12. User level Table

Table 1 – User Group

Code	Name	
1	Administrator	Admin
2	Ministry of Health	MOH
3	Provincial Health Department	PHD
4	Operational District	OD
5	Provincial Hospital	PH
6	Referral Hospital	RH
7	Health Center	HC
8	National Hospital	NH
9	Private/NGOs	
10	Visitor (Custom)	

Table 2 – Access Rights

Access Rights		Permissions for User Group (Code in table 1)			
No.	Item	Enter	Edit	View	Export
I	Population Rate	1, 3, 4 & 7	1, 3, 4 & 7	1 to 10	1 to 10
II	Population Data	1, 3, 4 & 7	1, 3, 4 & 7	1 to 10	1 to 10
III	Monthly HC1	1, 4 & 7	1, 4 & 7	1 to 10	1, 3, 4 & 7
IV	Monthly HO2	1, 4, 5, 6 & 8	1, 4, 5, 6 & 8	1 to 10	1, 3 to 6 & 8
V	Monthly Report (Private/NGOs)	1, 4 & 9	1, 4 & 9	1 to 10	1, 3, 4 & 9
VI	Province, OD and HF	1	1	1 to 10	1 to 8
VII	Inventory Report	[redacted]		1 to 10	1 to 10
VIII	Indicator Report			1 to 10	1 to 10
IX	Manage System - User Profile		1 to 10	1 to 10	[redacted]
X	Manage System - Manage User	1	1	1	
XI	Manage System - Blocking Tool	1	1	1	
XII	Utility	1 to 10	[redacted]	1 to 10	1
XIII	Dashboard for Public	[redacted]		1 to 10	1 to 10
XIV	Dashboard for MOH			1 to 8	1 to 8

Table 3 – Overall Permissions for User Groups

Access Rights	User Group									
	Admin (1)	MOH (2)	PHD (3)	OD (4)	PH (5)	RH (6)	HC (7)	NH (8)	Private/ NGO (9)	Visitor (10)
I. Population Rate										
Enter	√	X	√	√	X	X	√	X	X	X
Edit	√	X	√	√	X	X	√	X	X	X
View	√	√	√	√	√	√	√	√	√	√
Export	√	√	√	√	√	√	√	√	√	√
II. Population Data										
Enter	√	X	√	√	X	X	√	X	X	X
Edit	√	X	√	√	X	X	√	X	X	X
View	√	√	√	√	√	√	√	√	√	√
Export	√	√	√	√	√	√	√	√	√	√
III. Monthly HC1										
Enter	√	X	X	√	X	X	√	X	X	X
Edit	√	X	X	√	X	X	√	X	X	X

Access Rights	User Group									
	Admin (1)	MOH (2)	PHD (3)	OD (4)	PH (5)	RH (6)	HC (7)	NH (8)	Private/ NGO (9)	Visitor (10)
View	√	√	√	√	√	√	√	√	√	√
Export	√	X	X	√	X	X	√	X	X	X
IV. Monthly HO2										
Enter	√	X	X	√	√	√	X	√	X	X
Edit	√	X	X	√	√	√	X	√	X	X
View	√	√	√	√	√	√	√	√	√	√
Export	√	X	√	√	√	√	X	√	X	X
V. Monthly Report (Private/NGOs)										
Enter	√	X	X	√	X	X	X	X	√	X
Edit	√	X	X	√	X	X	X	X	√	X
View	√	√	√	√	√	√	√	√	√	√
Export	√	X	√	√	X	X	X	X	√	X
VI. Province, Operation District and Health Facility										
Enter	√	X	X	X	X	X	X	X	X	X
Edit	√	X	X	X	X	X	X	X	X	X
View	√	√	√	√	√	√	√	√	√	√
Export	√	√	√	√	√	√	√	√	X	X
VII. Inventory Report										
View	√	√	√	√	√	√	√	√	√	√
Export	√	√	√	√	√	√	√	√	√	√
VIII. Indicator Report										
View	√	√	√	√	√	√	√	√	√	√*
Export	√	√	√	√	√	√	√	√	√	√*
IX. Manage System – User Profile										
Edit	√	√	√	√	√	√	√	√	√	√
View	√	√	√	√	√	√	√	√	√	√
X. Manage System – Manage User										
Enter	√	X	X	X	X	X	X	X	X	X
Edit	√	X	X	X	X	X	X	X	X	X
View	√	X	X	X	X	X	X	X	X	X
XI. Manage System – Blocking Tool										
Enter	√	X	X	X	X	X	X	X	X	X
Edit	√	X	X	X	X	X	X	X	X	X
View	√	X	X	X	X	X	X	X	X	X
XII. Utility										
Enter	√	X	X	X	X	X	X	X	X	X
View	√	√	√	√	√	√	√	√	√	√
Export	√	X	X	X	X	X	X	X	X	X
XIII. Dashboard for public										
View	√	√	√	√	√	√	√	√	√	√

Access Rights	User Group									
	Admin (1)	MOH (2)	PHD (3)	OD (4)	PH (5)	RH (6)	HC (7)	NH (8)	Private/ NGO (9)	Visitor (10)
Export	√	√	√	√	√	√	√	√	√	√
XIV. Dashboard for MOH										
View	√	X	√	√	√	√	√	√	X	X
Export	√	X	√	√	√	√	√	√	X	X

* Until dashboard is published.

Note: The access authorization of selected user groups (PHD, OD, PH, RH, HC, NH and Private/NGOs) in terms of data management depends on its own health coverage plan. For example, a HC can only enter, edit and export the HIS data of their own HC. An OD HIS officer can only manage the data of the health facilities in its OD.