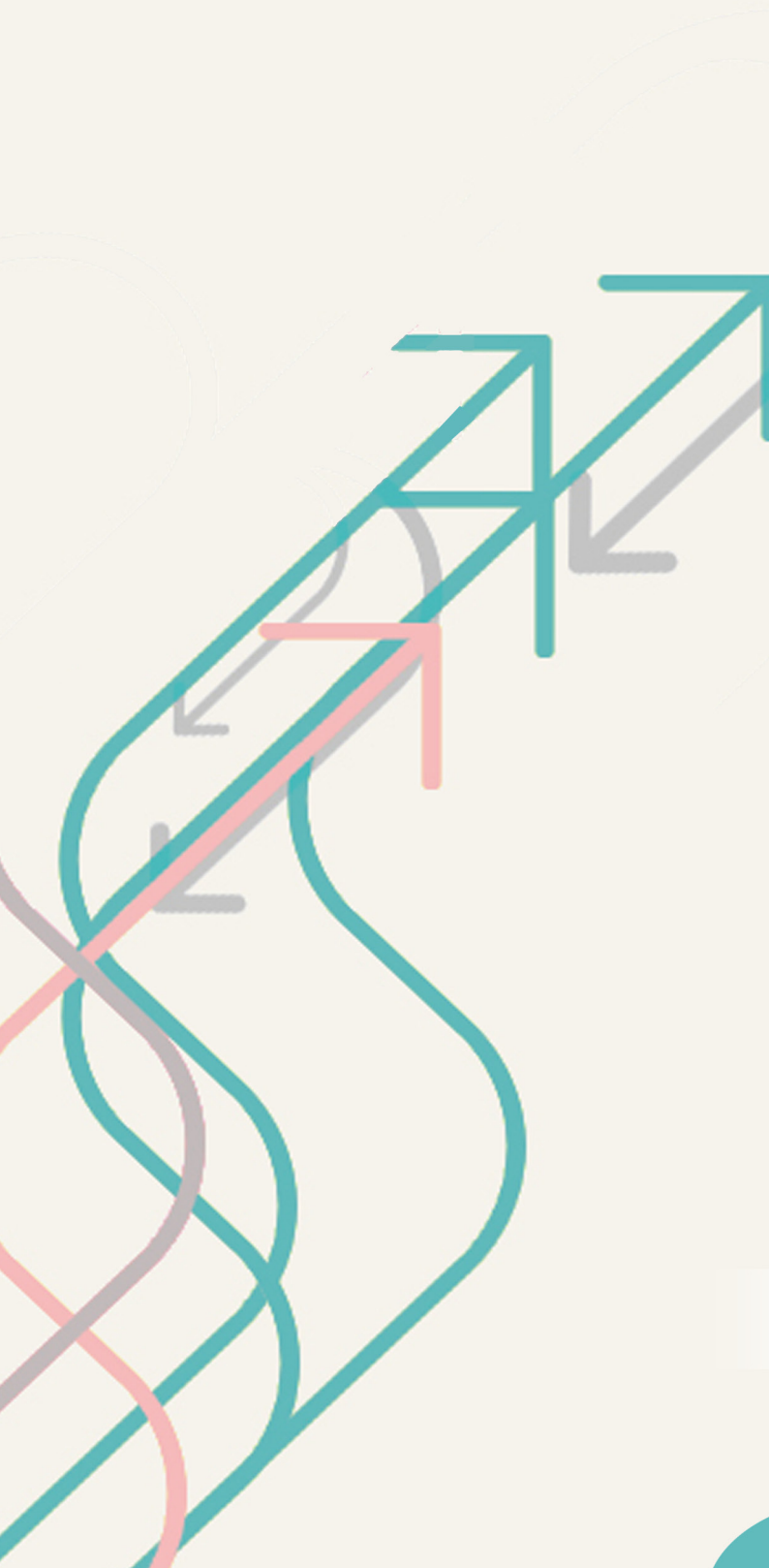




HMIS



Health Management
Information System
Scale-Up Project

eHMIS User Guide



SNRP REGIONAL HEALTH BUREAU



USAID
FROM THE AMERICAN PEOPLE



MEASURE
Evaluation

DECEMBER 2011



eHMIS

Electronic Health Management Information System

User Guide



USAID
FROM THE AMERICAN PEOPLE



DECEMBER 2011

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1.1. What's eHMIS?

eHMIS is a facility based data aggregation system that is used for public health related decision making. Its main users are public policy makers, health officers, researchers, planning departments of health offices, HMIS focal persons, data entry clerks and many others ranging from health facility to federal management levels.

Moreover, eHMIS is best referred as a system that is designed to fulfill the need of automated national health information management system. It helps to accurately and timely collect, aggregate, store, analyze and evaluate health related data from health facility to federal level. The system also has decision support tools mainly used by decision makers at the federal, regional, zonal and woreda levels.

eHMIS, therefore, is composed of a set of interrelated components and procedures organized with the objective of generating health information and intelligence to monitor the health status and health services of the nation to improve public health care leadership and management decisions at all levels.

1.1.1. Major parts of the eHMIS

eHMIS is a collection of interrelated tools that are integrated for a common purpose. The major tools include the Health System Reference Database (HSRD), Report Tracker, Data Entry, Aggregation, and Decision Support System (DSS).

1.2. Intended Audience

This user guide document is developed for users from regional to woreda levels working on eHMIS.

1.3. Document Organization

The user guide is designed in order to assist users to easily understand and use eHMIS. The user guide, therefore, describes tasks that are managed by eHMIS in a simple and step-by-step manner with appropriate screen shots that can help users easily understand how to interact with the eHMIS tools.

1.4. Notation Conventions

CONVENTION	MEANING
	Note: Identifies points of importance
	Helpful Hint: Identifies points that can speed up or ease an operation
	Warning: Identifies actions that will permanently change the data or adversely affect the system
	Important: Indicates points you must consider before taking action
<i>Italic/Bold</i> print	Words that need special attention

2.1. Introduction

This section of the manual deals with the hardware and software requirements of eHMIS Launch Pad. Besides, it provides details as to how users can easily install, reinstall, uninstall and use the eHMIS Launch Pad. A description is also provided to users about logging into the system and launching the system from the windows desktop or task bar.

2.2. System Requirements (Prerequisites)

In order to efficiently use the eHMIS Launch Pad, users are recommended to have the following hardware and software resources.

Processor	Pentium IV or higher with 500 MHz or higher
Memory	256 megabytes (MB) of RMA or higher
Hard Drive Space	500 megabytes (MB)
Display	800x600 or higher resolution monitor
Operating System	Windows XP Service Pack (SP) 3 or later
Framework	.NET 4.0 Framework
Others	Printer Microsoft Office 2003 Service Pack 2

2.3. How to Install eHMIS Launch Pad

This section of the user manual illustrates how you can easily install the eHMIS Launch Pad. The step by step installation instructions are provided considering the availability of a properly installed Windows XP operating system on user's computer.

1. Start Microsoft Windows



It's assumed that users have enough knowledge on operating computers and are familiar with the Windows XP environment.

2. Insert the eHMIS Installation CD into the CD-ROM drive. The eHMIS installation should begin automatically
3. Follow the on-screen instructions

After eHMIS is successfully installed, the eHMIS shortcut will be displayed on your desktop



If the installation does not begin automatically:

- A. Open the eHMIS installation CD
- B. Double-Click on the file Setup.exe or Launch Pad.exe

2.4. Reinstalling eHMIS Launch Pad

1. Place the **eHMIS Installation CD** in the CD-ROM drive
2. Start the installation process, and follow on-screen instructions



During the process, a message box will be displayed instructing you to remove eHMIS from your computer.

3. Click on the **Remove** button to remove **Launch Pad** from your computer
4. Click on the **Finish** button when prompted

After the **Launch Pad** has been removed—

5. Repeat the eHMIS Launch Pad installation steps (*see How to Install eHMIS Launch Pad*)

2.5. Uninstalling HMIS

Follow the following steps to uninstall the eHMIS Launch Pad from a computer.

1. Click on **Start** 
2. Click on the **Settings** option
3. Click on the **Control Panel** option and the

After the Control Panel window opens —

4. Click on the **Add/Remove Programs** option
5. Locate and click on the eHMIS **Launch Pad** in the *Currently Installed Programs* list
6. Click on the **Change/Remove** button
7. The eHMIS **Launch Pad** setup program will start, and will prepare your computer to uninstall eHMIS Launch Pad
8. Click on the **Remove All** Button.

2.6. How to Start the eHMIS Launch Pad

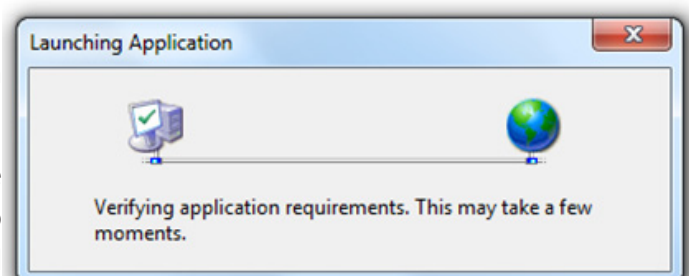
The Launch Pad is the central point where all eHMIS tools/applications are located. It is designed in such a way that users are regularly be notified of updates whenever they launch/start the application.

2.6.1. Starting the Launch Pad from Windows Desktop

From the Windows desktop, locate and double-click the eHMIS *Launch Pad* icon to start the application.

2.6.2. Starting the Launch Pad from Windows Taskbar

1. Click on **Start** button 
2. Click on **Programs (All Programs)**
3. Locate and click on the **eHMIS** menu and then select **Launch Pad**
4. The system will automatically check the availability of an update and notifies users to download if there are any updates. Then, it will automatically install and launch the application. Otherwise, the login screen of the application will be displayed.



2.7. Logging into the System

► To Log In

When the application is launched, it will display a login screen prompting users to enter a user name and password. Type your user name as well as password and hit the **Login** button. You can also click **Cancel** in case you want to exit the application.



If you fail to log into the eHMIS Launch Pad

- A. Make sure that you have provided the correct user name and/or password
- B. If the problem persists, please contact the system administrator

2.8. To Logout of the System

Click the **Log Out** button located at the top-right side of the screen

2.9. To Exit the Application

Before you exit the application, make sure that you have completed your work and saved your entry (if any) and then click the **File** menu and select **Exit**.

2.10. How to Change a Password

For security reasons, users are advised to change their passwords in a controlled but frequent manner. However, users should give important consideration to make the password strong enough so that others cannot easily break or by any means access it.

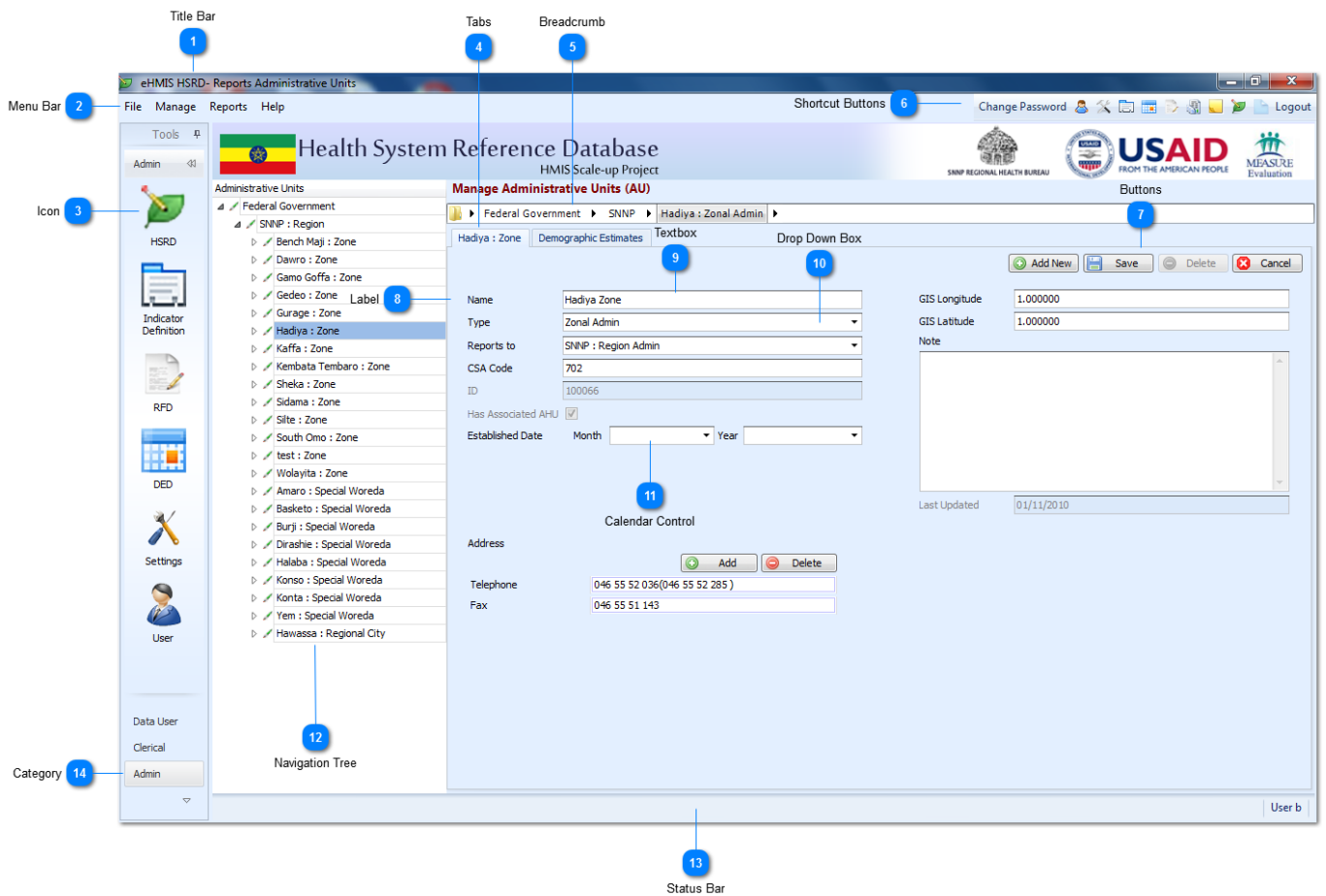
1. On the *Launch Pad*, click on **Change Password** option located at the top-right corner of the screen
2. Enter the old (existing) password, the new password and the Confirm Password (the new password for confirmation purpose)
3. Click on the **Save** button



While changing your password:

- A. Note that your old password will be changed permanently
- B. Choose a strong password which is composed of alphabets (a-z), numbers (0-9), and special characters (such as `_`, `$`, `@`, etc.)
- C. Do not share your password with other users or by any means expose if for ease of access

2.11. Screen Elements



The Health Systems Reference Database (HSRD) serves as a foundation and is the first and foremost prerequisite for a Health Information System (HIS).

Key input and components in the HSRD include, a master national ID that allows Administrative Units (AUs), Administrative Health Units (AHUs) and Service Delivery Units (SDUs) to be uniquely identified. Population, relationships, estimates and status serve as a central reference library for Administrative Units (AUs), Administrative Health Units (AHUs) and Service Delivery Units (SDUs).

3.1. The Purposes of the HSRD

The main purpose of the HSRD is to establish a reference database where by information regarding administrative units, administrative health units and service delivery units are stored. The HSRD will, therefore, serve as a central reference database that other tools such as Report Tracker, Data Entry, Scanning, Aggregation and DSS use.

3.2. Accessing the HSRD

The Launch Pad is the application where all eHMIS tools are accessed from. The tools are grouped into user privileges that include Clerical, Data User and Admin. HSRD data is only managed by administrators. Hence, non-admin users can only read, print and export HSRD reports (i.e. non-admin users can not add or remove HSRD data).

3.3. ADMINISTRATIVE UNITS (AUs)

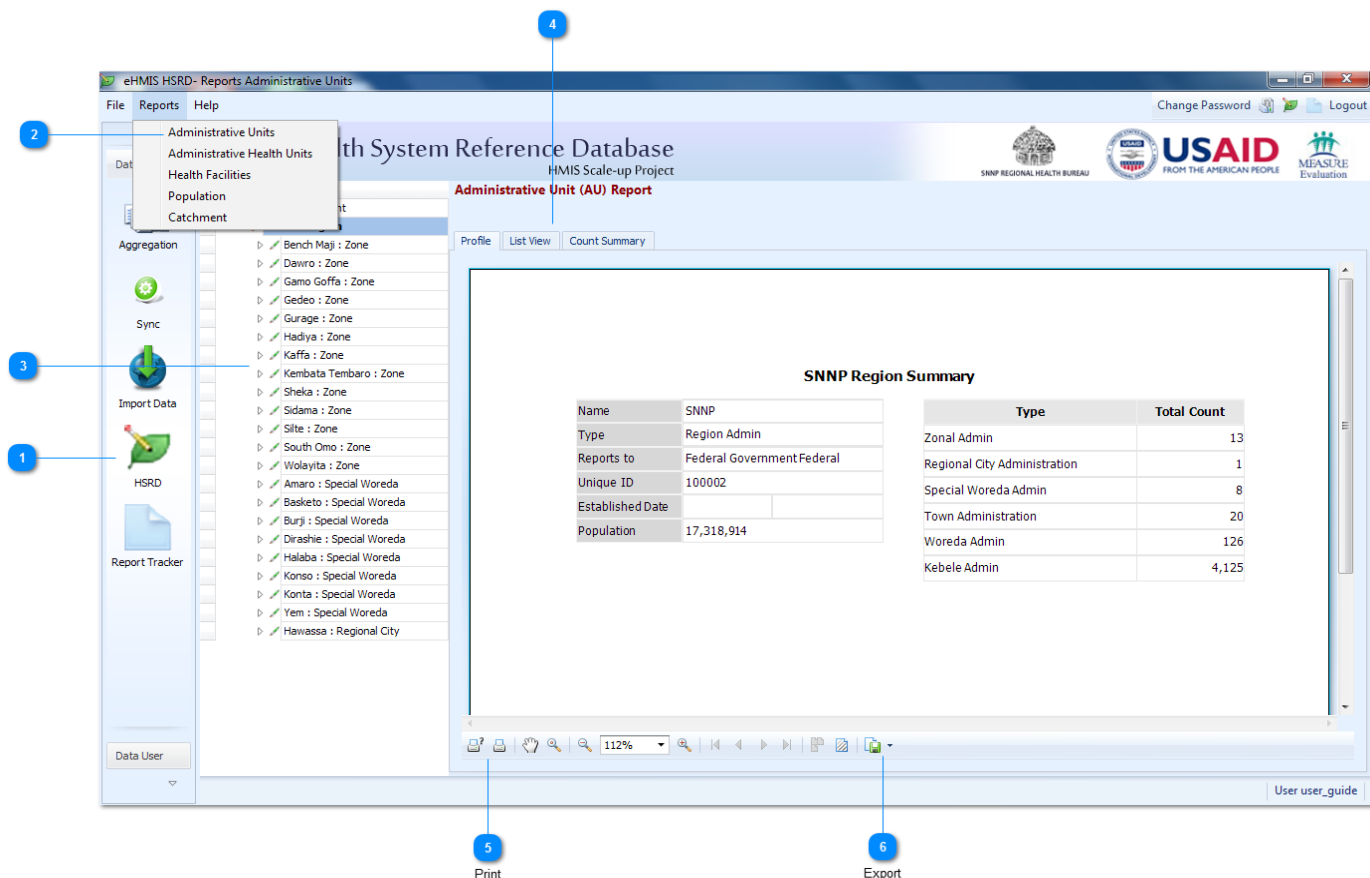
An Administrative Unit (AU) also referred to is an Administrative Political Unit (APU) is a political boundary that contains Administrative Health Units (AHUs) and Service Delivery Units (SDUs)/Health Facilities. Defining the Administrative boundary is very essential as AHUs and SDUs operate within this political boundary. Besides, relevant data such as population estimate and GIS information are obtained from Administrative Units.

AUs are structured as: Federal Government->Regions->Zones->Woredas->Kebeles or
Federal Governments->Regions->Special Woredas->Kebeles

3.3.1. Accessing Administrative Unit's reports

AU reports show the profile of a particular administrative unit, list of all AUs under the selected administrative unit, and the count summary.

1. Click on **HSRD** icon
2. Click **Reports** from the menu bar and then select **Administrative Units**
3. Select the appropriate AHU hierarchy you want to view the report for
4. Depending on the type of report you want to generate, click on the **Profile, List View** or **Count Summary** tab
5. Finally you can **Export** or **Print** the data



Demographic Estimates

All administrative units will have demographic estimates that are calculated and specified at the regional level. Basically, these estimates are obtained from the Central Statistics Agency (CSA) and it is recommended that demographic estimates are periodically revised.

3.4. ADMINISTRATIVE HEALTH UNITS (AHUs)

Administrative Health Units (AHUs) include Woreda/Special Woreda Health Office (WoHo), Zonal Health Department (ZHD), Regional Health Bureau (RHB) and Federal Ministry of Health (FMoH).

3.4.1. Accessing Administrative Health Unit's Reports

The AHU reports can provide concise and summarized information on the profile of AUs and AHUs, list of assets, transportation, telephone, mobile, and fax. In addition to this, the reports are generated in a chart as well as list views.

To generate AHU reports

1. Click **Reports** from the menu bar and then select **Administrative Health Units**
2. Navigate to the left side tree menu and select the AU and/or AHU
3. Depending on the type of report you want to generate, click on the **Profile, Chart, List View, Asset List, Transportation, Telephone, Mobile, or Fax** tab
4. Finally you can **Export** or **Print** the data

1. Click on the **Reports** menu item.

2. Select **Administrative Health Units** from the dropdown menu.

3. Click on the **Profile** tab in the report navigation bar.

4. The **SNNPR RHB Profile Report** is displayed, showing summary data for the selected Administrative Health Unit.



Assets

Assets include land line/wireless telephone, safe water, electricity, mobile service network and other telephone types.

3.5. HEALTH FACILITIES

A Service Delivery Unit (SDU) includes health facilities that act as a primary source for disease and service reporting. These SDUs comprise Hospitals (at the federal, regional, zonal and woreda levels), Health Centers (HCs), and Health Posts (HPs).

3.5.1. Accessing Health Facility's Reports

The Health Facility reports provide summarized information regarding the general profile of AUs and AHUs, list of assets, human resources, and transportation. Besides, it offers users with the option to Print Woreda forms.

1. Click **Reports** from the menu bar and then select **Health Facilities**
2. Navigate to the left side tree menu and select the AU and/or AHU
3. Depending on the type of report you want to generate, click on the **Profile List**, **Assets** or **Human Resources**
4. Finally you can **Export** or **Print** the data



Filtering Health Facilities

Health facility reports can be filtered based on the facility's *Type*, *Ownership Type*, *Construction Status* and *Operation Status*.

3.5.2. Population reports

To generate Administrative Unit's *Population* report:

1. Click on **Reports** from the menu bar and then select **Population**
2. Navigate through the tree menu and select the particular AU for which you want to generate the report
3. Specify the **Start Year** value
4. Finally **Export** or **Print** the data



Show AU's Missing Population

To display all AUs whose population data is not yet entered, select the **Show AUs Missing Population** checkbox.

3.5.3. Catchment reports

To generate the SDU's/Health Facility's *Catchment* report:

1. First, click **Reports** from the menu bar and then select **Catchment**
2. Navigate to the left side tree menu and select the AU and/or AHU
3. Specify the **Start Year**
4. Finally **Export** or **Print** the data

Health facilities report data through Service (Monthly and Annual) and Disease (OPD and IPD) forms. The reporting forms collected from the health facilities (i.e. Health Post, Health Center and/or Hospitals) will be sent to woreda AHUs, zone AHUs and regional health bureau in the respective order. In the process of collecting data using the reporting forms and delivering them to appropriate AHUs, the Report Status Tracker application will serve its purpose of tracing the status of the reporting forms so that they can be delivered on time without any loss.

The Report Status Tracker application can be considered as appropriate and powerful tool for tracking reporting forms receipt and data entry.

4.1. The Purposes of the Report Status Tracker

The Report Status Tracker application will be essential for tracing reports so that those reports that arrived on time, delayed and lost can be best managed.

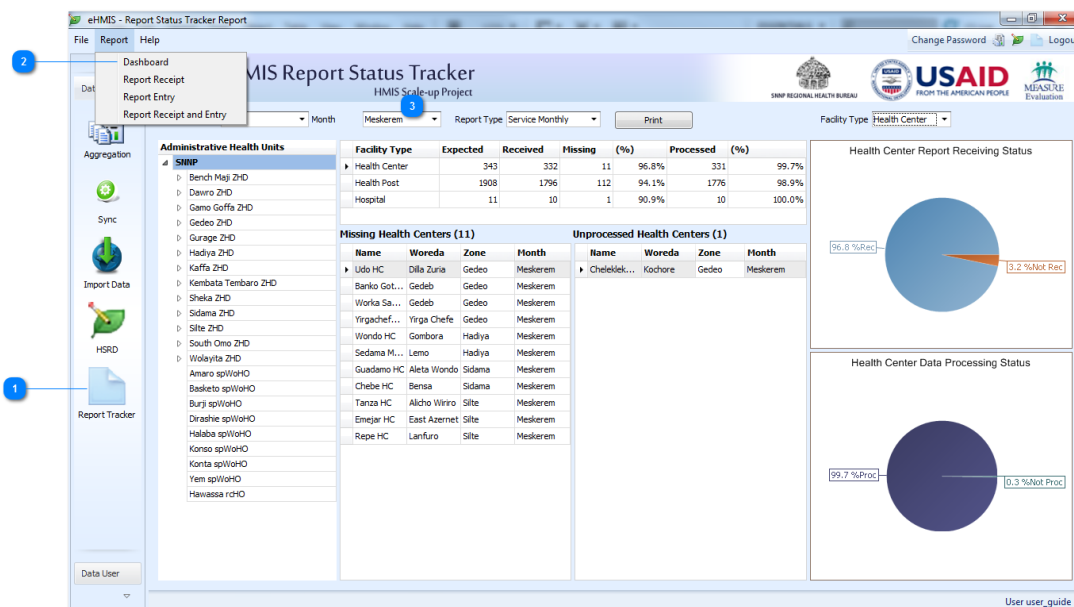
4.2. DASHBOARD

The Dashboard on the Report Tracker application provides a summarized information regarding the number of reports expected from health facilities, reports that are received (arrived at the Regional Health Bureau), missed, and lists health facilities whose reporting forms do not arrive at the Regional Health Bureau on time.

Besides, the charts on the dashboard provide health facility's report receiving as well as data processing statuses.

4.2.1. Accessing the Dashboard

1. Click on **Report Tracker** icon from the **Launch Pad**
2. Click **Reports** from the menu bar and then select **Dashboard**
3. Select the appropriate AHU you want to view the report for
4. Specify the **Year, Month, Report Type** and **Facility Type**
5. Finally you can **Print** the data

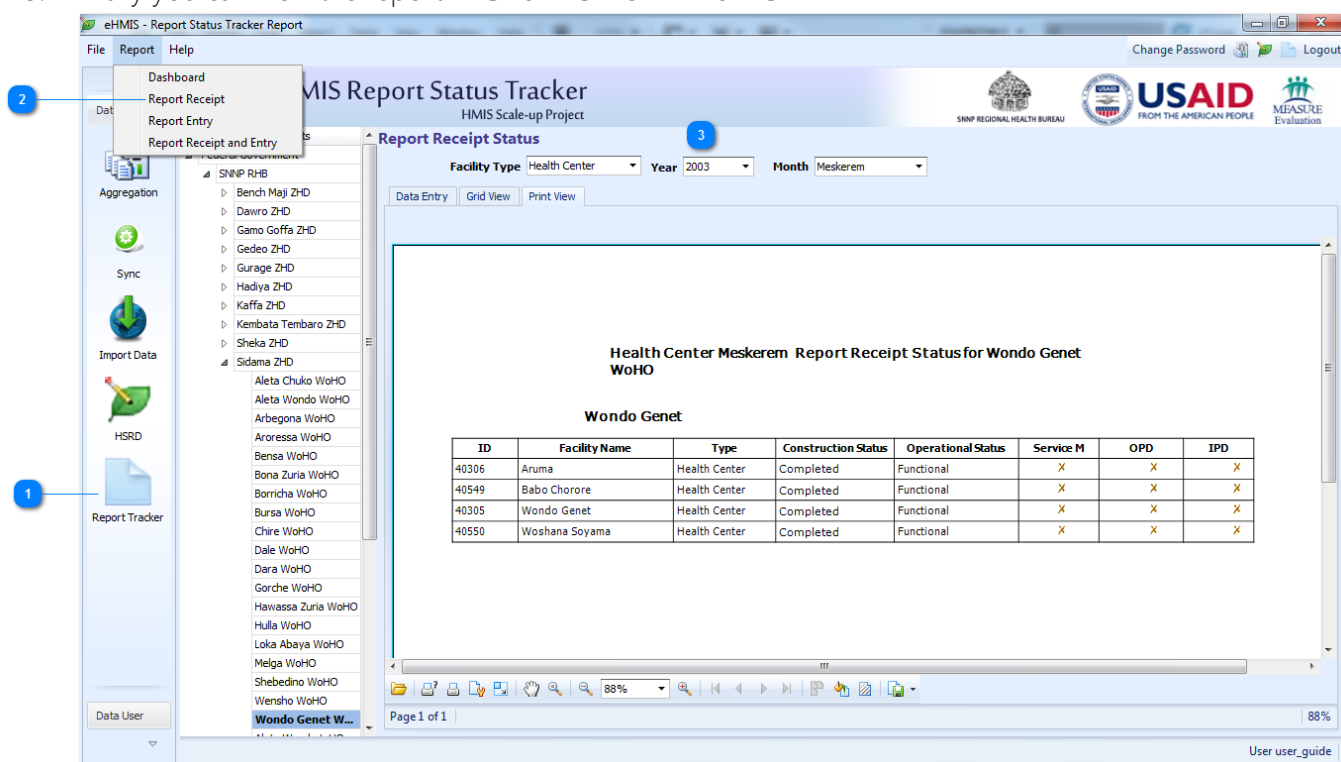


4.3. Report Receipt

The report receipt feature of the Report Tracker Application helps users to access report delivery information. When reporting forms arrive at the Regional Health Bureau, the person who is entitled to receive all reports will flag the reports of specific health facilities as received. Hence, by using this feature, it's possible for AHU staffs at the Woreda and Zonal levels to track the reporting forms they sent to the RHB. This feature will also ensure that reports are delivered without loss and delay.

4.3.1. Accessing the Report Receipt

1. Click on **Report Tracker** icon from the Launch Pad
2. Click on **Reports** from the menu bar and then select **Report Receipt**
3. Select the appropriate administrative hierarchy you want to view the report for
4. Specify the **Facility Type, Year** and **Month**
5. Finally you can view the report in **Grid View** or **Print View**



4.4. Report Entry

This feature of the *Report Tracker* can be used to track the reports whose data processing is complete or in progress.

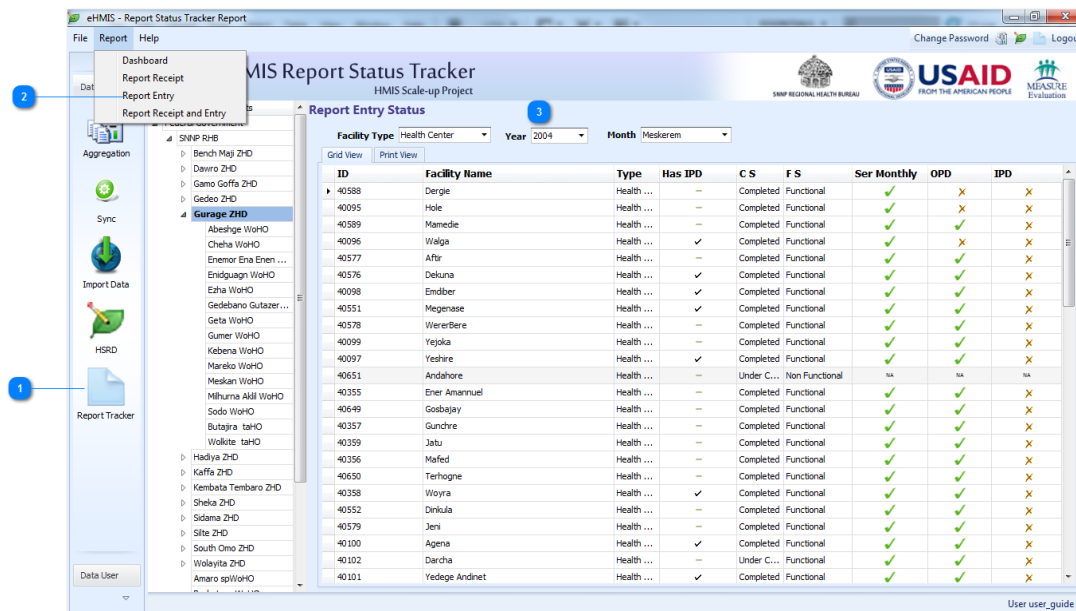
4.4.1. Accessing the Report Entry

1. Click on **Report Tracker** icon from the Launch Pad
2. Click on **Reports** from the menu bar and then select **Report Entry**
3. Select the appropriate administrative hierarchy you want to view the report for
4. Specify the **Facility Type, Year** and **Month**
5. Finally you can view the report in **Grid View** or **Print View**



To Print/Export the Receipt and/or Entry reports

To print and/or export the reports, change the view to *Print View* and then select the Print or Export buttons.

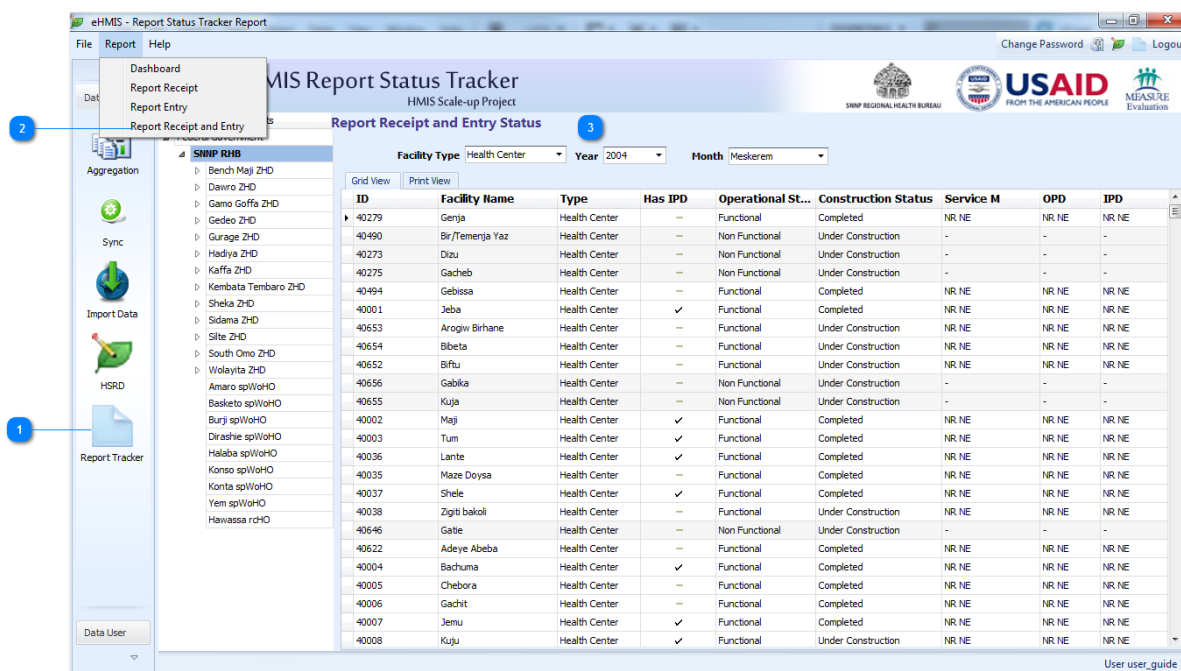


4.5. Report Receipt and Entry

This feature combines the Receipt as well as Entry reports.

4.5.1. Accessing the Report Receipt and Entry

1. Click on **Report Tracker** icon from the Launch Pad
2. Click **Reports** from the menu bar and then select **Report Receipt and Entry**
3. Select the appropriate administrative hierarchy you want to view the report for
4. Specify the **Facility Type**, **Year** and **Month**
5. Finally you can view the report in **Grid View** or **Print View**



Aggregation (summarization) is one of the essential tasks to carry out after data is properly collected through the Manual Data Entry Tool or Scanning process. The data that is collected from different AHUs will be summed up using the Aggregation tool.

The tool offers an option by which users can specify form types (i.e. Service Monthly, Disease OPD, Disease IPD and Service Annual forms), and the month(s) and year based on which you want to aggregate data.

5.1. Features of the Aggregation Tool

5.1.1. Aggregation at Different Levels

The Aggregation Tool can be implemented to aggregate data at woreda, zonal and regional levels with the option that allows users to view a summarized profile report of an Administrative Health Unit (AHU).

5.1.2. RAW DATA

The Aggregation Tool is dedicated to generating aggregate (summary) results. However, it also incorporates a feature that allows users to view the raw data collected from the health facilities.

5.1.3. Generating Reports

The main purpose of the Aggregation Tool is to produce summary of the data (aggregate results) at woreda, zonal and regional levels. For this purpose, the tool provides a mechanism by which users can generate reports featuring summarized (aggregated) data based on the AHU with the type of form, and reporting month and year specified.

5.1.4. AU PROFILE

In addition to other features, the Aggregation tool provides a summary profile of a specific Administrative Unit (AU) selected. The profile summary can be presented in a tabular as well as chart forms.

5.1.5. PRINT/EXPORT REPORTS

After generating the reports, users can print or export them to PDF and/or Microsoft Excel file formats.

5.2. Accessing the Aggregation Reports

1. Click on **Aggregation** icon from the **Launch Pad**
2. Select the appropriate administrative hierarchy you want to view the report for
3. Specify the Report Type (i.e. **Service**, **Disease OPD**, **Disease IPD**, **Service Annual** or **Profile**)
4. Specify **Month-Year** range
5. Finally you can **Print** and/or **Export** the data

Month Range

2

3

4 >> Specify Month, Year Range

5

Aggregation Icon

Aggregation

Sync

Import Data

Report Tracker

From 2003 Mizia To 2004 Meskorem

Service Delivery Aggregate Report For SNNP From Mizia 2003 to Meskorem 2004

S.NO	Activity	Public Facilities			Private not-for-profit Facilities			Private for-profit Facilities			All Facilities Total	WorHO	All HH
		Health Posts	Hospitals	Total	Health Centers	Clinics	Hospitals	Total	Clinics	Hospitals			
Number of Facilities reported													
	Total no of Facilities	4,030	662	19	4,711	16	25	2	43	12	0	0	802
Family Health													
A1	Reproductive Health												
A1.1	Family Planning Acceptors												
T.1.1	Total new and repeat acceptors	71,509	26,859	1,314	99,682	636	100	0	936	---	---	0	100,618
T.1.2	New acceptors	36,004	13,945	562	50,511	538	11	0	549	---	---	0	51,060
T.1.3	Repeat acceptors	35,505	12,914	752	48,171	298	89	0	387	---	---	0	48,558
A1.2	Antenatal Care												
T.1.3	First antenatal attendances	22,207	20,065	628	42,890	1,368	472	249	2,089	---	---	0	45,079
A1.4	Abortion Care												
T.1.4	Abortion care	1,455	365	1,820	4	115	16	135	---	---	0	1,955	1,955
A1.5	Deliveries and Outcomes												
T.1.5.1	Attended by skilled attendant	3,480	1,126	4,606	360	407	74	841	---	---	0	5,449	5,449
T.1.5.1.1	Live births	3,377	1,093	4,430	366	381	73	819	---	---	0	5,240	5,240
T.1.5.1.2	Still births	103	75	178	4	26	1	31	---	---	0	209	209
T.1.5.2	Attended by HEW	7,658	---	7,658	---	---	---	---	---	---	0	7,658	7,658
T.1.5.2.1	Live births	7,619	---	7,619	---	---	---	---	---	---	0	7,619	7,619
T.1.5.2.2	Still births	280	---	280	---	---	---	---	---	---	0	280	280
T.1.5.3	Attended by ITBA	9,722	---	9,722	---	---	---	---	---	---	0	9,722	9,722
T.1.5.3.1	Total Birth	17,650	---	17,650	---	---	---	---	---	---	0	17,650	17,650
T.1.5.3.2	Child Death	1,117	---	1,117	---	---	---	---	---	---	0	1,117	1,117
T.1.5.3.3	Maternal death	174	---	174	---	---	---	---	---	---	0	174	174
T.1.5.3.4	Total Death	233	---	233	---	---	---	---	---	---	0	233	233
T.1.6	Caesarean	---	0	214	214	47	106	0	153	---	---	0	427
T.1.7a	Institutional maternal death	10	---	10	---	---	---	---	---	---	0	10	10
A1.6	Early Neonatal Care												
T.1.6	Early neonatal deaths 24 hours of life (institutional)	88	31	7	127	4	0	0	4	---	---	0	131
A1.7	Postnatal Care												
T.1.7	First post natal attendances	17,499	4,712	1,074	23,285	351	382	106	849	---	---	0	24,134
A1.8	Child Health - Weight Monitoring												
T.1.8	Number of newborns weighed	---	---	---	---	---	---	---	---	---	---	---	---



To Print/Export Aggregation Reports

To print and/or export the reports, use the Print or Export buttons at the bottom of the reports.

5.3. Custom Report

One of the many reasons that make the Aggregation tool powerful is its ability to support custom reports. Users can produce customized reports based on the features they want the reports to include and save them for later use. It's also possible to further edit the customized reports to incorporate new features or remove existing ones.

5.3.1. Creating Custom Reports

1. Click on **Aggregation** icon from the Launch Pad
2. Click on **Custom Report** menu and then select **New**
3. Specify the **Name, Title, Data Element** to include in the report, **Total Items (i.e. Annual and/or Quarter Items)** and short name
4. Finally click on **Create Report**

Annual/Quarter Items

3

1

2

4

5

6

7

8

Create Report Button

Create custom report

Name

Name of the Report

Title

Report title

Total Items

Annual Items

Quarter Items

Selected Items

Use Alias (Short name)

If Short name is not entered Description will be used

Description

Short name

Total new and repeat acceptors

>

<

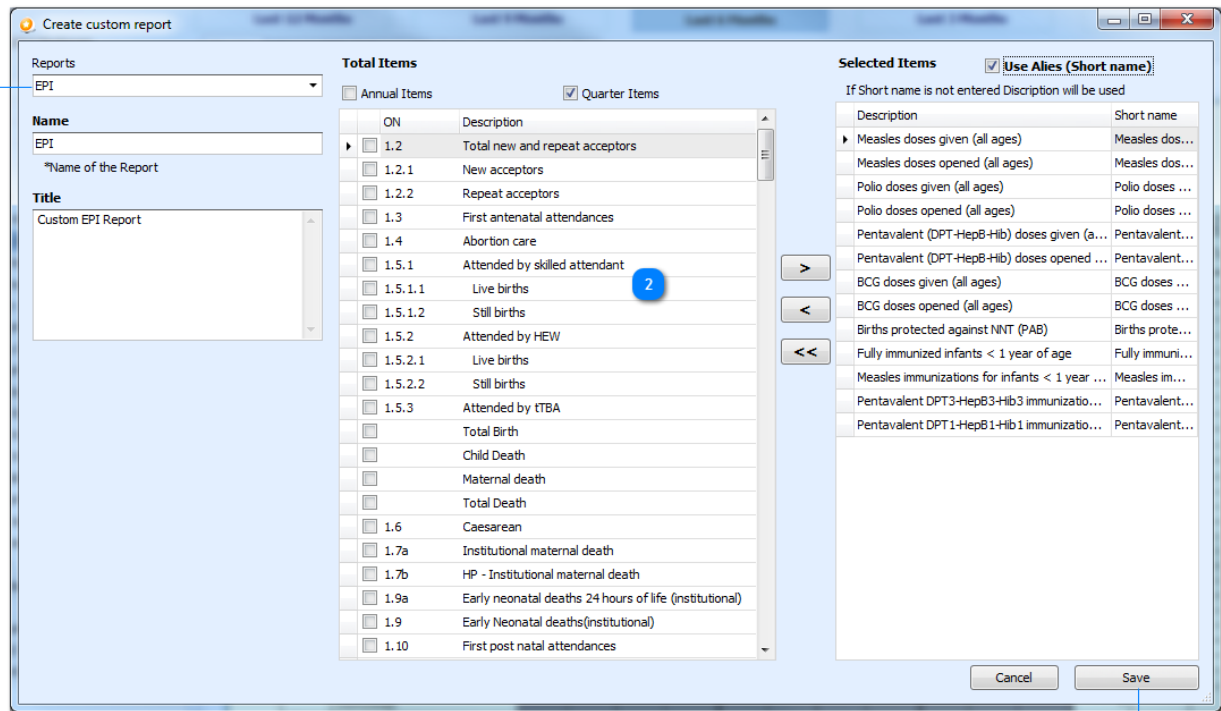
<<

Cancel

Create report

5.3.2. Editing Custom Reports

1. Click on **Aggregation** icon from the Launch Pad
2. Click on **Custom Report** menu and then select **Edit**
3. Specify the **Report**
4. Edit the name, title and data elements of the custom report
5. Finally click on **Save** button



Create custom report

Reports: **EPI**

Name
EPI
*Name of the Report

Title
Custom EPI Report

Total Items

☐ Annual Items ☒ Quarter Items

ON	Description
☒ 1.2	Total new and repeat acceptors
☐ 1.2.1	New acceptors
☐ 1.2.2	Repeat acceptors
☐ 1.3	First antenatal attendances
☐ 1.4	Abortion care
☐ 1.5.1	Attended by skilled attendant
☐ 1.5.1.1	Live births
☐ 1.5.1.2	Still births
☐ 1.5.2	Attended by HEW
☐ 1.5.2.1	Live births
☐ 1.5.2.2	Still births
☐ 1.5.3	Attended by RTBA
☐	Total Birth
☐	Child Death
☐	Maternal death
☐	Total Death
☐ 1.6	Caesarean
☐ 1.7a	Institutional maternal death
☐ 1.7b	HP - Institutional maternal death
☐ 1.9a	Early neonatal deaths 24 hours of life (institutional)
☐ 1.9	Early Neonatal deaths (institutional)
☐ 1.10	First post natal attendances

Selected Items ☒ Use Alias (Short name)

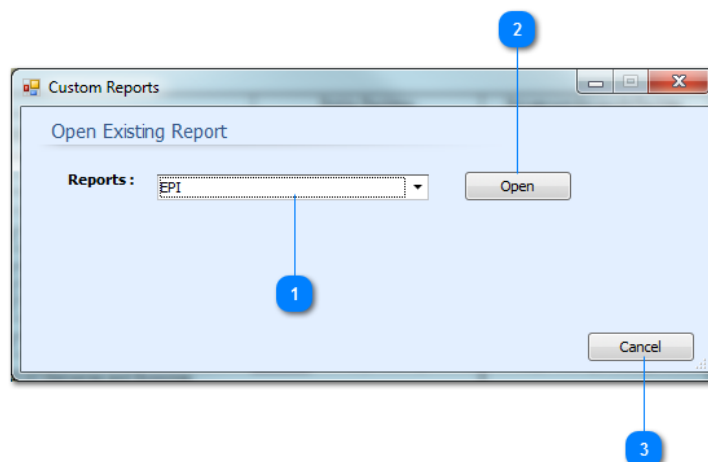
If Short name is not entered Discription will be used

Description	Short name
Measles doses given (all ages)	Measles dos...
Measles doses opened (all ages)	Measles dos...
Polio doses given (all ages)	Polio doses ...
Polio doses opened (all ages)	Polio doses ...
Pentavalent (DPT-HepB-Hib) doses given (a...	Pentavalent...
Pentavalent (DPT-HepB-Hib) doses opened ...	Pentavalent...
BCG doses given (all ages)	BCG doses ...
BCG doses opened (all ages)	BCG doses ...
Births protected against NNT (PAB)	Births prote...
Fully immunized infants < 1 year of age	Fully immuni...
Measles immunizations for infants < 1 year ...	Measles im...
Pentavalent DPT3-HepB3-Hib3 immunizatio...	Pentavalent...
Pentavalent DPT1-HepB1-Hib1 immunizatio...	Pentavalent...

Cancel Save

5.3.3. Opening the Custom Report

1. Click on **Aggregation** icon from the Launch Pad
2. Select the appropriate administrative hierarchy you want to view the report for
3. Click on **Custom Report** menu and then select **Open**
4. Specify the **Custom Report** you want to open and then click on **Open**
5. Finally **Print** and/or **Export** the report



Custom Reports

Open Existing Report

Reports: **EPI**

Open

Cancel

Print 1
Export 2

Preview
[Close] [Maximize] [Full Screen]

File View Background
[Print] [Export] [Zoom In] [Zoom Out] [Reset Zoom] [Find] [Find Next] [Find Previous] [Close All] [Close] [Save] [Open] [Recent]

Custom EPI Report

ZHD: Gurage
WoHO: Abeshge
Period: From Miazia 2003 to Meskerem 2004

Health Facilities	Measles doses given (all ages)	Measles doses opened (all ages)	Polio doses given (all ages)	Polio doses opened (all ages)	Pentavalent (DPT-HepB-Hib) doses given (all ages)	Pentavalent (DPT-HepB-Hib) doses opened (all ages)	BCG doses given (all ages)	BCG doses opened (all ages)	Births protected against NNT (FAB)	Fully immunized infants < 1 year of age	Measles immunizations for infants < 1 year of age	Pentavalent DPT3-HepB3-Hib3 immunizations for infants	Pentavalent DPT1-HepB1-Hib1 immunizations for infants
Hole HC	2	1	15	2	16	16	3	3	2	2	2	7	5
Walga HC	108	17	409	28	259	259	78	11	179	108	108	83	87
Darge HC	10	3	103	12	101	101	29	3	0	10	10	29	36
Mamedie HC	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	120	21	527	42	376	376	110	17	181	120	120	119	128

Page 1 of 1
100% [Zoom In] [Zoom Out] [Reset Zoom]

3 Zoom

The Decision Support System (DSS) is the ultimate output of every eHMIS tool. The DSS is the dashboard that provides decision makers access to data collected that can be easily analyzed for effective and timely decision making.

The DSS employs simple and yet powerful charting tools such as line, bar and maps to communicate information in a way that makes the thousands and millions of records in the database represented in simple user-friendly form.

6.1. Drill Down: Targeting Decision Making

For the information presented to be useful and have credibility, users must have the ability to drill down to specific data so they can identify areas that need attention or that are effective. The DSS, therefore, provides a feature for the user to “zoom in” to maps and charts and allow to drill down to the lowest level of data that is available.

6.2. Indicator Definition

For those who are interested in inquiring about the details of how the indicator is calculated, the DSS, using the Indicator Definition tool, provides a screen where the user can learn exactly which fields in the data source as well as demographic estimation (as applicable) were used in calculating the indicator.

6.3. Trends: Line Charts

Users can easily run reports which depict trends of indicators at the regional, zonal or woreda levels but also for a specific health facility even as low as health posts. Further, users may click on each point/unit of the trend and see a more detailed trend. For example, if the unit of each point in the line chart is a year, the user can zoom it to a given month and monitor the trends of the specific performance at monthly level.

6.4. Comparison Using Bar Charts

The DSS provides a mechanism to easily compare data at different levels in the AHU hierarchy.

6.5. Maps and Tables

Using shape file obtained from the HSRD (see HSRD), the DSS provides dynamic maps that the user can use to analyze trends and performance at various levels of the eHMIS. Maps can be presented at the regional level with drill down ability to woredas or even to the kebele level where shape files are available. Further more, the DSS allows the user to customize various scales to calculate the drawing of the maps.

In addition to the line, bar charts and maps, the DSS also has tabular charts which allow to actually see the raw numbers behind the graphical charts. Besides, the user can also drill down to the lowest level data that is available.

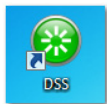
6.5.1. Printing/Exporting the Reports

The DSS is designed to allow users to easily print and export results using the popular export formats such as Excel or PDF.

6.6. Accessing the DSS

6.6.1. From the Desktop

Click on the **DSS** icon from the Desktop

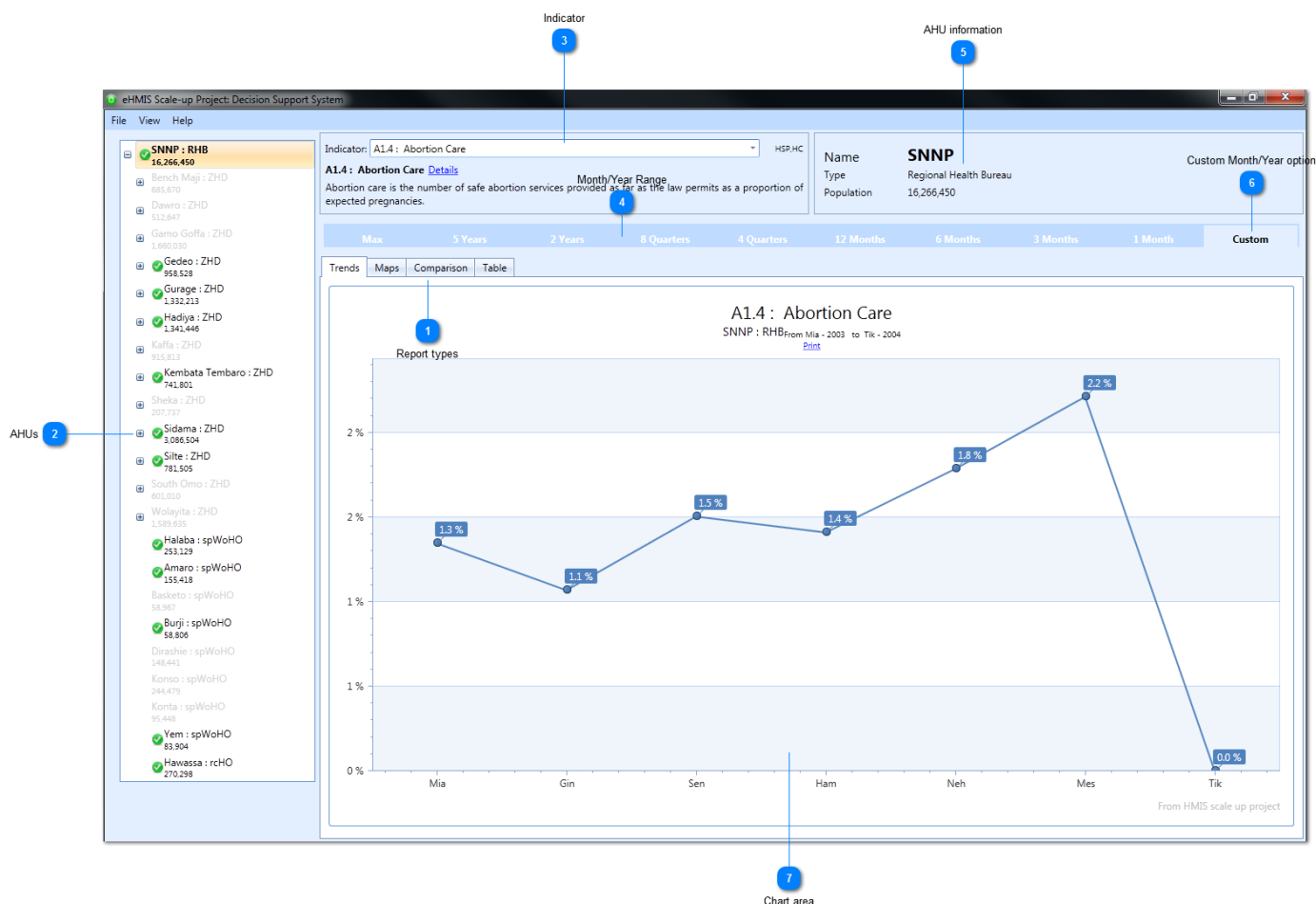


6.6.2. From the Start Menu

1. Click on **Start** button
2. Click on **Programs (All Programs)**
3. Locate and click on the **eHMIS** option and then select **DSS**
4. The system will automatically launch the DSS



DSS Splash Screen

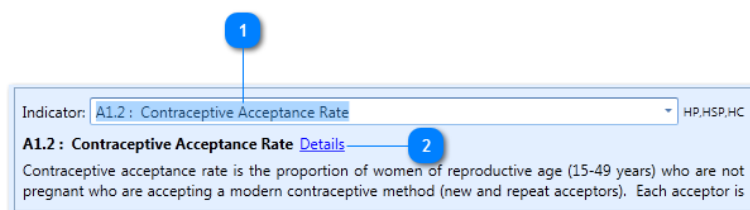


DSS Main Screen

6.7. Trends

Open the **DSS** (see Accessing the DSS) and then,

1. Select the appropriate **AHU** hierarchy from the left side tree
2. Select the **Indicator** based on which to generate the trend



Indicator: **A1.2 : Contraceptive Acceptance Rate** HP,HSP,HC

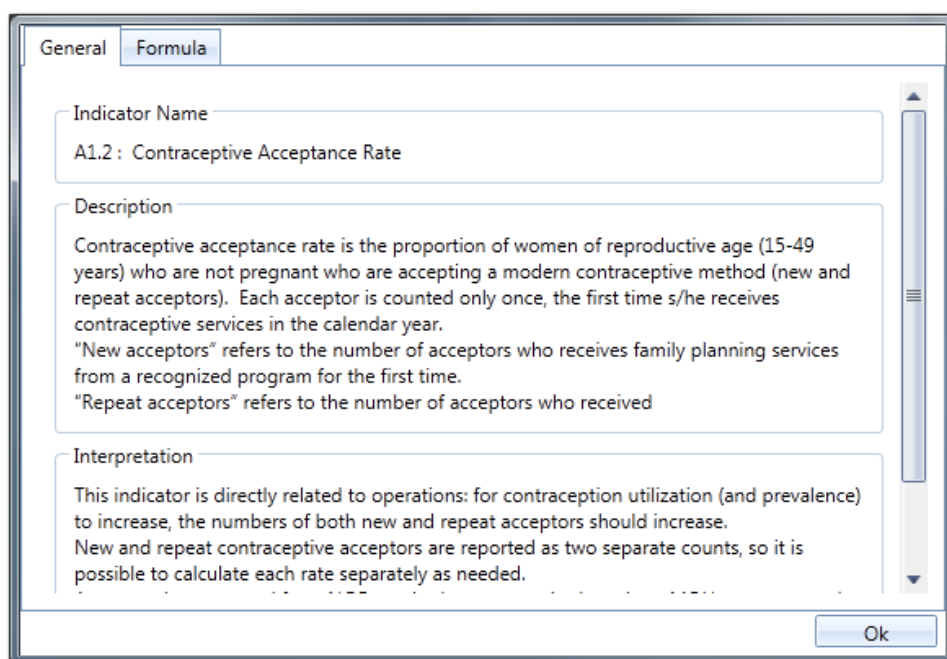
A1.2 : Contraceptive Acceptance Rate [Details](#)

Contraceptive acceptance rate is the proportion of women of reproductive age (15-49 years) who are not pregnant who are accepting a modern contraceptive method (new and repeat acceptors). Each acceptor is



Indicator Details

To view the details of a given indicator (such as general description and formula), click on the *Details* link which is available next to the indicator name.



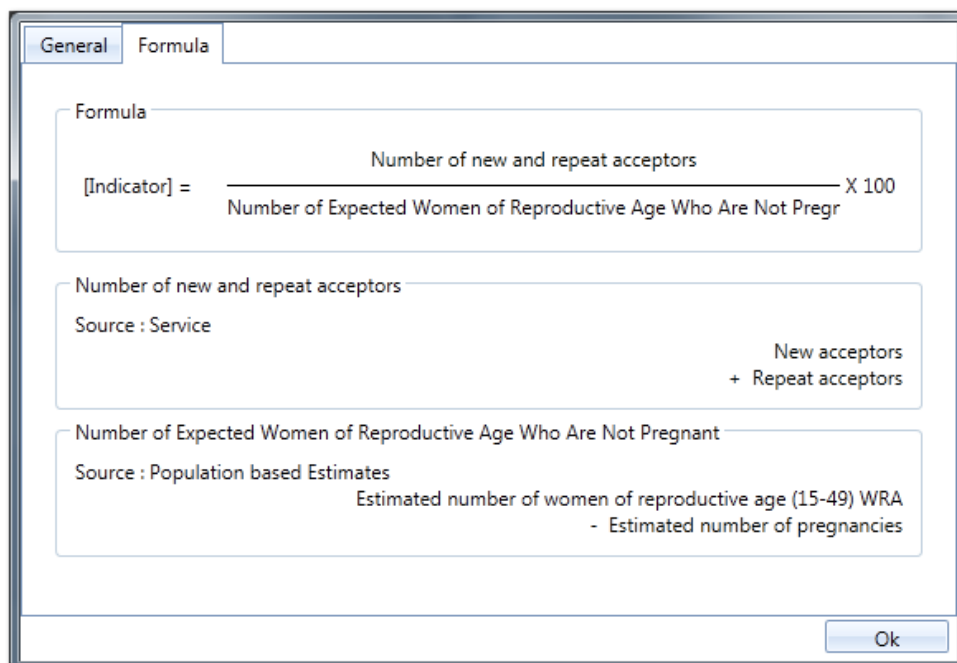
General Formula

Indicator Name
A1.2 : Contraceptive Acceptance Rate

Description
Contraceptive acceptance rate is the proportion of women of reproductive age (15-49 years) who are not pregnant who are accepting a modern contraceptive method (new and repeat acceptors). Each acceptor is counted only once, the first time s/he receives contraceptive services in the calendar year.
"New acceptors" refers to the number of acceptors who receives family planning services from a recognized program for the first time.
"Repeat acceptors" refers to the number of acceptors who received

Interpretation
This indicator is directly related to operations: for contraception utilization (and prevalence) to increase, the numbers of both new and repeat acceptors should increase.
New and repeat contraceptive acceptors are reported as two separate counts, so it is possible to calculate each rate separately as needed.

Ok



General Formula

Formula
[Indicator] =
$$\frac{\text{Number of new and repeat acceptors}}{\text{Number of Expected Women of Reproductive Age Who Are Not Pregnant}} \times 100$$

Number of new and repeat acceptors
Source : Service
New acceptors
+ Repeat acceptors

Number of Expected Women of Reproductive Age Who Are Not Pregnant
Source : Population based Estimates
Estimated number of women of reproductive age (15-49) WRA
- Estimated number of pregnancies

Ok

3. Specify the Month-Year range



Month-Year Range. Select:

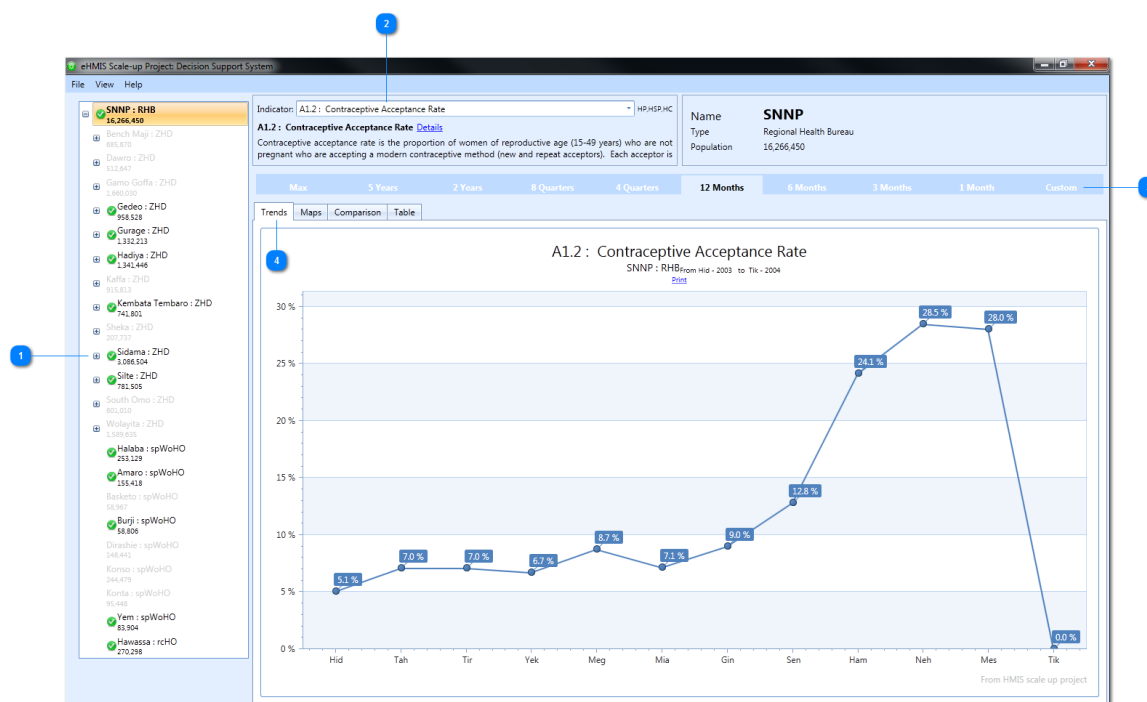
- *Max* to display the whole years data since HMIS start year
- *5 Years* to display data of the last five years
- *2 Years* to display data of the last two years
- *8 Quarters* to display data of the last 8 quarters
- *4 Quarters* to display data of the last 4 quarters
- *12 Months* to display data of the last 12 months
- *6 Months* to display data of the last 6 months
- *3 Months* to display data of the last 3 months
- *1 Month* to display data of the last 1 month
- *Custom* to specify a custom month-year range

4. Click on **Trends**



To drill-down

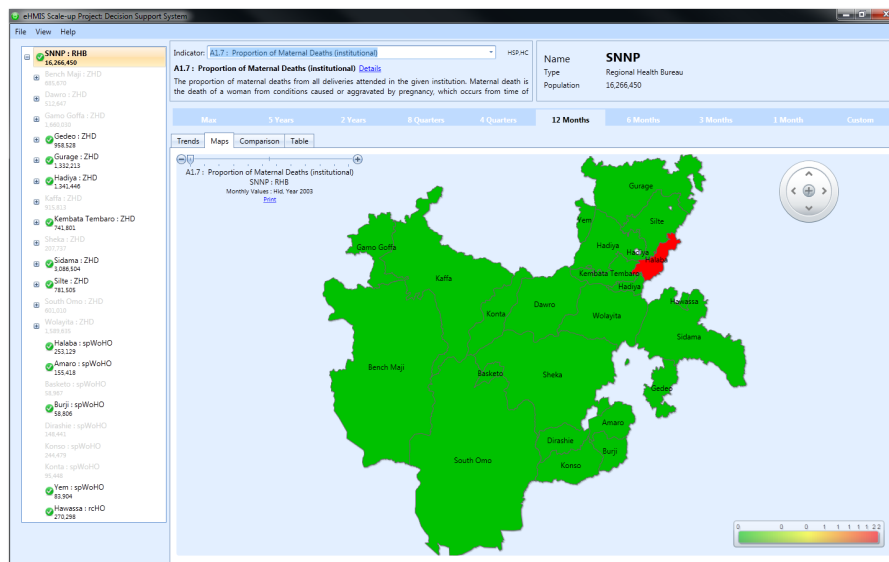
Put the mouse on the trend connecting points to see details of the numerator, denominator and indicator information. Besides, double clicking on the connecting points will help you drill-down to details ranging from Zonal, Woreda and Health Center information for the selected indicator.



6.8. Map

Open the **DSS** (see Accessing the DSS) and then,

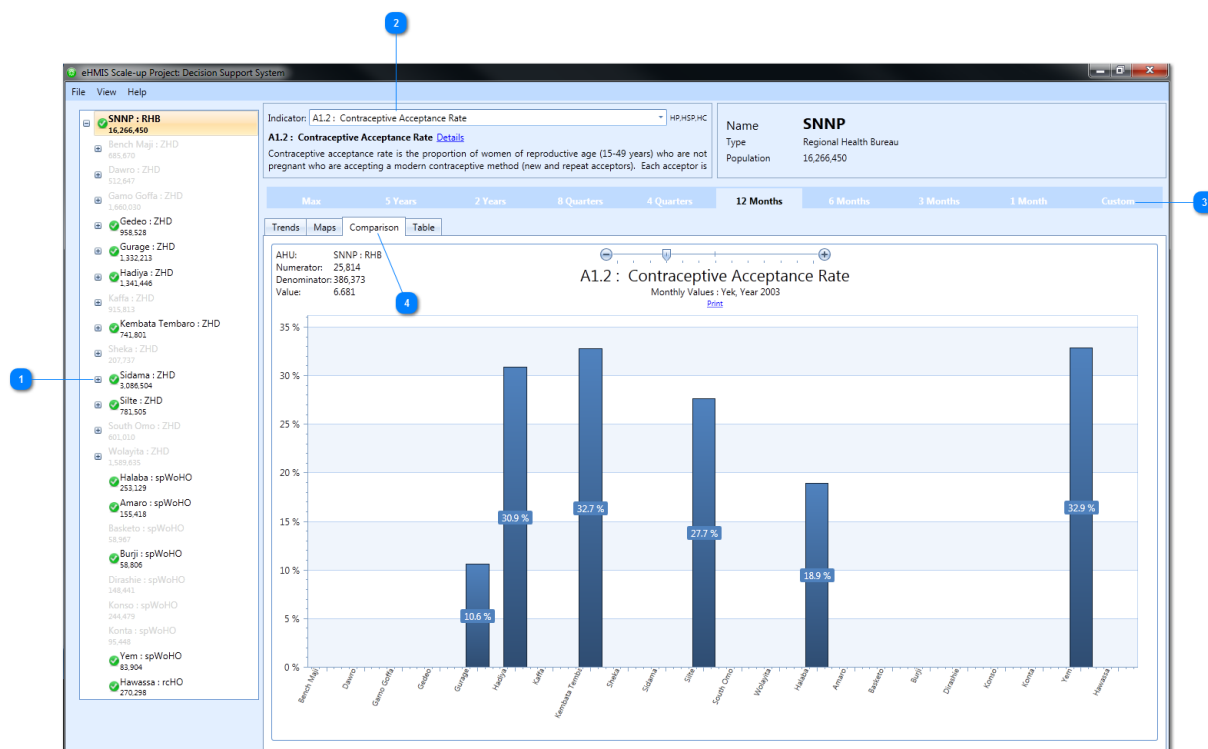
1. Select the appropriate **AHU** hierarchy from the left side tree
2. Select the **Indicator** based on which to compare data
3. Specify the Month-Year range
4. Click on **Maps**



6.9. Comparison

Open the **DSS** (see Accessing the DSS) and then,

1. Select the appropriate **AHU** hierarchy from the left side tree
2. Select the **Indicator** based on which to compare data
3. Specify the Month-Year range
4. Click on **Comparison**



To drill-down

Double click on the bars of the chart to drill-down to details ranging from Zonal, Woreda and Health Center information for the selected indicator.

6.10. Table Data

Open the **DSS** (see Accessing the DSS) and then,

1. Select the appropriate **AHU** hierarchy from the left side tree
2. Select the **Indicator** based on which to compare data
3. Specify the Month-Year range
4. Click on **Table**

The screenshot shows the eHMS Scale-up Project Decision Support System interface. The left sidebar contains a tree of AHU hierarchies. The main panel displays the selected indicator, A1.2: Contraceptive Acceptance Rate, and the selected time range, 12 Months. The table below shows the contraceptive acceptance rate data for the selected AHU hierarchy and time range.

Name	Year	Month	Numerator	Denominator	Indicator
Enemor Ena Enen	2003	Hidar	0	4,109	0.0%
Enemor Ena Enen	2003	Tahiras	234	4,109	5.7%
Enemor Ena Enen	2003	Tir	275	4,109	6.7%
Enemor Ena Enen	2003	Yekatit	248	4,109	6.0%
Enemor Ena Enen	2003	Megabit	187	4,109	4.6%
Enemor Ena Enen	2003	Miazia	164	4,109	4.0%
Enemor Ena Enen	2003	Ginbot	143	4,109	3.5%
Enemor Ena Enen	2003	Senie	147	4,109	3.6%
Enemor Ena Enen	2003	Hamle	2,697	4,191	64.4%
Enemor Ena Enen	2003	Nehasie	2,286	4,191	54.5%
Enemor Ena Enen	2004	Meskerem	1,873	4,191	44.7%
Enemor Ena Enen	2004	Tikint	0	4,191	0.0%



To Show Details

Click on **Show Details** checkbox to display the Health Post as well as Health Center details of the selected woreda and month-year range.

After the reporting forms are collected from health facilities, they will be delivered to Woreda AHU, Zone AHU and Regional Health Bureau (RHB) respectively. Currently, the forms are processed at the RHB through the scanning technology or manually by using the data entry tool of the eHMIS.

Once the data processing is completed, users at different levels can generate Aggregation, DSS, Report Tracker and other reports. Moreover, users at the Zonal and Woreda levels can access the latest (recent) data using either the *Sync* or *Data Import* tools of the eHMIS.

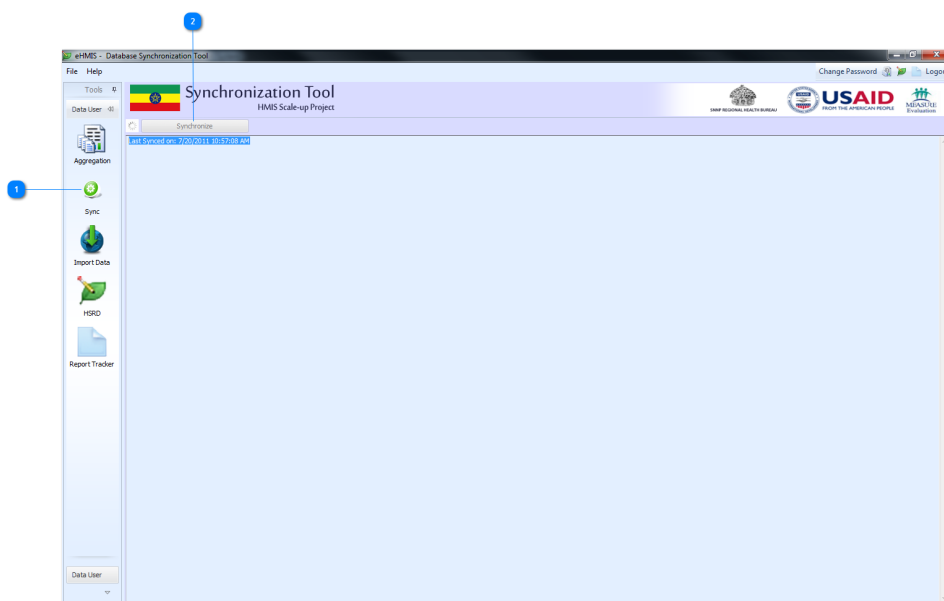
7.1. Sync

This option provides a mechanism by which users at Woreda as well as Zone levels can use the Internet connection to update their local database. For this option to work, having relatively average speed Internet connection is inevitable.

7.1.1. How to Sync the Data

Open the **Launch Pad** (see Accessing the Launch Pad) and then,

1. Click on **Sync** button from the Launch Pad
2. Click on the **Synchronize** button



For Sync to work

Make sure that the Internet is properly connected prior to using the *Sync* option to update data. It is always preferable to use the Sync at low Internet traffic hours.

7.2. Import Data

The *Import Data* tool is an alternative option to update the local databases of Woreda and/or Zone AHU's. Contrary to Sync, this may not require users to have Internet connection for updating the data. Hence, this option is recommended at times when Internet connection is unavailable or below average speed that may not allow the Sync tool to properly function.

Users at Woreda as well as Zone need to communicate with the regional health bureau IT staffs requesting the latest data (exported to a WinZip file).

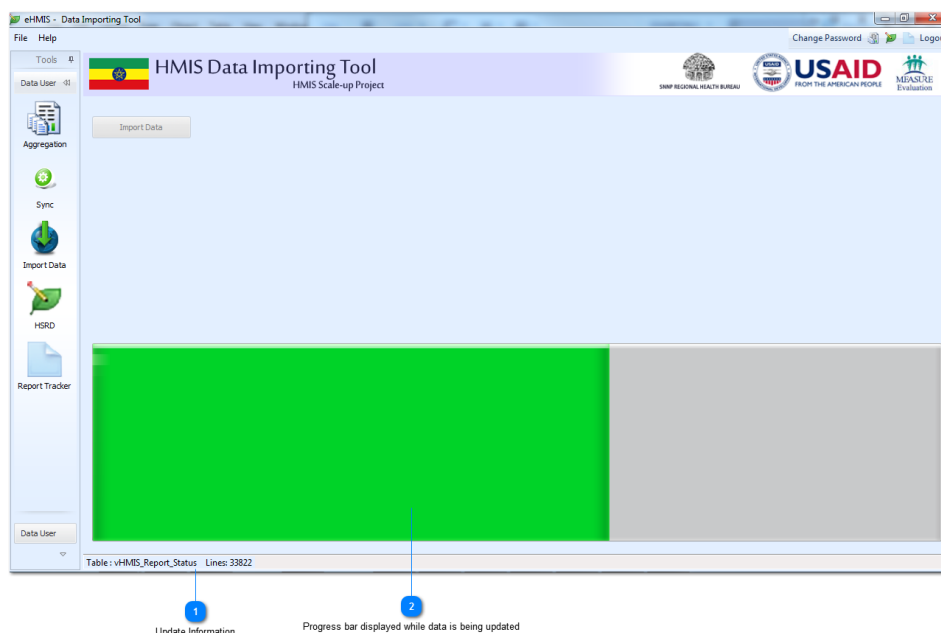
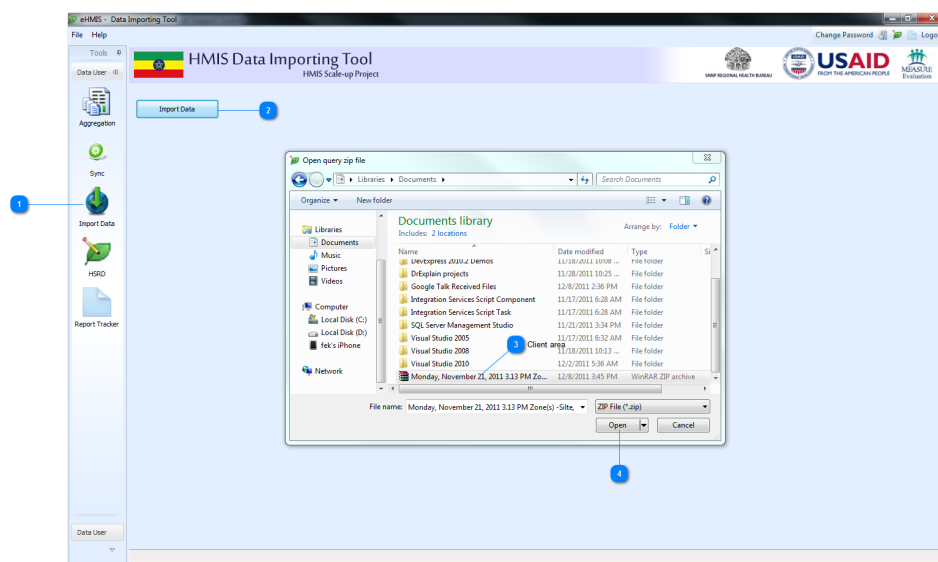
Once the RHB IT staffs exported the data, users at Woreda/Zone can copy it with a external storage media (such as Flash Disk, CD-ROM) or they can receive it through their e-mail address.

7.2.1. How to Import the Data

Follow the steps below to update local databases using the exported data from the RHB:

Open the **Launch Pad** (see Accessing the Launch Pad) and then,

1. Click on **Import Data** option from the Launch Pad
2. Click on the **Import Data** button
3. Locate the exported file (i.e. Win Zip file) and then open the file



When Importing Data is Completed

When importing data is completed (i.e. the progress bar reaches the right hand side of the screen), a message box labelled **All Data Imported** will be displayed; and that indicates that the recent data is imported successfully..



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